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See page 64

Data integration & STP in housing

Are you ready for straight-through processing? How frictionless workflows & automation could transform your operations.

Housing management

Big data, compliance, virtual reality in housing, cloud HMS & data migration

Finance management

Matching housing demand, cutting arrears, using market data and universal credit

Repairs & mobile working

Cutting backlogs, online marketplaces & video diagnostics

Customer management

Channel switching, digital inclusion, IoT, self-service and e-healthcare & support

Infrastructure

Unified communications, fire safety's 'golden thread' & low-code software

General news

Live broadcasting, IT 'test beds' & frictionless workflows

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Editor's welcome

March 2021

Bad housing data, or how much is 'Lodnon' costing you?

This edition of Housing Technology is heavier on 'data' than normal, in part owing to our main feature article (page 30) on data integration and straight-through processing as well as numerous contributed articles from data experts in our sector.

In much the same way that a philosophical construct or mathematical theorem is only as strong as its underlying premise, so too housing providers' IT estates and business operations are only as good as their underlying data.

Data can be used as the evidential base to back up a new idea or strategy and then provide the strong foundations for its implementation. Data can be used to highlight trends or spot as-yet unnoticed patterns, turning qualitative feelings into quantitative measurements. Data can be used as the fuel that powers increased automation and better, faster and cheaper processes. Above all, data can do lots of things but only if it's the right data in the right format and in the right place.

Today's data management landscape is, arguably, a consequence of the original demarcation a decade or so ago between housing providers' IT departments and their business users; to the roughest approximation, the former provided somewhere for the latter to put their data. The IT department was 'merely' one of many services consumed by business users, and this profoundly affected how data was added, managed, stored and interpreted.

IT departments are no longer 'just a service'; they are the single most important enabler for every housing provider's entire operations. That increase in strategic importance has been accompanied by IT departments' greater ownership of and responsibility for data in all its myriad forms.

That bring us back to how much 'Lodnon' and other bad data are costing you. Keep in mind that every single downstream initiative (such as reducing arrears or increasing first-time fixes) or data-heavy process then requires extra human intervention and therefore cost that could so easily have been avoided.

What's the solution? Everyone in your organisation's should be made aware of the importance of good data; to paraphrase the government's Second World War propaganda, "careless data costs money."

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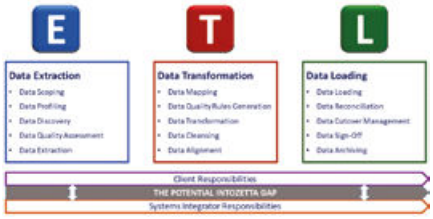

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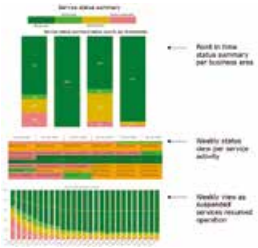

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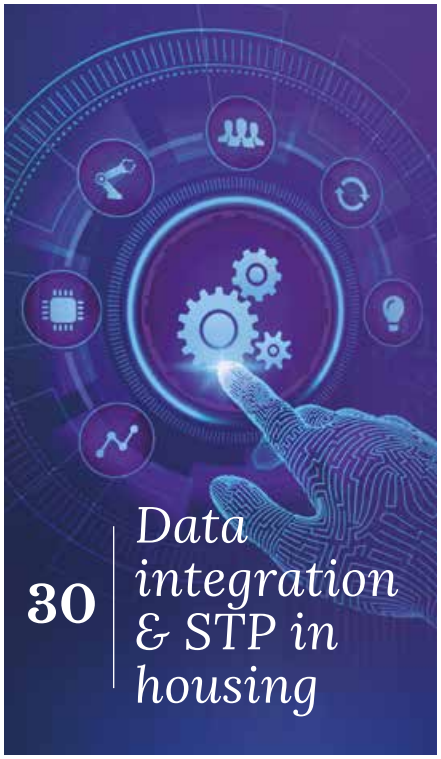

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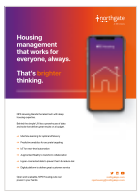

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Northgate Housing at Colchester Borough Homes

Colchester Borough Homes, a subsidiary of Colchester Borough Council, has implemented a new housing management system from Northgate Public Services to give its tenants better access to more digital services.

Managing the project remotely owing to the pandemic, NPS worked in partnership with CBH and the council to ensure NPS Housing went live in under a year; NPS reported that similar transformations would normally take at least 18 months to implement.

Once all phases of the project are complete, tenants will be able to view their rental statements, manage payments and report repairs from their homes.

At the same time, CBH's staff working remotely can update tenancy records from any device and analyse data such as the geographical location and condition of properties at the touch of a button.

Gareth Mitchell, chief executive, Colchester Borough Homes, said, "With NPS Housing, we have the firm foundations we need to push the boundaries of innovation in housing and continue to meet the needs of our residents for many years to come. It is a testament to the teams involved that we have completed this work in such a short space of time and under such extraordinary circumstances."

Notting Hill Genesis live with Techlabs' iProperty Cloud

As part of a wider digital transformation programme, Notting Hill Genesis has just gone live with Techlabs London's iProperty Cloud sales module after a 10-week implementation.

Rajiv Peter, director of digital technology, Notting Hill Genesis, said, "We chose TechLabs London because of its collaborative approach as well as being easy to deal with. It also had a tried-and-tested CRM system that perfectly fitted our existing technology landscape and future strategy so it was a natural partner."

Now that iProperty Cloud's sales module is live, the housing provider is also deploying the system's lettings module in order to achieve a fully-digital tenancy sign-up and onboarding process, including e-signatures and self-service tenancy document management.

Mohamed Mostafa, director and Microsoft MVP (Most Valuable Professional), Techlabs London, said, "Having been closely engaged with Notting Hill Genesis, I was impressed by the housing provider's innovation roadmap to enhance its customers' digital experience. In much the same way, we built iProperty Cloud with the aim of bringing tangible benefits to the housing sector through technology-enabled business transformation – not buzz words, but real results felt by our clients' staff and residents."

Redbridge selects Civica's cloud Cx housing software

Civica has won a software-as-a-service (SaaS) contract with the London Borough of Redbridge for its cloud-based Cx Housing, Asset Management and Abritas homelessness software packages. The contract is valued at £500,000 over five years.

The council chose Cx to support its housing team's digital transformation agenda and deliver better online services for over 3,000 households. Central to the council's implementation is the move from seven existing systems to just one Cx-based platform to provide a 'single version of the truth' for better data management and consequent business intelligence, insights and decision-making.

Civica reported that Cx will also allow the council to develop a more relationship-based way of working, with the increased automation of transactional elements of the housing service giving the council's staff more time to talk to tenants, respond faster and resolve any issues quickly.

A Cx-based self-service portal will boost customers' online experience by introducing repairs and service requests, rent payments and online applications.

The communications engine within Cx will also help the council communicate better with its diverse population, with a range of language options. The platform can also link with third-party pictorial tools such as Repairs Diagnostics and so overcome any language barriers.

Propeller Powered compliance at Ateb Group

Welsh housing provider Ateb Group (formerly Pembrokeshire Housing) has achieved absolute compliance across all key areas for 2019/20 as part of its digital transformation programme, based on software from Propeller Powered for real-time reporting across its entire operations.

Ateb started working with Propeller Powered in 2019. The software supplier was initially appointed to focus on gas- and electrical-servicing compliance, with the remit then expanded to cover all key areas of statutory compliance as well as options to monitor weekly fire alarm checks and playground inspections.

Nick Hampshire, chief executive, Ateb Group, said, "From day one, Propeller Powered demonstrated that it understood our needs and bought into our tenant-led DNA. Its style of agile, 'get things done' service delivery was particularly helpful around collaborative design and development.

"Since the implementation, Propeller Powered has provided our operational teams with a powerful and expandable system to manage our multiple programmes of compliance. From an assurance perspective, we now have a real-time view of our regulatory compliance."

Propeller Powered's solution includes a KPI dashboard for instant insights into not only Ateb's current compliance position but also the status across all its properties every day; any non-compliance in any property is immediately flagged for action. Such is its confidence in the new system, Ateb's recently-published 2019/20 annual report includes a full breakdown of its scores across all key areas of compliance, derived from its Propeller Powered system.

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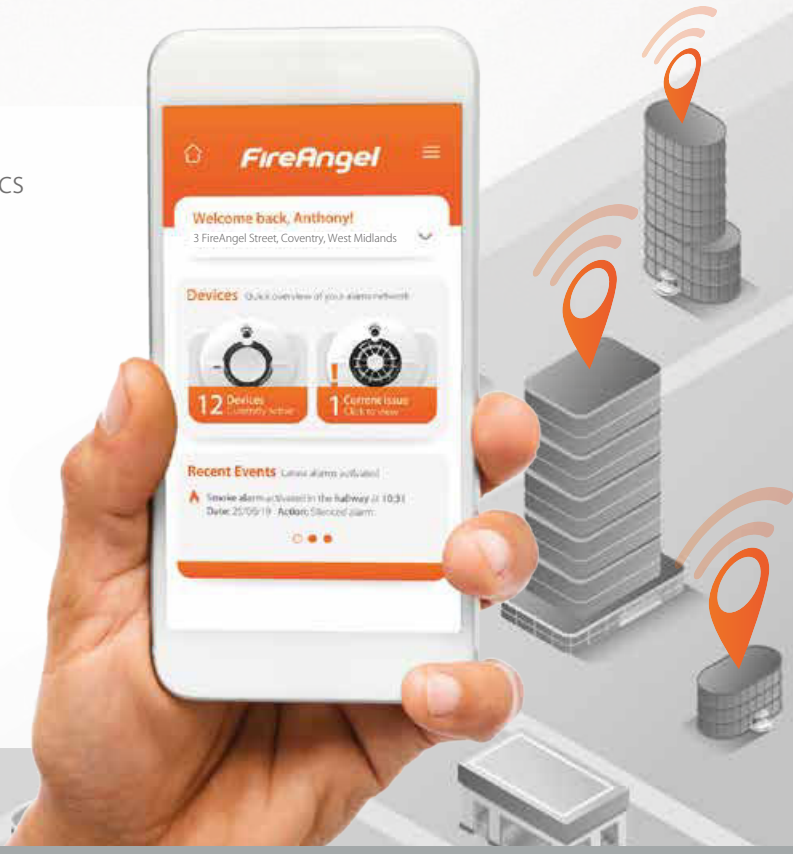

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* Calculations based on smoke and heat alarms

The legal hurdles to unlocking the value of big data in housing

Emma Watt, Associate Solicitor, and Rumandeep Dhariwal, Solicitor, Anthony Collins Solicitors

Many housing providers have access to sources of 'big data' which can hold significant value, if properly used. However, while there is value in exploiting this data, a housing provider must also balance this with its obligations to its users under data protection legislation.

What is big data?

The Information Commissioner's Office (ICO) defines big data as, "high volume, high velocity and high variety information assets that demand cost-effective, innovative forms of information processing for enhanced insight and decision making." In effect, this means large amounts of varied information that an organisation can gain access to and process very quickly. This is broken down into three aspects:

- **Volume –** the quantity of data;
- **Velocity –** the speed at which the data is processed; and
- **Variety –** the range of [structured and unstructured] data held.

How is big data valuable?

A lot can be learned from big data in a relatively short space of time, which is one reason why it's so valuable. Analysis could reveal details such as where improvements can be made, how to manage risk and opportunities to improve welfare as well as identifying broader consumer trends.

A good example of leveraging big data to enhance the user experience is the use of 'desire paths' in urban planning. By allowing commuters to identify short-cuts, you can pave routes that follow paths of least resistance, saving both design and maintenance costs. At the same time, vacancies and waiting lists can inform housing developers about the local demand for two, three or more bedroom homes.

Housing providers hold and have access to unique data sets, where tenants are brought together by geography, community and other characteristics. These records can reveal valuable insights that can be unlocked through careful evaluation and research. While this information is undoubtedly valuable to the housing provider, third parties could also benefit from gaining access to this data and they would be willing to pay for the privilege.

Creating income from big data

Analysing your big data is likely to result in the production of original reports, commercial insights, computer code, algorithms and written findings that can be protected by copyright and exploited through licences. The results may lead to inventions that can be protected through patents and enable you to commercialise a new product.
Your big data, as a distinct data set, may also benefit from copyright protection and/or database rights which

can be shared, loaned or sold to third parties. There is an opportunity to agree the terms on which external organisations can analyse your big data and exploit or share their insights with you and with others.

Ownership of such intellectual property rights does not necessarily give housing providers unfettered rights to exploit their big data and they will still be expected to comply with data protection legislation.

Remaining compliant with data protection legislation

When looking to assess and harness the value of big data, a housing provider must identify whether it constitutes or contains personal data. To the extent that big data relates to identifiable, living people, the housing provider must identify a lawful basis before the data is collected, used or shared, for any purpose; with enhanced protections applying to 'special category' data.

In respect of existing records, housing providers will need to take all reasonable steps to ensure their proposed new use of the big data is not incompatible with its original purpose. Helpfully, data legislation explains that further processing for archiving purposes in the public interest, scientific or historical research or statistical purposes isn't considered to be incompatible with the initial purposes for which that data was collected. Nevertheless, the big data should still be minimised (including pseudonymised where possible), accurate, stored only for a limited time, kept secure, and the change of use should be communicated to the data subjects.

The safest and most risk-free way to process big data is to make it anonymous, so that it no longer falls within the scope of data protection legislation. One of the clear benefits in using pseudonymised or aggregated data is that the results are only ever made available on a de-personalised or de-identified basis. A suitably-drafted data privacy impact assessment can help to identify these and other measures which minimise risk and record your compliance with the law applicable to big data.

What are the risks of getting it wrong?

While big data can be effectively used in a profitable way, appropriate due diligence and sufficient safeguarding measures should be put in place to safeguard the individuals before carrying out large-scale processing or sharing their information with third parties.

As a data controller, housing providers can risk hefty fines from the ICO, instructions from the ICO to change or end the processing in question and claims for compensation from the individuals whose data has been processed.

At the same time, housing providers are in a trusted position of authority, where fairness and transparency are key to maintaining a successful relationship with tenants. Aside from the risk of security and privacy issues, the processing of big data can cause unintended harm to people in their role as citizens and consumers by creating bias, embedding systemic errors, creating reliance on misinterpreted data and enabling poor decision-making.

Housing providers need to remember their duties under data protection legislation and that the security and integrity of the data will always take priority over any transaction. Providers should seek expert advice when considering data sharing or selling to ensure they have the legal justification and clear roadmap which enables them to unlock the value of big data successfully.

Emma Watt is an associate solicitor and Rumandeep Dhariwal is a solicitor at Anthony Collins Solicitors.

Using data & intelligence to support your tenants better

Tina Kennedy, Head of Digital, Aareon UK

We shouldn't underestimate the power of data. But what data do you need, for what use, and how do you use it effectively?

Data on its own means very little, but collating data in the right way is very powerful. It provides an overall picture of where things are now, the trends, the context of what's happening and gives the insights needed for informed decision-making.

But the door really opens when you can use data to be proactive, to understand more about your tenants, your properties and your contractors, and you can start to make decisions which change the dynamics and even start to predict outcomes.

Why is data so important?

Within social housing, there are three key areas of focus when it comes to data: tenants, properties and staff. It is always important to understand your customers, no matter what sector you work in. Not only knowing who they are through segmentation, but in order to make informed decisions, you also need to know what their needs are, so you can differentiate the services you provide.

With the right high-quality data, housing providers can gain insights to enable them to decide on the right technologies to manage their tenants and processes, the most appropriate communication channels to use, and ensure they are prioritising their most vulnerable tenants. This proactive, early-intervention work helps to eliminate those potential risks that housing providers want to focus on, such as arrears or fuel poverty.

Better understanding tenant data

One of the outcomes of the pandemic has been an increased focus by housing providers on gaining a more granular understanding of their tenants and their needs. By using data and analytics to profile and segment their tenants, combining data from multiple sources including front-line staff knowledge of their tenants and information provided by the tenants themselves, they can really target and pinpoint the right support to the right tenants.

But data and analytics don't just underpin your decisions about tenants, they underpin all your business decisions.

Data underpins business decisions for your staff

This type of insight is also multi-level, meaning that it's not just a tool used behind the scenes for strategic decision-making but also used operationally, using data to provide the right real-time information for front-line decision making, providing key insights and information to the right users and using this same data to become more agile and react faster when priorities change.

Predictive maintenance for your buildings

One of the other big areas being talked about across the housing sector at the moment is property maintenance and how housing providers can make the big leap to being proactive using smart technology.

With property maintenance being a necessary evil and the ongoing need to push more money and resources towards building better, more affordable and greener homes, it's not surprising that housing providers want to turn to predictive maintenance to help manage the process.

Technology in IoT has rapidly advanced over the past decade, meaning that it's now flexible enough to use

in many business sectors. However, the real value that customers get is not from the technology itself (i.e. the devices) but from the data that can be extracted.

Not only does this data unlock key insights that you would otherwise have not known without stepping into the property itself, but you have also effectively given the property a brain, telling us the best most effective action to take on that property before we even know there was any action to take.

Data done right

Technology, in general, is going to be driven by three things; data, data and even more data. Every single asset that impacts how people live will be connected and producing vast quantities of data.

If this is done well, it will mean that these assets will intelligently talk to each other and innovative data models will be created that could have an incredible impact on every aspect of our lives.

If it's done badly, it will mean dozens and dozens of new isolated solutions and apps that produce vast sums of numbers and reports that no one looks at. People will also start to become far warier about how their data is used, so any organisation that does want to use it will have to start providing some compelling reasons to their customers regarding why they want their data and how it will result in positive outcomes for them.

Connected data and artificial intelligence

The cost of property management is also going to be a massive driving factor. There is already an expectation on social housing providers to continue to provide the same, if not even higher, levels of service with fewer resources.

This is going to increase the need for automation. In a nutshell, over the next 20 years, every single thing that is done by a human that costs money will be examined with one question in mind, "can we do that cheaper?" Things that would never have been considered in past will be on the table, with human intervention as a last resort, not the first option. And this all comes back to connected data. Artificial intelligence has huge potential to drive this, but it is only as capable as the data it is working from.

Future proof your business

Collecting, storing, collating, analysing and using data both strategically and operationally is the key to the future ability of housing providers to deliver the right services at the right time, as cost-effectively as possible, so that tenant satisfaction and wellbeing increases and future business decisions can be based on good quality data insights.

To find out how Aareon can help you accelerate your 'digital ready' agenda, call us on 02476 323 723 or email hello@aareon.com.

Tina Kennedy is the head of digital at Aareon UK.

Common problems with data migration

Graeme Cox, Co-founder & Director, IntoZetta

Gartner recently reported that 83 per cent of data migrations either fail outright or exceed their budgets and implementation schedules.

Transformation programmes, usually driven by an ambitious business change initiative, are a huge investment of time, resources and money. Delay or even failure can be very expensive and can adversely impact the business growth strategy.

Most transformation programmes experience delay, with some delays being very long and costly; data migration is usually at the top of the list of the reasons why, and often some team members are replaced as a result.

Having many years' experience leading complex data migrations across many sectors, including with several housing providers, I want to share my understanding of the most common mistakes and 'gotchas' where things, even with the best of intentions, can go wrong.

Often overlooked, data migration is a complex and specialist activity. It requires a specific skillset, in-depth experience, a best-practice methodology and a proven toolset to deliver an end-to-end solution.

Common problems and how to avoid them

Start early

Don't leave data migration until the last minute. It's a key priority for success and is often overlooked until it is far too late to turn around, thereby delaying the published go-live date.

Aim to start your data migration activities as soon as possible. As a rule, the migration should be ramping up during the early design phase and in full flow by the detailed design phase. Follow a structured and proven data migration methodology as the basis of a detailed delivery plan; it will help to ensure that the right tasks are completed in the correct sequence and fundamental activities aren't missed.

Use a data platform

A data migration platform is essential for successful delivery. Don't build it yourself; we know it's tempting and might excite some of your IT people, but it will take longer, cost more and ultimately be thrown away after go-live. It will also be a huge distraction from delivering the programme itself.

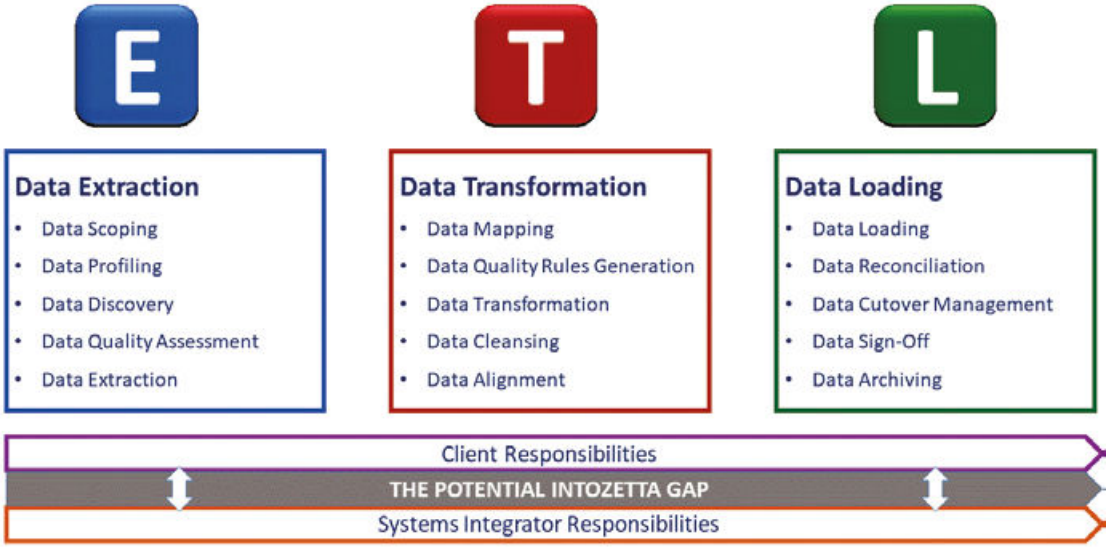
Select a platform that has been specially designed for data migration, rather than using a data reporting/query or system integration toolset that you might have already licensed. A proven specialist data migration solution will save time and, in the long run, prove to be a very cost-effective investment. Take advantage of the software-as-a-service subscription models available, and just pay for what you need for only as long as you need it.

Data quality

Don't blithely assume that the quality of your data is okay. High-quality, accurate data is fundamental to a successful implementation, while bad data is unlikely to even load into the new application. Poor data leaves key stakeholders disappointed and underwhelmed, and sometimes even leads them to question the value of the entire transformation programme. Data migration should be considered as a great opportunity to completely transform your data into an accurate, consistent and fit-for-purpose asset.

The data-quality capability should enable both simple and complex business data-quality rules to be defined, grouped, reported and tracked over time. It should include dashboards to contextualise information so that senior management can focus on key priorities, plus detailed error reports/listings for your operational resources to use for data cleansing. Automated and regular reporting is

Core data migration activities:



needed to track progress, view trends and drive the data-cleansing initiative through to a successful go-live.

The data team

Don't use inexperienced resources. Data migration is complicated, with many moving, interrelated parts; it simply can't be delivered on time and within budget without specialist experience.

A strong and multi-disciplined data team, combining technical expertise and business knowledge, is essential to the successful delivery. Create a dedicated data team responsible for all migration activities with an experienced data lead at the helm.

The data lead should report direct to the programme manager/director, rather than just tagged onto a particular workstream. Data requires a high level of focus, governance and control and affects the entire programme. Avoid having data team members embedded in other workstreams or 'business as usual' activities; they will usually be given unrelated work and data migration will take a back-seat.

Clear task ownership

Don't assume that all of your data-migration activities are being handled by an implementation partner. Ensure that every activity is clearly owned and there are no gaps, especially data transformation, data quality and cleansing. Delays mostly arise from confusion and assumptions on the responsibilities and ownership of the activities across third parties, the business itself and your internal technical teams.

As soon as possible, ensure a full ownership matrix is agreed across all activities; it'll save time and avoid gaps and subsequent delays. Commercial contracts and SoWs should include all of these.

Some unscrupulous third parties may even prefer the migration ownership to be ambiguous in order to buy themselves time and have a 'get out of jail free' card when things do overrun and to avoid any commercial penalties.

Data security

Don't weaken your data security protocols. Moving high volumes of data off your corporate applications can weaken the sophisticated security and protection that is provided by the applications themselves. For a controlled and secure process, the data-migration platform must be the central repository for all data-migration activities.

A data platform must be able to tightly control user access, allowing specific authorisation to limited datasets and limiting authorisation to only those that require access. The flow of data must be controlled and enable data to be segregated into clearly-defined groups (usually by business area) to control who has access to what, rather than a blanket authorisation to all.

Data scope

Don't just migrate everything. The scoping decision around the data migration is often that everything should be migrated. That might appear, at first glance, to be the easiest option, but don't forget that the more data you migrate, the more data there is to clean, test, load, reconcile and sign-off. Therefore aim to only migrate what is necessary from a legal, fiscal or critical business-operations perspective.

Knowing what is being migrated and what is not must be established as early as possible to avoid the emergence of extremely late requirements or having expensive work completed on unnecessary activities. Ensure the data migration scope is fully agreed, clearly documented and signed-off as early as possible, ideally during the

design phase. Data migration is often left out of the formal programme change process, but formal change control is essential. The data team must be involved in decisions relating to changes to the solution design to assess the impact of any changes on the data migration.

Common oversights

Don't forget documents (such as PDF and Word); they are usually very high volume and complex to migrate. Some document types will be closely related to your structured data and without them the business process could fail. Don't break the interfaces. This applies both internally, across the integrated application landscape, and with third parties, where they provide a service that depends on data exchange. Third-party data may need to be updated and aligned with new number ranges, codes, data formats and lengths that are all compatible, so ensure you include third parties in testing.

Avoid manual activities wherever possible because these often cause single points of failure. Aim to automate the full data-migration process because the failure of a single step could derail the entire migration. Check the full data-migration process can run within the go-live window, typically over a weekend, from business freeze to data sign-off.

Don't skip the testing phases for data migration, so include the data migration as part of the system testing and in all formal test phases. This will flush out unexpected problems and allow time for investigations and corrections. It will also prove the new application actually works with real data, across a multitude of scenarios, rather than using data manufactured just to pass the test.

Being aware of these common problems in advance will really help the data migration delivery be a success. Unfortunately, in my experience, there are no short-cuts; they just lead to more risk, unexpected delays, and in the end a higher overall cost.

Graeme Cox is the co-founder of IntoZetta.

Loreburn Housing opts for Designer Software

Loreburn Housing Group has signed a five-year contract with Designer Software for its HomeMaster web-based housing and finance software.

In order to deliver improvements in data analytics and agile working, Loreburn Housing needed to move from its previous on-premise legacy housing and finance system to a web-based system, with the pandemic forcing the housing provider to bring forward its plans in order to accommodate remote working.

Gary Alison, director of finance, Loreburn Housing, said, "Our partnership with Designer Software has enabled us to achieve several key aspects of our digital strategy. With our previous legacy system, it would have taken years and considerable cost to achieve the system capabilities of HomeMaster.

"We immediately knew that HomeMaster would make a significant difference to how we operate. It will improve process efficiencies, provide greater insight into our business performance and support our agile working approach.

"Working with the Designer Software team is a refreshing change from our previous suppliers.

Gary Alison, Director of Finance, Loreburn Housing

We have already worked with them on a new module for the system; they met our requirements fully and delivered exactly what we asked for in no time at all."

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Good data is usable data

Aira Pour, CEO and Caitlin Hafer, Marketing Manager, Bynaric

Usable data is the string that connects our modern world. Housing providers have information on available houses and local authorities have never-ending lists of those in need of housing. Unfortunately, the current systems make it almost impossible to efficiently connect these two groups.

For many housing providers, the process of creating and managing clean and connected data feels like an unachievable dream. Many have created a patchwork of fixes which address a variety of symptoms but never the underlying causes of their data woes.

But clean, connected data is achievable, and the steps to reaching that dream are simple and straightforward.

'User proof' your data entry

One of the biggest hurdles to getting clean data is the mislabelling or mis-entry of information. For example, the same address field could be filled using Dublin County, Co. Dublin, Dublin Co, Dulbin, Dlubin and so on. While they all mean the same to the human user, the differences create noise and confusion within the data, meaning that housing providers' systems as well as those of relevant third parties can't communicate. The mis-entry of data is not the fault of the user, but rather of the tool allowing it to happen.

Imagine I want you to only click the 'A' key, all day, every day. No one is perfect, so of course you might sometimes accidentally hit S, Q, or Z. While I can train and remind you to only hit A, isn't it better to simply remove every other key? You can relax knowing that it's impossible to make a mistake, and I can relax knowing that your clicking will never go astray.

Housing management applications need the same level of fail-proofing in order to ensure that users are not only comfortable using the system, but that the system protects them from making errors. By creating standardised fields and controlled options, we can ensure that data is entered correctly, allowing different systems to communicate; everyone is clicking 'A' and our data is clean.

Put everything in one place

Now that our systems are speaking the same language, they need to put their information in the same place, as a single source of information about a property's details, tenant history, repair history and required maintenance, and made available to all users. Furthermore, different administrators who might need to retrieve information about properties or tenants should be able to do so quickly.

Picture a world where every time someone interacted with a property, they wrote down on a door what they had done, when they had done it and the next steps needed. This could be the front door, a bathroom door, even a cabinet door. Each person uses a different door and doesn't specify which door they are using. Information is therefore spread around the property, and it's difficult to get a complete picture.

Now imagine that instead of writing on a random door, everyone wrote their information on the property's front door. Each property would have its own record of tenants, repairs, survey results, and needs. And that information would stay with the property from the moment it was built.

Tenants have a similar record, a passport of sorts, with them throughout their housing journey.

Records kept to this level of detail and availability are achievable. It simply requires housing management software that stores information on properties and tenants in a single location. Unfortunately, most existing software solutions segregate departments' information onto the equivalent of a variety of doors. Thus, when housing becomes available, providers must knock on several doors to find an appropriate tenant. Tenants remain on housing lists for years and houses sit empty.

Instead of cobbling together information sources from different platforms and different departments, housing providers need one reliable source of information. A single source of information means that everyone has the data that they need, when they need it, and tenants can be matched to housing efficiently.

Be proactive and reactive

Lastly, housing providers need to be both proactive and reactive in their data management strategies. Housing providers can proactively implement solutions to prevent data mislabelling and ensure that all the information is stored in a single location, while reactively cleaning the data they already have.

Consider the solutions suggested above: the keyboard, notated front door and passport. Implementing these solutions will prevent future data mislabelling and loss but does nothing to fix past data issues. By reacting to data issues and cleaning their existing data, housing providers can adopt a two-pronged approach to ensure that no more bad data can pollute the system and only the finite amount of previously-entered data needs cleaning.

This is not a 'pie in the sky'. Bringing all data in to a single location gives housing providers a clear view of issues in their existing data and the steps needed to rectify them. By setting policies that prevent future data issues, housing providers set a firm foundation and create space in the system to clean and connect existing data.

For our part, Bynaric sees the issues around data management in housing as being straightforward and eminently solvable. By developing a housing management system based around a single source of information for all involved, we're working to bring social housing into the big data age and prevent the pitfalls that many housing providers face when it comes to creating, managing, and using their data.

Aira Pour is the CEO and Caitlin Hafer is the marketing manager of Bynaric.

Thirteen's virtual world for employee interaction

One of the issues facing many housing providers during the pandemic has been about how their employees can engage with one other while working from home. Webinars are useful and phone calls have their place, but nothing quite matches up to face-to-face meetings.

In an effort to fill this gap, Thirteen Group has turned to an innovative online platform that lets staff meet up and have the more informal interactions that video-calling systems can't quite replicate.

Thirteen worked with developer Virbela to launch a bespoke 'virtual campus' called Virteen – a web-based system where its staff can create their own avatars, wander around an online world to go to meetings, events and presentations, and have the impromptu encounters that they've been missing over the past year.

Hassan Bahrani, head of IT, Thirteen Group, said, "We worked with our colleagues in our facilities and HR teams, and last year they asked Thirteen's staff about how they felt the home-working arrangements were going for them. A common thread centred on how much people missed bumping into each other and having those all-important spontaneous conversations.

"We've already been using Microsoft Teams as a collaborative tool for a few years, and while it's been great for formal, planned meetings, it's more limited when it comes to informal catch-ups."

Bahrani thinks that the Virbela platform offers a glimpse into the future of work post-coronavirus; a place where 'water-cooler moments' can be replicated, increasing chance encounters and boosting collaborative working.

Virteen also offers an escape from home-working offices, providing staff with a sense that they have taken a trip somewhere, which could help to tackle the wellbeing issues sometimes arising from prolonged and enforced working from home.

Bahrani said, "Because agile working was already well integrated into Thirteen's culture, the transition to working from home for our office-based staff was relatively smooth. However, the inevitable lack of face-to-face contact and the loss of those water-cooler conversations, which can often lead to great things, was highlighted as being a real issue.

"Teams is our usual tool for pre-arranged, one-to-one meetings and group work, but for a little more flexibility and informality in our interactions, Virteen will offer something a bit different."

Virbela provided a base template which Thirteen then customised to create its Virteen platform. The virtual campus comprises a main office building with large presentation spaces, meeting rooms and smaller offices around the campus which can host the same range of business activities as offered by Thirteen's real-world facilities.

Hassan Bahrani, Head of IT, Thirteen Group

Each visitor creates their own avatar to wander through the buildings, outdoor areas, atrium or seaside promenade – there's even a speedboat waiting on the quay for Thirteen's staff to jump into!

Visitors can either make their way to a planned event or meeting or just amble around the campus taking in the sights and bumping into colleagues whom they might not have 'seen' in over a year.

Bahrani said, "Virteen was intended to be a fully immersive environment. When you finish your session, it really does feel like you've escaped your home office for a while.

"As well as for business use, the staff testing the system have been visiting Virteen for social events and we're looking at running things such as award ceremonies, presentations and other more fun and collaborative events."

Sean Washak, European sales lead, Virbela, said, "Virbela creates immersive spaces that bring in-person experiences to life online and enable better remote team collaboration.

"Within the Virteen campus powered by Virbela, Thirteen can recreate the feeling of its traditional office space through opportunities for spontaneous connection between colleagues, meeting spaces equipped with familiar presentation tools, and a sense of presence within the 3D campus."

As a novel system for the housing sector (we believe this is the first instance of a UK housing provider using Virbela's platform), Thirteen is taking a measured approach with its implementation.

Virteen is first being deployed to a modest proportion of Thirteen's workforce to gauge its success, who will then hopefully become evangelists for the system before its final implementation.

Bahrani said, "We decided a long time ago to encourage more agile working and push for a more output-driven culture, rather than an hours-driven one.

"A lot has changed for our staff during the past year and as a business, we've spent a great deal of time considering how people will meet and work post-coronavirus. It's therefore important that we look for new ways to humanise virtual working and plug the gaps that can sometimes be created by online interactions, and we're hoping that Virteen will help us to do exactly that."

Barcud goes live with ActiveH

Barcud (formerly Tai Ceredigion Cyf and Mid Wales Housing) went live with its new ActiveH housing management system from MIS-AMS in July 2020 despite the challenges of the lockdown.

Alongside ActiveH, Barcud has also opted for the software provider's mobile working, asset management and contractor modules.

Gavin Harvey, assistant director of ICT and business improvement, Barcud, said, "MIS-AMS allocated a dedicated team to our implementation, including one-to-one support. We genuinely felt as if they were working as a part of our team – which is pretty unique in our sector. I've worked with various housing software vendors over the years and none match the service delivered by the team at MIS-AMS.

"At the start of the project, we had to make some difficult decisions about how to migrate our data, which was spread across disparate systems. Although we were leaning towards the standard approach of taking static time-shots, the team at AMS suggested we take a 'live extraction' approach.

"We were sceptical owing to the time and resource implications. Progress was initially slower than we had hoped, but the live extraction paid huge dividends on the day we went live, with the migration completed seamlessly."

Barcud's project began before the coronavirus lockdown but both teams were able to carry on while working remotely, with the only exception being end-user training.

Harvey said, "We decided to deliver training via video and it's been a real success. Our users can now access training on demand, enabling them to solve problems independently if they forget how to do something. We're now keen to use video training on other implementation projects, regardless of whether the team are working remotely or in the office – it's just worked so well."

Following the successful completion of the first phase of the implementation, Barcud and MIS-AMS are deploying the mobile surveyor and planned maintenance modules as well as a customer portal. After that, they will move onto the final phase and shift the combined team's focus onto transferring the new housing stock acquired during the Tai Ceredigion Cyf and Mid Wales Housing merger into ActiveH.

Sharon Tatton, implementation manager, MIS-AMS, said, "The team at Barcud has been a joy to work with. The project has been managed extremely professionally, but we've also had a lot of fun getting through the various complexities that have been thrown our way."

Managing demand during the housing crisis

Increase sales productivity with Dynamics 365 and ClickDimensions.

Jordan Wheat, New Business Consultant, Crimson

Last December, Homes England reported that during April-September 2020, the number of housing starts was the lowest since 2012/13, at 11,313 homes. Housing completions had also decreased to 11,358 houses, the lowest since 2015/16. However, the reduction of both housing starts and completions is in part due to the pandemic.

Affordable housing comprised 79 per cent of housing starts in April-September 2020, a decrease of 32 per cent from the previous year, putting the number of affordable homes at its lowest since 2017/18. Housing providers are under pressure to provide affordable housing for those in need, and the pressure is greater during the current period of economic uncertainty, furlough, and redundancy.

With a large number of enquiries, housing providers have plenty of people ready to take a step on the property ladder through both full and shared ownership. The current problem is the lack of houses, making it even more important to match the right people to the right house within a suitable timescale.

Historically, housing providers have stored their enquiry, property and opportunity data in separate spreadsheets; this has affected communication and productivity by increasing the chance of human error. Spreadsheets lack clarity, so process simplification is essential to smooth-running systems.

Microsoft Dynamics 365 not only simplifies processes, workflows and enquiries, but also consumes data from external sources thanks to integration opportunities, thereby helping to synergise data.

Using one system from development to sale shortens lead times because it's easy to understand when a property is available or when an enquiry would be a good match. By choosing to be proactive rather than reactive, operations become automated and streamlined, while centralising data on a common platform means that information can be consumed by multiple sources efficiently.

Housing providers have been using legacy housing management systems, with archaic allocation processes which are predominantly used for onboarding tenants rather than home-ownership sales. By shoehorning the sales processes into the legacy system, home ownership is a time-consuming and disorganised procedure.

In contrast, when information is stored in Dynamics 365, viewing the sales pipeline is simplified, and conversion rates, marketing data and KPIs are readily available via intuitive dashboards. This means that all enquiry-to-opportunity conversion data and the time taken from application to sale is up-to-date and readily available, at the same time as reducing human error and making analysis easier. The homebuying process isn't just about sales, which is why full integration and customer-journey visibility is so important.

External sources such as property portals (e.g. Rightmove and Zoopla) can be integrated through Dynamics 365 to provide additional benefits. Some housing providers, such as Platform Housing, have integrated their own custom property portal to surface more interaction and information from customers. Buyers interested in shared ownership can be evaluated for suitability, and the custom platform proactively sells better-suited properties to the right people. With the current housing market in mind, the key to effective operational management should focus on productivity and managing the surge in demand through the sensible qualification of sales leads.

Customer data gathered through emails and conversations help with converting sales opportunities. For example, Microsoft Virtual Agent can capture the initial

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enquiry data and then probe deeper to match customers to a housing provider's current portfolio. And with in-person viewings and show-home visits unavailable due to the pandemic, modern technologies (e.g. augmented reality) can be used to bridge the gap between housing provider and customer, with Virtual Agent not only capturing the data but also processing it.

The conveyancing process is not only simplified for the housing provider; customers can also view a portal which outlines the actions and stages for each process. By keeping the customer in the loop, their overall engagement and experience is more positive because they will be aware of any hold-ups or additional requirements.

With different home-ownership options, including shared ownership and staircasing, each method is catered for and all of the processes are captured. The portal is flexible and easy to use, thanks to the low-/no-code Microsoft Power Platform, so updates or regulatory changes can be introduced quickly. By configuring the system, staircasing changes can be applied with a minimal amount of training. In this instance, Crimson isn't the gatekeeper to the solution; just leave the technical details and the platform foundations to us and then make any adjustments and configurations using your internal teams.

Housing providers can deliver affordable homes for full or shared ownership to their customers to combat the current housing crisis while also improving cash flow to support the wider community. Microsoft Dynamics 365 and Power Platform improve proactiveness by reducing the chance of human error, improving clarity of information and shortening the sales process. The solutions capture demand to inform the development strategy, with support from Power BI and analytics. By organising the demand for housing, cancellations can be reduced, conversion rates can increase and sales cycles can be shortened, all without taking on any additional staff.

An efficient and productive housing provider can support the fringes of its community thanks to home sales.

To find out more about reducing time spent during the new home sales process, register for our next webinar at **crimson.co.uk**.

Let Crimson benchmark your current sales process to identify your pinch points and boost your teams' productivity with integrated data and Dynamics 365 solutions.

Jordan Wheat is a new business consultant at Crimson.

West of Scotland Housing gets RentSense

West of Scotland Housing has bought Mobysoft's RentSense software to help it mitigate the effects of the pandemic and welfare reform on its increasing arrears.

Robert Campbell, director of housing and community services, West of Scotland Housing, said, "The impact of the pandemic on some of our tenants and their ability to pay their rent has meant that we have needed to offer them increased levels of support.

"We spoke to other housing providers about RentSense and how it helps reduce arrears and improve financial performance. In particular, we needed the intelligence it offers in terms of helping to identify tenants at the first stages of debt."

RentSense will also help the housing provider to monitor workloads across its teams, including adjusting patches to ensure that there is parity for its income officers. Housing managers can also see how the income officers are managing their workloads throughout the week so additional resource can be allocated where needed.

Fife Housing selects RentSense

Fife Housing Group has joined many of its Scottish peers in choosing Mobysoft's RentSense software to improve its financial performance through reduced arrears.

Beverley Graham, housing manager, Fife Housing Group, said, "At the moment, a great deal of our housing officers' time is spent trawling through individual rent accounts, even though some don't need any action. Once RentSense has been deployed, we expect the team will have more accurate and relevant caseloads so that we can focus our resources more effectively.

"We heard about RentSense from our peers in Scotland – we looked at it more closely last year and we were impressed with projected financial benefits as well as the resources it frees up. Overall, the other housing providers we spoke to were very positive about it, plus they had actually seen greater financial benefits than originally predicted."

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"We have a fantastic working relationship with Crimson. They understand our processes and leverage their experience with the housing and homebuilder sectors to make us think differently."

Robert Bloom, Sales & Marketing Director, Accent Group

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Competing for space

Using market data to avoid being outflanked and build better homes

Gavriel Merkado, Founder & CEO, Realyse

As you probably know, there are around 1,400 housing associations in the UK and close to 400 local authorities, not to mention thousands of private development and investment companies, all of whom are competing to build the best possible homes for their respective markets.

Although it's not like we're building enough housing. Even with the pandemic leading to the exodus of around one million Europeans who had been living in the UK, the country is still short of around 2.5 million homes. However, affordable housing (particularly affordable rented housing) has been a strong area for development, even during the pandemic.

With vast demand for housing relative to supply, some might think that the solution to the housing affordability crisis is a case of 'build anything anywhere', but most professionals will know that the process of site finding and rent setting is far more complicated and nuanced than that.

This is where technological improvements over the past few years are having a significant impact on helping housing providers find, price, develop and maintain housing sites, particularly for rent.

Finding a site

There are two ways to find a site, proactive and reactive. In the latter case, someone (perhaps an agent or the owner) brings the site to you. It may be competitive, it might be completely off-market. This works well a lot of the time because you know the seller actually wants to sell, and then you just need to determine viability.

However, what about when you're looking at site assembly, or you have a sense that a particular location needs housing, but no-one has come to you to ask for a bid?

That's where being proactive comes in, and that's where new technology can help. A range of different providers now exist who can help you to identify sites and their owners. However, what is really crucial is understanding what you can do with a site, which is determined by the local housing market, economics and planning regime.

By taking those into account, you can now virtually 'visit' sites and understand quickly and easily how they might present an opportunity for development or investment, passing on those you need to pass on, and investigating further those which look like they might have potential.

Determining the price

What is a fair market rent in a location? And from that, what is the relevant affordable rent or social rent (if not set by the local authority)? In the past, understanding the appropriate rent level could be a complex activity of checking portals, calling agents and referring to local authority guidance. Now decades of rents combined with property characteristics and LHA data is instantly available, including the elusive 'achieved rent' rate.

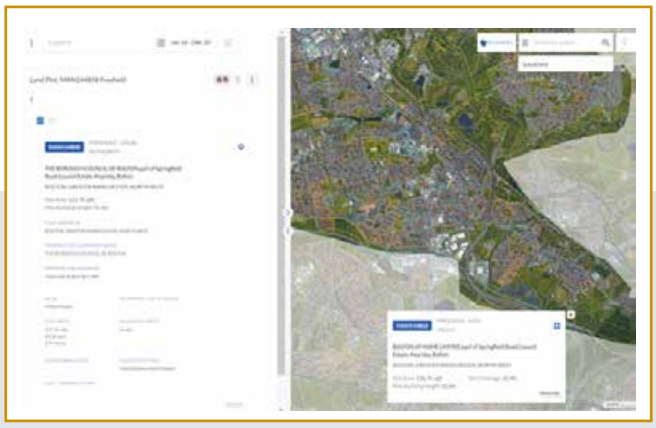
Armed with this information, housing providers can easily determine the fair market rent and set an appropriate discounted rent or affordable rent in their viability models.

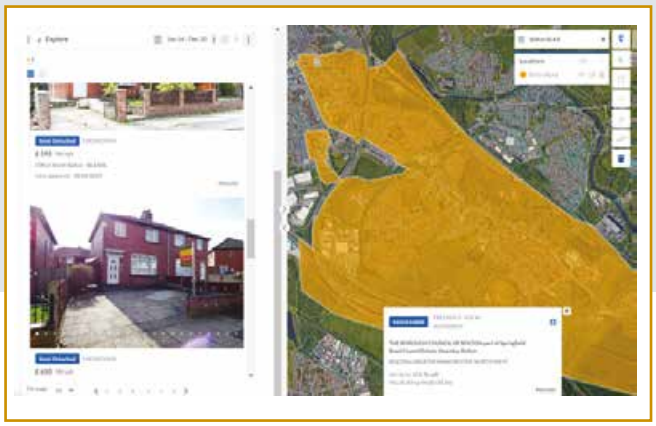
When interest-cover ratios define the viability of finance, it's essential to know the realistic level of achievable rent for a new development as well as what is truly affordable in order to strike the right balance between ensuring a development is financially viable and providing the best value to tenants.

Developing the site

This is where the data really comes into its own by enabling housing providers to understand the competitive landscape – where gaps and opportunities exist, understand what tenants value and where housing is needed most.

For example, identifying that the monthly rent of a property with a small garden is £50/month more than without a garden. Or that a series of new planning applications have been submitted in an area that either requires an affordable housing component or may change the nature of the area, thereby creating other interesting development opportunities. Or that in a particular location there is little difference between the local housing allowance and the affordable rent, potentially allowing for partnerships with local authorities. Or that one location has





Source: Homes England (Housing Completions, April-September 2020)

a relatively high cost of living and a growing population but a large amount of disused space which could be perfect for redevelopment.

Using a range of systems which incorporate market data, socio-economic data, consumer data and competitive information can provide deep insights into the market and give you a strong indication of exactly what is needed, where and for whom.

Maintaining the properties

Lease renewals are obviously just as important as finding new tenants, but how do you know if you're setting the correct rent level? You could ask an agent, you could look at your own portfolio or you could look online. But in each instance, you'll tend to see only part of the picture and having the wrong information when it's time for renewals can be highly problematic.

With rents typically linked to inflation or a highest recent comparable, and inflation historically almost always positive, there is little opportunity for rents to decline. However when the market shifts rapidly as it has done now twice in a dozen years, those who can see what's happening and react to it quickly tend to do better because they can keep up with changes in the market, both on the way down and on the way up.

A housing provider's tenant wanting to reduce their rent (for whatever reason) but finding only the same or higher price may instead just move out if they can. If that happens en masse, it can create problems for that housing provider. Instead, by keeping an eye on the market and market rents, housing providers can more easily adjust rents to keep them affordable.

Ben Potter, data analysis & evaluation officer, Liverpool City Council, said, "Realyse has been a welcome addition for us. It quickly helps our officers to visualise market activity as a backdrop to our reactive and proactive housing work.

"Having an analytical tool that accelerates the process of understanding sales, rental and planning trends at a pretty granular level enables us to gain more insight, challenge existing preconceptions and help focus our resources better."

As more housing providers and local authorities use Realyse and other technologies in their decision-making processes, we expect to see greater clarity in the market. This will hopefully help everyone to more easily understand where, what and when to build, and in doing so, avoid competition with each other and with other parts of the market.

We're already helping organisations such as Places for People, Liverpool County Council and L&Q with market data and we hope that the advantages they see from using our technologies and those from other suppliers spread across the sector, leading to improved outcomes for tenants and businesses alike.

Gavriel Merkado is the founder & CEO of Realyse.

Plentific expands online contractor platform

Plentific has upgraded its online repairs and maintenance platform so that housing providers can now use it to manage their existing contractor relationships.

The platform's new 'appointed contractor' feature means housing providers can choose to assign work orders to a mixture of their preferred contractors, their own workforce or from Plentific's marketplace of approved contractors, all from the same screen.

Not only does this give housing providers greater flexibility regarding how they assign repairs and maintenance jobs, but it also means that all orders can be managed through a single online dashboard, bringing together compliance, repairs and voids data in one place, irrespective of the delivery method.

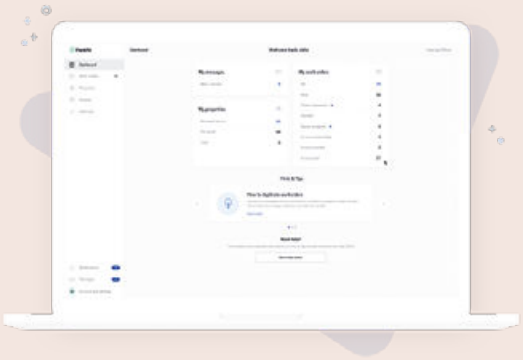
Plentific's 'appointed contractor' feature enables housing providers to set up rules determining when a job should be assigned to a preferred contractor and whether it's applicable to only standard, responsive work or also to emergency work orders. If needed, housing providers can also place orders on the Plentific marketplace, ensuring the work is always completed as fast as possible.

Users of Plentific's platform can invite their preferred contractors to the platform and, once verified, begin assigning orders to existing SLA contractors as well as the marketplace and their DLO.

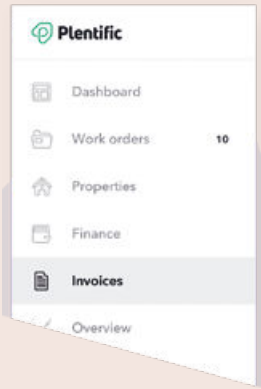
Cem Savas, co-founder and CEO, Plentific, said, "While our marketplace has allowed housing providers and local authorities to expand their supply chains, we recognised that many of them will also need to manage their existing relationships within our platform."

Plentific's online maintenance & repairs at Centrepoint

Homelessness charity Centrepoint is set to use Plentific's platform to manage the repairs and maintenance of its hostels for homeless young people. Through the platform, Centrepoint will be connected to a marketplace of approved local contractors and gain insights about the repairs and maintenance operations of its properties.



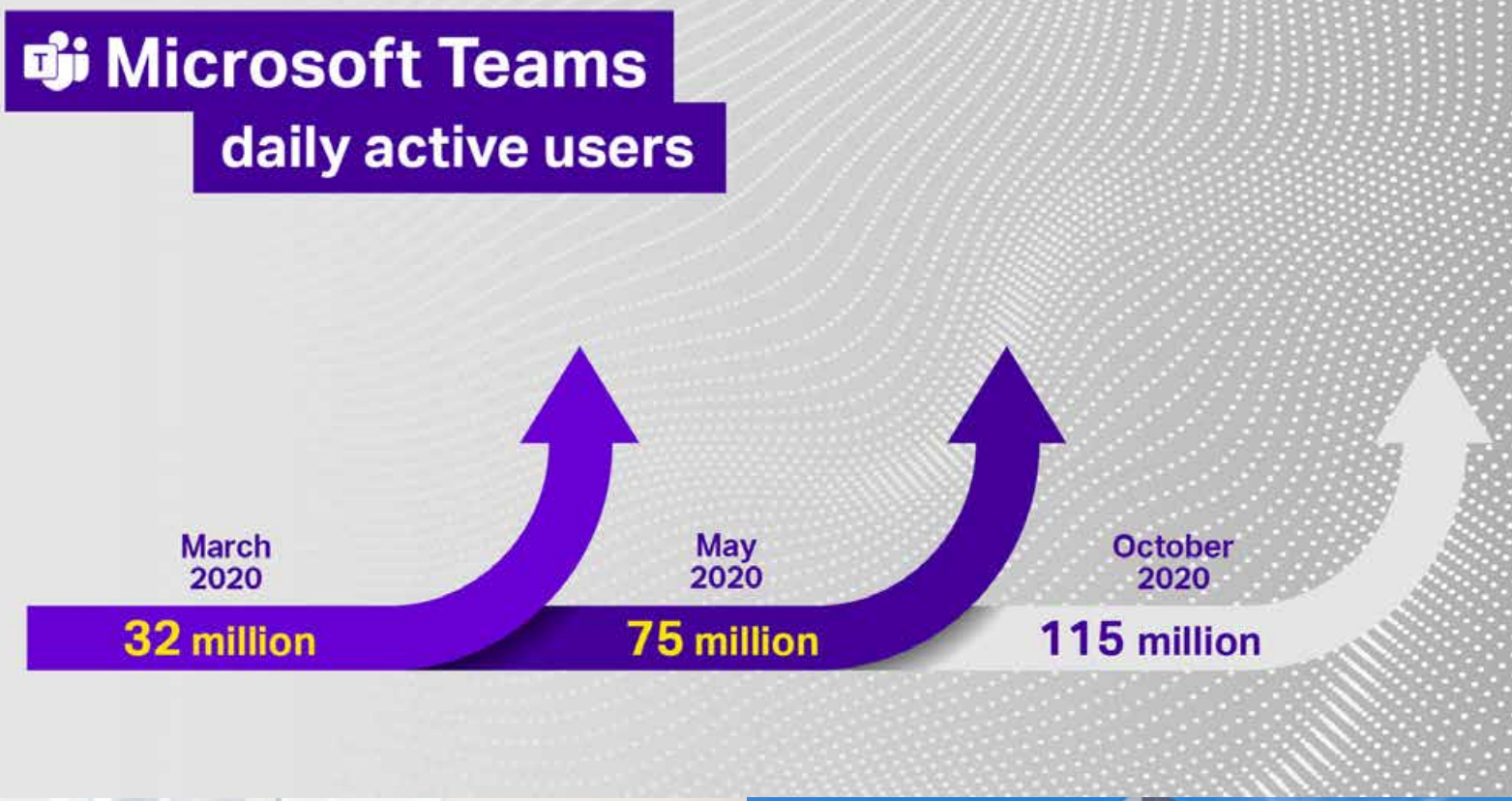
Plentific's technology platform and online marketplace will help to manage each step of the charity's repairs and maintenance processes and is expected to reduce the average repair time from 13 days to 72 hours.



Ed Tytherleigh, director of support & housing, Centrepoint said, "We are partnering with Plentific for our repairs and maintenance work – Plentific's online marketplace will transform the way we manage our properties and will provide an even better environment for our young people, allowing them to prosper and grow as they move away from homelessness and the other challenges they face."

As well as digitising its repairs and maintenance processes, Plentific will also provide Centrepoint with insights into how its properties are performing. This will enable the charity's property managers to better understand its needs across the entire estate and make more informed decisions.

Cem Savas, CEO and co-founder, Plentific said, "Having a safe place to live is absolutely essential to people's wellbeing and our platform will help to ensure that Centrepoint's clients have the best environment while they build their lives. Our mission is to make housing work better for everyone and I can see no place where the need is greater than for those who might otherwise be homeless."



Giving Teams a Voice

Microsoft Teams with Telephony can be a great way for housing organisations to bring all their communications together and turn MS Teams into a full Unified Communications solution - Direct Routing could be the ideal alternative to costly Microsoft Calling Plans.

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Gamma

Sheffield Council streamlines with Totalmobile

Totalmobile has contracted with Sheffield City Council to streamline the housing repairs processes for its 44,000 council houses with smart job management and mobile technology. Totalmobile's Connect software is expected to be fully operational by September 2021.

The council wants to continue digitising its processes and minimise the time spent by its workforce logging and planning maintenance requests from tenants. With 200,000 repairs per year, the council will be using Totalmobile's repairs and dynamic scheduling software to maximise operational efficiencies while cutting travel times and carbon emissions.

For the council's tenants, Connect will give them greater flexibility about booking repairs appointments. In turn, each job will be automatically assigned to operatives who have the right skills, materials and resources to hand. The system's mobile capability also gives each worker contextual job information to consider beforehand, while operational dashboards enable the council's management to monitor ongoing work and service levels.

Sheffield City Council also intends to implement Connect's video-diagnostic feature so that their operatives have a better idea of what needs to be done before they even set out. Connect's business intelligence and diagnostic scripts also help to alleviate pressure on contact centres, with the scripts using a bank of repairs data to suggest courses of action.

Mark Betts, transport and FM senior service improvement manager, Sheffield City Council, said, "We're very excited to get Totalmobile's Connect solution for our 600-strong team. The dashboards will ensure that we have the intelligence to react to potential issues before they affect planned services, and the dynamic scheduling will improve our operatives' efficiency and productivity, and let our residents select the time that best suits them for repairs appointments."

'IT test-bed' residences from MIS Group

In an interesting development, IT provider MIS Group has branched out and bought a number of residential properties with a view to using them as a test-bed to trial innovations in housing management technology.

The newly-created Mirca Properties will provide rental accommodation to tenants, managed through MIS's ActiveH Web housing management system and IT services provisioned by MIS Group subsidiary Incline IT.

In common with most other IT providers to the housing sector, MIS Group has found that most IT transformations require a leap of faith, particularly when it comes to the very newest technologies because they usually lack customer references, proofs of concept, RoI metrics and other evidence-based approaches needed to support housing providers' underlying business plans.

In order to remove some of these barriers to change, MIS Group will use Mirca Properties to test and refine new technologies and managed IT services in a truly live environment.

Andrew McLaughlin, managing director, MIS Group, said, "Across the entire MIS Group, we love to solve problems and look for better ways to do things. Through our Mirca Properties venture, we hope to empower the sector to extract maximum value from technology innovations. By demonstrating and evidencing these technologies, we are realising the 'art of the possible' and creating a blueprint to de-risk similar projects for housing customers."

While some of the more ambitious projects on the horizon include using autonomous cloud and full housing process automation, the company's first goal is, "to take the internet of things in housing from theory to reality."

Trialling IoT devices within its housing assets, Mirca Properties will use the sensor data to fully automate decision-making and trigger activities within ActiveH Web, based around advanced analytics capabilities through Incline IT's partnership with Amazon Web Services.

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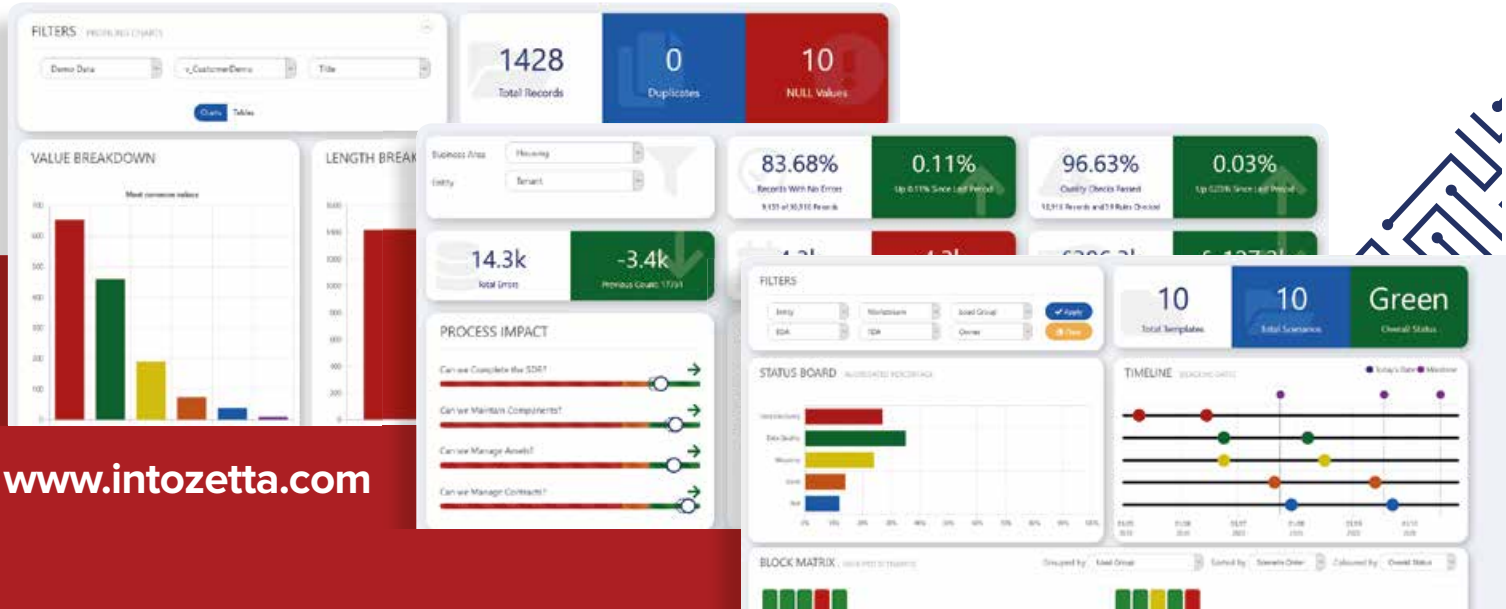

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Data integration and straight-through processing

Housing Technology interviewed data integration experts from Aareon UK, Civica, FireAngel Safety Technology, IntoZetta and Northgate Public Services about how and why housing providers should be focusing on data integration and straight-through processing to improve their internal operations and tenant services.

What is the ultimate aim of data integration?

Aareon UK's ERP solution manager, Paul O'Reilly, said, "The ultimate aim of data integration is to both improve staff efficiency and to give a great customer journey. If we start with the experience of a customer who has requested a service from their housing provider, then this should be the thing that informs how we conceive the role of integration. Relevant data may lie in several different places, yet it all needs to combine to create the 'story' that provides the customer with a satisfactory resolution to their issue."

Trevor Hampton, director of housing solutions, Northgate Public Services, said, "There is just no room in today's digital world for rekeying information from one system to another. Data integration gives housing providers the ability to see the whole picture, ultimately enabling them to offer fully-digital service delivery. It's only when all the data is connected that they can satisfy customers, contractors and stakeholders' transactional expectations."

Andrew Eayres, solution architect, Civica, said, "The aim is to bring together data held in disparate systems. Doing this provides a single view of your data so the resulting information is accurate and ultimately allows better decision making. For example, to have a holistic view of a given asset, data is used from your asset management system for planned replacement, or for tenancy turnover, you would access data from your HMS and then add external deprivation data to create a single view."

IntoZetta's co-founder and director, Graeme Cox, said, "At the technical level, data integration transforms a housing provider's typically disparate and fragmented data landscape, sitting across multiple applications, into a coherent, consistent and accurate dataset. This integrated data capability underpins business process and service integration, increasing the levels of automation and reducing the levels of manual intervention through the hand-cranking of stop/start, broken and siloed business processes."

Why is data integration hard to achieve?

FireAngel Safety Technology's chief product officer, Nick Rutter, said, "We're at a stage where the digital integration of data is relatively simple; if you want to streamline datasets and reduce the number of application platforms then integration can be as simple as enabling an API transfer.

"The challenge comes when you want to integrate physical data files or data that's stored in multiple channels into this system; very often the volume of data is unmanageable and the resources available to oversee this type of integration aren't available. Add in concerns around confidentiality, GDPR and inaccurate or missing data, and the whole exercise becomes even more complex."

I think the concept of STP is beginning to gain traction now that housing providers can see what's possible – just look at the truly online business models of companies such as Amazon or Ryanair who have been using this model for years.

Paul O'Reilly, ERP Solution Manager, Aareon UK

Civica's Eayres said, "Data is usually held for specific purposes, in different structures and formats within different systems, from relational databases to Word documents, often in silos, all with their own data models. A housing provider will also probably supplement their core business systems with a variety of informal systems (such as spreadsheets) that become mission-critical data stores. If those challenges aren't enough, many legacy systems were not designed with data integration in mind; the

STP supports the concept of a single source of truth and a 'golden thread' of data because all interactions can be digitally logged against the file for each property or tenant.

Nick Rutter, Chief Product Officer, FireAngel Safety Technology

data may not share a common key and the system may not have a suitable API or other mechanism to facilitate integration.

"Most housing providers' core applications comprise the 'big three' of housing, asset and finance management systems, each with their own databases and data structures, leading to questions about accuracy, which is the lead system and legal constraints about the processing of a particular dataset.

"The challenge is designing systems that are fit-for-purpose while having the ability to integrate the data with other systems without actually duplicating the data – i.e. to integrate data there shouldn't be a need to hold the same data in more than one system."

IntoZetta's Cox said, "There are several unavoidable prerequisites that must be addressed before data integration can be successfully delivered. Unless there has already been a large-scale transformation programme that has consolidated multiple applications into a single new application, it is likely that data is strewn across numerous applications and even some undocumented 'grey IT' built up over the years.

"Typically, data is stored across many applications and in different structures, so there isn't a single view nor a single trusted source. What data sits where and how it moves around the organisation is largely unknown. The overall quality of the data is uncertain and not accurately measured, and there are often different misaligned data identifiers or 'unique keys', so linking data across applications isn't possible. All of these issues will prevent a functioning data-integration capability.

"Over and above the data issues, there is the integration platform and middleware technology itself to design, configure and implement. It must be compatible with multiple application types and integrated with various technologies and database types. In addition, it must be capable of transforming data values and data structures 'in-flight' while data and messages are being exchanged, and of course it has to be secure and controlled as well!"

What do housing providers need to do in order to integrate their data across applications?

Aareon's O'Reilly said, "In the old days, joining up systems and therefore data was very much a case of interfaces. Manual, unreliable and prone to problems, this was, and in some cases still is, a drain on the resources of many IT departments. Things are now changing and the majority of HMS suppliers now offer APIs to some degree or another. These enable easier data integration but they still demand a good deal of technical knowledge so some developer assistance is usually needed.

"Another area often overlooked are the dreaded spreadsheets which enable housing staff to create their own 'data islands' that are almost impossible to include in any coherent data strategy.

"A new approach that we are working on at Aareon is the concept of a 'smart platform' – a cloud-based platform with a single set of integrations back to the core HMS at one end, and an environment which allows housing providers to 'plug and play' digital products, IoT devices, third-party systems and even internally-developed applications into the platform. This approach gives a more usable and comprehensive solution to the problem of integration compared with the traditional, on-premise enterprise service bus (middleware) approach."

IntoZetta's Cox said, "Before trying to integrate data across applications and services, a detailed understanding of your data landscape is essential. The data must be fully mapped out and be of high quality, so that it can support the integration process through data linking and alignment across the applications.

"Data discovery is needed to identify what data is stored where, the data quality and data lineage, and how it flows to and from both the internal applications and to third parties. This activity, sometimes known as data archaeology, should include all data sources, systems and applications, local databases (incl. grey IT), spreadsheets and even documents.

The key is to identify which service requests or transactional processes most lend themselves to STP, but it doesn't have to be an all or nothing situation; some processes might need only some degree of STP.

Andrew Eayres, Solution Architect, Civica

"A comprehensive data-quality assessment is vital, ideally using an industry-standard set of business rules, to identify where the data-quality issues are across the various business processes and the corresponding impact of each error. This approach will then allow any necessary data cleansing to be carried out correctly.

"Once the data is fully understood, mapped and clean, it's ready for integration. However, for ongoing and successful integration, the data must be placed under formal data governance and data quality controls to monitor for any degradation that could lead to integration failures."

Northgate Public Services' Hampton said, "First, you need a data integration strategy if you want to integrate your data across applications and services. For example, do you use an application-to-application data integration approach, middleware technology or a common data storage approach?

"Second, you need to have access to the right IT skills, either via external data-integration specialists or by training your internal IT staff. In the case of the latter, we'd suggest training a small team rather than an individual to avoid a skills gap if or when that individual leaves.

"Finally, put data-sharing agreements in place before the data integration begins. These include agreements with external stakeholders, such as tenants and contractors, as well as departmental stakeholders because you need an agreed policy about what data is to be shared. These are relatively easy to put together and, in a nutshell, cover what data, how often and in what format."

How would you define straight-through processing (STP)?

Aareon's O'Reilly said, "STP is a friction-free process that needs little or no human intervention, providing an immediate resolution for the customer and optimised processing for the housing provider.

"Take the example of a tenant booking a repair. The tenant logs on to the self-service portal or app, reports the damage or fault using diagnostic tools, selects their preferred time and date for the tradesman to call, and has this selection confirmed by an automated text or email. The repair order, because it is low value (in this example), doesn't need to be authorised, and so is created and issued within the core HMS and sent via scheduling software to an operative's mobile device. The operative attends the next day, fixes the problem, marks the job as complete, which completes the order in the HMS, sending an automated satisfaction survey by the tenant's chosen method. Meanwhile, the invoicing data is created in the finance system and readied for payment. Throughout that entire process, nobody has had to manually intervene in an IT system, and the tenant gets a speedy resolution to their problem."

FireAngel's Rutter said, "STP removes the need for manual intervention, reducing the resources needed for day-to-day functions such as payment transactions. For a housing provider, the introduction of STP allows them to benefit from automating their wider processes, such as letting tenants request maintenance visits, report ASB or access a chatbot powered by FAQs and a knowledge base."

Civica's Eayres said, "STP is all about customer requests that can be processed using automation, such as via an electronic form with no manual intervention. STP originated in the banking sector to enable payments and other transactions go through without any manual processing, but it can be applied to almost any service request."

At the technical level, data integration transforms a housing provider's typically disparate and fragmented data landscape, sitting across multiple applications, into a coherent, consistent and accurate dataset.

Graeme Cox, Co-founder & Director, IntoZetta

Do housing providers understand the concept of STP?

Northgate Public Services' Hampton said, "As a specific terminology, STP is not widely known in the housing sector because historically STP has mainly applied to financial services, but housing providers are more familiar with the concept of data integration. After all, the majority of housing providers have a degree of data integration, perhaps linking their housing or asset management systems with their finance system or their rent accounting system with their tenancy payment engine, while some of the larger housing providers have more sophisticated data integration systems, such as middleware and master data management.

"While our sector is keen to enjoy the seamless experience that STP provides, housing providers know that it can't be achieved 100 per cent of the time. There will always be instances when it's impossible to have a fully automated transaction; a good example being a tenant with a pest infestation and a phone call would be needed to get a better understanding of the problem."

Aareon's O'Reilly said, "I think the concept of STP is beginning to gain traction now that housing providers can see what's possible – just look at the truly online business models of companies such as Amazon or Ryanair who have been using this model for years.

"The pandemic and past year of disruption have forced our sector to make changes to the way it thinks about technology. The housing sector has historically

lagged behind others but we're now seeing significant acceleration in housing providers' plans for digitisation."

FireAngel's Rutter said, "I think housing providers' understanding of STP is growing and, more importantly, their acknowledgement of the benefits of STP is increasing. Self-service is now commonplace in our daily lives, with online banking, chatbot customer service and online shopping driving this acceptance of STP."

Are housing providers ready for STP?

Northgate Public Services' Hampton said, "Consolidation lies at the heart of whether or not you're ready for STP and data integration. We're still seeing housing providers who lack not only a data integration strategy but also lack a fundamental IT strategy. Having too many disparate IT systems makes joined-up data-sharing unwieldly and expensive, and continuing to rely on paper-based processes makes data integration a complete non-starter.

"Another crucial factor in determining STP readiness is whether the housing provider has mapped out its customer journey from start to finish and thought about what this now looks like in a digital world. If this hasn't been done then it will be difficult, if not impossible, to identify the consequent data integration needs. The customer journey has changed so much in the last decade that it's vital to reimagine it in order to understand what the new digital connections look like and where the data integration points need to be.

"If you don't start to invest in data integration and IT strategies now, then imagine how far you will be behind in five years' time when looking through the lens of a fully connected, transparent and integrated IoT world."

There is just no room in today's digital world for rekeying information from one system to another. Data integration gives housing providers the ability to see the whole picture, ultimately enabling them to offer fully-digital service delivery.

Trevor Hampton, Director of Housing Solutions, Northgate Public Services

What are the advantages and disadvantages of STP?

Civica's Eayres said, "The main advantages of STP are better customer service by quickly and efficiently handling tenants' service requests, combined with lower costs from the removal of unnecessary manual interventions and more 'first-time fixes'. For example, if a tenant receives prompt automated communications about the progress of their request, it removes the need for them to contact their housing provider. STP also formalises many decision-making processes, thereby removing arbitrary choices at the same time as providing an automatic audit of the outcome.

"The main disadvantages of STP are the difficulties and cost of achieving STP across disparate systems that were perhaps never geared up for facilitating STP in the first place. These are coupled with concerns about accuracy and the suitability of handling particular requests via STP. For example, a housing provider might want to impose manual checks when updating asset information; humans are very good at handling variations and dealing with uncertainty whereas an automated process might not be.

"The key is to identify which service requests or transactional processes most lend themselves to STP, but it doesn't have to be an all or nothing situation; some processes might need only some degree of STP, still leaving the freed-up resources to focus on exceptions management or adding human involvement where and when it's needed most."

FireAngel's Rutter said, "Housing providers have the almost-impossible task of providing residents with safer homes and supporting a higher quality of living from already-stretched resources; STP can shoulder some of that burden and reduce the volume of administrative tasks. STP can also support the concept of a single source of truth and a 'golden thread' of data because all interactions can be digitally logged against the file for each property or tenant. STP also reduces errors and concerns around GDPR and other regulatory requirement because processes should be able to be completed in full without human intervention or error."

IntoZetta's Cox said, "STP helps to drive improved service, greater operational efficiency and streamlined business processes, all resulting in higher levels of customer satisfaction. Because the need for manual interventions is reduced, operating costs fall, productivity improves and existing staff resources redirected towards more value-adding activities. However, things can go wrong if there are gaps in the STP design and missing scenarios that will need manual interventions and work-arounds until they have been fixed."

What factors prevent housing providers adopting STP?

IntoZetta's Cox said, "Aside from any cultural barriers arising from increased automation, the typical factors preventing housing providers from adopting STP are other competing priorities, cost, complexity and the lack of a clear business case defining its benefits."

Northgate Public Services' Hampton said, "The biggest barrier is if the housing provider hasn't built the right foundations, and for that you need a housing management system that's fit for purpose. I can't bang the drum loudly enough here because if your housing systems aren't functioning as they should then linking up the data will be irrelevant because the quality of the data won't be good enough.

"Having a flexible, open system is so important, and your systems should ideally provide free APIs for the ultimate flexibility. While we might have been the first to do this, it is nevertheless encouraging to see a number of other HMS suppliers now changing their approach. That said, all housing providers should be mandating this because it's

about ensuring they have the power to control and use their data freely, easily and with no restrictions.

"You also need the vision, understanding and buy-in from top to bottom of your organisation because achieving STP isn't a short-term process. It's possible to achieve STP levels of around 15 per cent of transactions within the first year, but to get above 80 per cent of transactions and processes being completed without human intervention will take three to five years."

Aareon's O'Reilly said, "Technology can be a barrier, especially if you are trying to build an STP-based solution yourself using tools that don't lend themselves to the idea. Data integration and reliability are both critical factors, alongside the 'corporate mindset'; unless you have arrived at a housing provider from another business sector and have already experienced STP in action, it can seem counter-intuitive to relinquish hands-on control of your business processes, but if executed well STP is a significant driver of both efficiency and great customer journeys."

Housing Technology would like to thank Paul O'Reilly (Aareon UK), Andrew Eayres (Civica), Nick Rutter (FireAngel Safety Technology), Graeme Cox (IntoZetta) and Trevor Hampton (Northgate Public Services) for their comments and editorial contributions to this article.

Southampton's gigabit broadband from Hyperoptic

Southampton City Council's tenants now have access to gigabit broadband (over 12x faster than the UK average) from Hyperoptic.

Hyperoptic originally installed its network in Southampton in 2016 and has since expanded its reach to the council's social housing properties. 4,000 council homes now have access to the Hyperoptic network, with a further 2,000 properties about to be added. The full-fibre broadband provider has also connected 14 community centres in the city, where it will offer the general public free access to its gigabit broadband.

Satvir Kaur, cabinet member for homes and culture, Southampton City Council, said, "With more people working and learning from home, access to superfast broadband has never been more important. We're very grateful to Hyperoptic for making this service available to our tenants, investing in Southampton and supporting our ambition to become a leading digital city."

Hyperoptic said that based on its 'digital connectivity social value calculator', Southampton City Council is creating over £1.2 million of social value through the rollout of Hyperoptic's full-fibre network across the city.

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Interview
Vivid changes with Teams Direct Routing... and headsets

Sam Winterbottom, Public Sector Director, Gamma

Gamma's public sector director, Sam Winterbottom, interviewed Rob Poyser, Vivid Homes' infrastructure operations manager about the housing provider's use of Microsoft Teams Direct Routing.

In the January 2021 issue of Housing Technology, we looked at how Microsoft Teams has provided an easy route by which housing providers can adopt unified communications as a service. We also noted that while the power of Teams is undisputed, in its basic form it is an inward-facing solution, a compelling unified platform for internal collaboration, but one that can't link to the outside world via mobile or wireline public telephone networks.

That's a real problem for organisations, such as housing providers, whose very raison d'etre is to serve customer constituencies for whom the phone is still the preferred method of communication. Microsoft offers two solutions to this telephony integration challenge – Microsoft Calling Plans and Microsoft Direct Routing.

Calling Plans keeps things tidy in a contractual sense because it's provided by Microsoft but calls packages can be expensive and inflexible when compared to offerings from 'normal' telcos. Direct Routing enables Teams to work with telephony provided by a third party such as an existing telco, so depending on the choice of telco, call costs can be lower and flexibility greater.

Vivid Homes adopted Teams Direct Routing in 2020 and is now reaping the benefits. With 31,000 homes across four counties of Southern England and plans to build 17,000 more over the next decade, Vivid serves 72,000 customers, and those numbers give a clue to the scale of the external communications challenge faced by Vivid.

Rob Poyser, infrastructure operations manager, Vivid Homes, said, "By happy serendipity, we had already adopted Teams before coronavirus struck. We'd been using the on-premise Unify Openscape system for around 10 years; it was great when it was first installed but over time had become a nightmare to support, so we decided to move to a cloud solution and chose Teams.

"We have a full E5 license for Teams and are keen to use the entire stack provided by Microsoft in order to generate maximum value for money. Before coronavirus, we were already holding meetings on Teams and that on its own was having a positive impact on our operations.

"Having it in place put us in a really good position to quickly move to more flexible ways of working. People log on, do a few hours' work, then maybe need to look after their children for a while, and can then log back on and do some more work later. Talking to our people, many are much happier working from home and not having to do their daily commutes. Of course, it's about a better work-life balance for them."

Vivid's staff liked Teams from the outset because they found it so intuitive. At the same time, Poyser and his colleagues were freed from the burden of the almost daily interventions they previously had to make to keep things working smoothly.

Poyser said, "We suddenly had time to work on other projects. Even upgrades are handled without us having to get involved. Being cloud-based means that we don't have to worry about the upgrades – they're just done for you."

When Vivid wanted to extend Teams to accommodate external telephony, Poyser and his colleagues first of all experimented with Microsoft Calling Plans but soon saw that Direct Routing would deliver two further benefits.

Poyser said, "Of course, there was the question of cost from making savings with Direct Routing over Calling Plans, plus our telephony provider was Gamma and we already had a good working relationship with them."

However, Poyser is realistic and pragmatic about the customer dynamic between the global scale of Microsoft and its smaller customers.

Poyser said, "When we've had to call on Microsoft regarding support issues, they did what was needed, but when it's something as crucial to our daily operations as the primary link between Vivid and our customers, the telephone, then we really want the comfort of being able to speak to someone who can help right there and then, and that's what our relationship with Gamma gives us.

"The transition to Teams Direct Routing with Gamma was smooth. We did it in stages, department by department. Now Vivid staff can work from pretty much anywhere and still take and make phone calls to external mobile and landline numbers."

Apart from choosing a telco with an advanced and highly stable infrastructure and a very proactive approach to customer care and service, what's Poyser's next tip for the smooth integration of 'anywhere telephony' using Teams Direct Routing? It's not quite what you might expect: headsets.

Poyser said, "Yes, headsets… Think about it – you're giving people the ability to take and make phone calls through any device they choose that's logged on to Teams. They might be using a laptop on a train or in another public place, or a tablet in the kitchen at home. Unless they use a headset, everyone around them hears the call and for a number of reasons that's clearly undesirable.

"Headsets are essential. We discussed with our people what they wanted and top of the list was comfort, followed by really good quality audio, both from a hearing and speaking viewpoint as well as the removal of extraneous noise. We tested loads of different headsets before choosing ones from Jabra."

Sam Winterbottom is the public sector director at Gamma, and Rob Poyser is the infrastructure operations manager at Vivid Homes.

Following the golden thread to fire safety

James King, Connected Homes Director, FireAngel

Dame Hackitt's independent review of building regulations and fire safety, combined with the release of the draft Building Safety Bill and the recent formation of the National Construction Products Regulator, continue to drive cultural and regulatory changes throughout our sector regarding the safety and suitability of residential buildings, particularly high-rise structures.

FireAngel's connected homes director, James King, explores how the internet of things and artificial intelligence technologies that enable remote real-time monitoring are supporting housing providers in achieving a 'golden thread' of data that supports actionable insights to ensure each tenant's individual safety requirements are adequately met, while also documenting constant compliance across an entire property portfolio.

The recommendations outlined in both the Hackitt Report and the draft Building Safety Bill are based on a significant change in approach for our sector, one which places resident safety and building suitability at its core.

This new methodology is predicated on overcoming the ingrained flaws of the housing sector's current regulatory system, specifically with regard to the inadequacy of existing methods of paper-based data capture and the subsequent failure to successfully communicate this information to key individuals throughout the entire lifecycle of a building.

The Hackitt Report has proven that the failure to sufficiently document and communicate this information leads to an inability to comprehensively understand the level of risk each property and tenant represents, which subsequently means the building isn't fit for purpose and constant compliance can't be achieved.

To successfully attain this shift in methodology, the requirement for a 'golden thread' of transparent building information is critical, not only during the initial design and construction stages, but throughout each occupation and maintenance phase, to provide valuable insights that can be acted on to ensure due diligence and duty of care.

The digitisation of data capture

By replacing existing safety solutions with connected systems, housing providers can cost-effectively digitise their methods of data capture to attain a consistent output of necessary information and achieve confirmation of compliance across an entire portfolio, right from the initial installation stages.

Because gaining access to properties continues to be an ongoing concern for housing providers, it's paramount that once access is achieved, contractors can successfully install and sign off the network in a single visit. To ensure installers can support a single thread of data, without reams of paperwork to file once they've left the property, connected technologies are enabling these stages to be completed on site, with all of the details digitally logged against the property in an instant.

Following installation, the contractor can validate each device by taking a photograph of every product installed in each room. These images are then uploaded to the centralised platform, facilitating immediate sign-off, which subsequently produces a certification of fire legislative compliance in accordance with BS 5839-6.

This intelligent process of digital confirmation eradicates any requirement for paper-based data capture, ensuring each installation has been successfully assessed for

competence and validated to ensure the maximum levels of detection have been achieved, completely revolutionising previous approaches to documentation and verification.

Adaptive information

Because these connected solutions support the data capture and wireless communication of relevant information, the 'golden thread' of data from the initial installation is extended on a daily basis as key details from every device across an entire network are transmitted in real time to the cloud-based platform.

As a result, housing providers can receive instant notifications regarding the status of every device installed in each property across their entire portfolio, including vital information such as alarm diagnostics, alarm history, replacement dates and network health.

The very nature of a wireless network also supports its continued adaptability, giving housing providers the flexibility to install or remove additional sensors, dependent on the unique requirements of the resident and their property.

English Housing's 2019-2020 survey found that over half of social-rented households have one or more members with long-term disabilities. As their needs develop and change, it's essential that the data captured can either highlight this shift or be enhanced to include further data streams to support the additional need that has been identified.

For example, by installing smoke, heat and carbon monoxide (CO) devices that feature supplementary sensors and use IoT and AI technology, housing providers can capture valuable information regarding additional factors that may affect the safety of a resident and the suitability of the building, not just the associated dangers attributed to smoke and CO.

This encompasses diverse influences, such as monitoring the level of humidity and temperature of the property or detecting water leaks and room occupancy. Because this data is captured in real time within the cloud-based platform, the network of devices wirelessly communicates the data to key individuals to provide essential insights into the current status of the property and the associated risk factors that may need to be acted on. For more immediate actions, the sensors can also detect whether a resident is in distress and needs immediate support through the activation of a wireless panic button and smart siren.

Revolutionising audit & asset management

By offering the ability to also communicate this information into an existing asset management platform, housing providers can not only achieve a new level of fire-safety practices that adhere to the guidance outlined in the draft Bill, but also use this 'golden thread' of information to cost-effectively transform their approaches to asset and audit management.

This data also enables the creation of actionable insights that can be communicated to key individuals responsible for the continued safety and maintenance of each property. This allows constant upgrades and adaptations to be made as and when needed to ensure the continued safety of each resident.

To support this, FireAngel's Predict technology, which uses the data output from each smoke and heat sensor to identify high-risk patterns and trends and then translates them into manageable and actionable insights, ensures the continued safety of each individual through the strategic application of resources in the most cost-effective and efficient way.

By monitoring dangerous trends as they happen, it enables our unique patented algorithm to prompt a non-time critical intervention, marking a shift towards a methodology of prevention, rather than purely reaction, to potentially prevent a life-threatening event from occurring.

The result is a long-term reduction in overheads because this successful stratification of risk identifies any changes in building or resident behaviour, as and when it occurs, to support the effective management and maintenance of assets, while also streamlining current auditing practices, particularly with regard to compliance because a digital audit trail of compliance is constantly updated and documented.

The principles of the new regulatory framework outlined in the Hackitt Report aim to drive real cultural change and support the adoption of new behaviours throughout our sector. Through the provision of connected technologies that support remote real-time monitoring, housing providers can achieve a 'golden thread' of building information that is consistently updated and communicated to facilitate actionable insights that not only ensure constant compliance but also provide each resident with the highest standards of safety.

To find out how FireAngel Connected can help protect your residents and properties, get in touch with our specialists via connectedhome@fireangeltech.com or visit fireangel.co.uk/connected.

James King is the connected homes director for FireAngel.

FireAngel's next-generation gateway

FireAngel has launched its New Generation Cellular Gateway enabling housing providers to offer higher levels of protective and preventative fire safety.

Using FireAngel's Smart RF technology, the New Generation Cellular Gateway wirelessly connects smoke, heat and carbon-monoxide alarms in a property to FireAngel's Connected cloud-based platform. Housing providers can then monitor when alarms are triggered, removed or need maintenance. The FireAngel Connected solution is augmented with an AI-powered fire risk tool, FireAngel Predict, which uses live data to give a real-time risk level for each property.

FireAngel's new gateway is Zigbee-compliant, allowing connectivity with other Zigbee sensors in a property, such as water-leak detectors, panic buttons and motion sensors. The gateway also has built-in temperature and humidity sensors to allow housing providers to identify properties at risk of damp and mould.

Trials of the New Generation Cellular Gateway are currently underway in a number of social housing properties across the UK.

Nick Rutter, co-founder and chief product officer, FireAngel, said, "Our New Generation Cellular Gateway is an integral part of a housing provider's digital transformation strategy. Because it gives access to our FireAngel Connected system, it offers housing providers a remote monitoring system as well as offering a live risk assessment tool to help protect tenants and properties.

"With Zigbee built in, our system can integrate with existing asset management systems so housing providers can be assured that the monitoring of a property's ecosystem will be scalable and expandable in the future to provide increased safety and reassurance."

Being 'cloud smart' to support tenants

Oliver Barrett, Business Development Manager for Housing, Phoenix Software

"The cloud – isn't that just servers in someone else's data centre?" A sensible question and, in reality, it's exactly that. Instead of locating your server infrastructure in your offices, you locate it in someone else's.

Instead of your team monitoring, managing, cooling, powering and upgrading the servers, you're paying someone else to do so, allowing you to benefit from their economies of size, scale up (or down) the resources you need and free your team to support your organisation in other areas.

While some housing providers do continue to invest in on-premise hardware, many are looking to leverage the cloud. However, the question we're asked most often is, "how can we use the cloud to give us the greatest benefit?"

You're probably already on the journey...

Many customers are already using Microsoft cloud services such as Exchange Online, SharePoint Online and Teams. These are all SaaS solutions and if you weren't using them at the start of 2020, the chances are you're using Teams now because it has allowed millions of people to communicate and collaborate across the world. But what about using the cloud to replace on-premise hardware? Ask yourself:

- Do you need an on-premise data centre at your head office?
- Do you want an on-premise data centre?
- Do you even want or need a head office?

Moving further to the cloud

The cloud delivers many benefits to the way we work, but that's different when it comes to infrastructure, right? In truth, yes and no. Yes, there are different benefits, but no, these benefits can still be great and many of the same core concepts apply.

In the same way the modern workplace gives you the ability to work more flexibly, productively and collaborate more innovatively, the cloud gives your data centre the ability to do the same.

It enables you to do certain things that were, while not impossible, difficult to do on-premise. One great example of this is IoT devices or sensors that give the ability to deliver a better experience for tenants while also making cost savings for you by pre-emptively and proactively undertaking repairs and maintenance.

These two elements combined are vital. For instance, take the proactive maintenance element. Boiler repairs are a huge cost, but by being able to monitor the boilers' components, measure their wear and tear, and predict when parts might need replacing, you can drastically reduce the costs of maintaining them. Also, on a human level, losing your boiler in the middle of winter is hugely inconvenient and sometimes dangerous, especially for older residents.

Fire systems, lift breakdowns and security systems – these are all areas to which IoT can bring benefits. Having a flexible and well-architected data platform sitting behind these solutions also helps to drive wider insights and innovations, enabling a more data-driven culture to develop to drive efficiency savings, allowing you to use your resources where they have the biggest impact.

Phoenix works extensively on data, IoT and AI in the housing sector and our relationship with Microsoft can help support you while doing so in a cost-effective, scalable and agile manner.

Where to start?

We see many organisations start by saying, "we want to move all our infrastructure to the cloud." Our question to them is always, "why?"

We don't believe that IT is a conversation around just technology anymore because technology can (within reason) do whatever you want it to. It's now a conversation around what do you want to achieve because the cloud may not be right for every workload or use case. We start with the 'why?':

- Why do you want to free up data centre space?
- Why do you want to help free up your team?
- Why do you want to become more data-driven or agile in your service delivery?

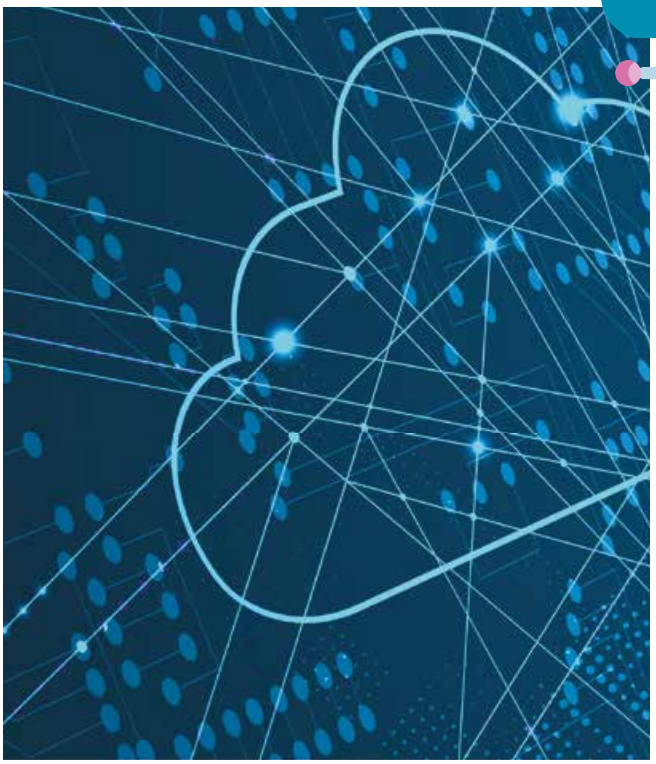
Once you have understood the 'why', it's important to then think about the 'how'. How do you make the move efficiently, securely and with the least disruption? You need to understand what your future requirements are and develop a view of your current environment along with any associated interdependencies between systems and how often/much these systems or applications are used.

This enables you to analyse this data and then design both an overarching architecture and cloud migration roadmap that meets your requirements. It also lets you develop a full TCO calculation for cloud services, from not only a pay-as-you-go perspective but also using the likes of reserved instances, hybrid use benefits and potentially some remaining on-premise hardware.

All of this helps to develop the business case for migrating to the cloud, but also ensures that when the migration is undertaken, it's done in a best-practice manner and leads to the highest possible savings; for some housing providers, there has been a 50 per cent saving in areas of IT expenditure by moving to the cloud.

Getting moving

Before you begin the migration, it's critical to make sure you have built a secure and scalable foundation, referred to as an Azure Landing Zone. The Azure Landing Zone is a cornerstone of your cloud adoption framework, making sure that identity, security, governance and networking are all in place to support and manage the migrated infrastructure.



This is vital because trying to retrofit the framework can be more difficult, costly and time consuming. Setting the foundations at the beginning of an Azure implementation to build in the governance and security to all services removes these worries.

It's then important to migrate the workloads as effectively as possible, potentially via an initial PoC, then expanding, via a series of wave groups or sprints, to ensure that the solution is adding value at each step. This process also allows the re-platforming of some of the applications into more SaaS- or PaaS-based offerings for further cost savings and benefits.

Ongoing management and innovation

We understand that support, management and optimisation are all relatively new skills for the housing sector when it comes to Azure. As a Microsoft Azure Expert MSP, Phoenix have demonstrated our skills, experience and commitment to Azure best practice and optimisation. We work as an extension of your teams, empowering you to focus on delivering new and innovative services to improve the provision to tenants and deliver immense value to you and your customers.

As the housing sector has accelerated cloud migrations in the past year, we're happy to talk through our experiences. Please feel free to contact me on 01904 562 200 or by email at oliver-barrett@phoenixs.co.uk.

Oliver Barrett is the business development manager for housing at Phoenix Software.

Cloud-powered postal mailings

Ian Johnstone, Workflow Solutions Specialist, Pitney Bowes

McKinsey Group estimates that the pandemic has accelerated the pace of digital transformation by seven years, and TechUK reported last year how it had seen two years' digital transformation taking place within just a fortnight.

Remote working, while enforced for many of us, has also been a strong catalyst for digital adoption. Cloud has been a major enabler; businesses have had to quickly find cloud-based alternatives for tasks usually completed in an office and workers have had to get up to speed on new tools for collaboration and communication. Microsoft Teams usage surged 70 per cent, with numbers reaching 75 million, every day.

Cloud-based tools are very good for many tenant-facing requirements, such as logging maintenance issues or booking appointments. And of course, self-service platforms and apps have a crucial role to play in the interaction between tenant and provider, and if they're cloud-based they can be easily accessed remotely.

However, some tenants prefer to receive printed communications, and recent reports show that mail is generating record levels of action and engagement.

Printed mail is valued and appreciated

One Royal Mail study found that 88 per cent of respondents reported paying as much or more attention than before to mail during the first lockdown in March 2020. Engagement with mail is higher than ever, reaching 96 per cent, and the biggest rise in engagement has come from people aged 18-34. Printed mail is proven to be more memorable and mail-driven online behaviour increased by 70 per cent, and 69 per cent of respondents in research from Two Sides say they keep hard copies of important documents filed at home, believing it to be the safest and most secure way of storing their information.

But delivering (please forgive the pun) printed communications when you're working remotely is harder. While employees continue to work away from their traditional workplaces, organisations are identifying gaps in their business operations; managing high-volume mailings is one of these gaps.

Certain communications, such as service charges and ground-rent notices, must be sent by physical mail, and some of those within specific time constraints. In theory, an employee with a printer, the right stationery and access to a website or post office could manage these mailings. But for organisations sending mail under the current circumstances, it's not practical to expect individual members of staff to manage the process themselves at home. And with higher mail volumes comes greater risk, and the wrong mailings sent to the wrong addresses could be classed as a breach of GDPR. Trying to keep on top of this when you have employees working from different locations is next to impossible, not to mention expensive.

In 2020, we took a deeper dive into the challenges, behaviours and investment plans of 250 public- and private-sector organisations with 500+ employees. We were particularly interested in how these organisations maintained business continuity in the areas of shipping and mailing since the beginning of the pandemic. If your business regularly sends hundreds of invoices or statements to your tenants, clients and partners, you probably have efficient processes and the right technologies at your normal workplace. But remove your workplace from the equation, and straightforward tasks quickly become complicated, time-consuming and expensive.

Business continuity challenges

The businesses we spoke to were, like many, hit by continuity challenges during the early phases of the pandemic. While the top strategic challenge (as expected) was around protecting the health and safety of employees, 30 per cent said they were challenged by the ability to produce and send critical customer communications and documents such as bills, notices and certified mail.

Cloud-based software is automating and solving some of these challenges. Automating labour-intensive manual processes such as mailings can be a prudent decision,

and one that doesn't have to involve major investment. Because many of these tools are now cloud-based, they can be accessed from anywhere with a network and used on demand. This also gives you the opportunity to trial the services and work out how they fit within your workflows.

SaaS-based software platforms are helping our clients, including housing providers, automate their printed communications. They can achieve regulatory compliance and stay connected with their tenants while employees are working remotely. Organisations prepare their documents then print them as if they were using a standard print driver. At this point, the digital document is effectively handed over to Pitney Bowes. We add barcodes for accurate tracking and reporting, print and seal the documents and hand them to the Royal Mail for delivery. Users log into a secure website to check on the progress of the mailing and view reports.

Residential managing agent Preim is responsible for 12,000 properties. Because a lot of communications need to be paper-based, Preim sends around 40,000 mail items each year, including 7,000 service-charge invoices which must be sent out on one specific date. The company found that the physical demands of printing, folding and sending them was too labour-intensive. Outsourcing the process and using the Pitney Bowes cloud-based Hybrid Mail application has increased the productivity of its core team and allowed them to focus on what they do best. And because we merge Preim's mailings with post we send for other clients, Preim benefits from preferential postal rates, too.

While 'business as usual' may seem rather distant, cloud-based technologies are giving businesses some of the continuity they need right now.

Ian Johnstone is a workflow solutions specialist at Pitney Bowes.

Cairn Housing goes low code with Netcall

Cairn Housing and its subsidiary Ancho have adopted Netcall's low-code Liberty platform in order to develop a tenant self-service portal.

The Liberty 'all in one' customer experience (CX) suite has enabled Cairn Housing and Ancho to provide simple, convenient services for their tenants across a variety of channels combined with 'work from anywhere' flexibility for their internal teams.

The housing provider built the MyCairn portal using Liberty Create, Netcall's low-code platform, allowing Cairn Housing and Ancho to build new processes and make changes to their workflows without the need for external IT development resources.

Within the first four months of the portal's operation, 16 tenant-facing services were made available including repairs, complaints, ASB reporting and surveys.

Almost 6,000 tenant cases have since been completed and closed by the Cairn team, and 500+ service satisfaction surveys have been returned with an average rating of 8.45/10.

Cairn has also deployed the end-to-end capability of the Liberty platform, including Liberty Converse, an omni-channel contact centre system, and Liberty Connect, a conversational messaging and chatbot tool.

Furthermore, during the pandemic, the low-code aspect of Liberty meant that Cairn was able to build and deploy a welfare solution for its tenants in just two days.

Neil Golightly, business services manager, Cairn Housing, said, "The rollout of MyCairn came at a pivotal time for us and our tenants. The pandemic has obviously created huge challenges, not only for our team, who are working remotely, but for our tenants too.

"Never has there been a greater need for the automation and seamless integration of our processes. The capacity offered by low code has allowed us to free up teams for more complex projects and to spend more of their time supporting vulnerable tenants."

Riverside's pandemic project for digital inclusion

Andy Cave, Digital Inclusion Project Officer, Riverside Group

To combat the effects of coronavirus, Riverside has been rolling out 100s of pieces of IT kit to help our tenants, with the aim of reducing social isolation by getting them online to stay in touch with family and friends.

As part of this, we identified a need for further digital training for residents, using our own volunteer network of 'digital champions' to support them to learn basic IT skills because many of them have never used a computer before.

Over the past few years and continuing during the pandemic, our digital champions have been on hand, enabling residents to access vital online services remotely, such as booking a doctor's appointment, ordering shopping, managing finances, logging onto online educational courses or looking for a job, as well as connecting to online tenancy services from their homes.

During last summer, Riverside's care and support teams bought hundreds of tablets to benefit customers of all ages. We worked with EE to get the best deal on the equipment and to provide appropriate data packages for residents. This has been a vital resource to help our customers to stay connected during the crisis and for those who haven't been able to access wi-fi in communal lounges across our supported housing and retirement schemes.

Many of Riverside's residents in retirement living and supported housing across the country are benefitting from 'mi-fi' units – these are portable wireless routers which connect to the internet via the mobile networks, enabling customers to access the internet from their rooms instead of communal lounges.

Learn my way

Riverside is registered as a UK online centre with the Good Things Foundation, which means our customers have free access to an online learning tool called Learn My Way.

Anyone can create an account and start to use the learning packages. Whether it's learning to use a keyboard for the first time or installing WhatsApp on your phone, there's a free and easy to understand way of doing that.

I would really recommend you have a look at **learnmyway.com** and dive in because there is something for everybody on the site.

Andy Cave is the digital inclusion project officer at Riverside Group.

Transforming the customer experience at CHP

Michael Barber, Digital & Transformation Director, CHP

In 2018, we started an ambitious programme to transform the way CHP operates. We'd already earned a reputation for being a high-performing housing association but we wanted to go further and provide a consistently great customer experience. In order to achieve this, we recognised that a complete overhaul of our existing processes and use of technology was required.

Our aim was to increase customer satisfaction and choice by providing additional communication channels. We also wanted to ensure that we could resolve most customer issues at the first point of contact to reduce the frustration of being passed around departments or having to chase up a response. To get to where we wanted to be, we had to streamline our processes to make us more efficient as a business. We also had to have the right IT systems in place to make life easier for our customers and employees.

Redesigning our processes

We knew that a significant review and associated rework of our core operating processes was needed so we documented every operating process at CHP, and then designed more effective ones to meet our future needs.

The process review was designed to identify and resolve customer pain points and drive improvements across the business; it covered over 100 processes for our customer-facing areas alone.

Implementing new technology

Implementing new technology was a key element to delivering our new processes effectively. To achieve our aim of getting closer to our customers, we developed a suite of new technology solutions. These were designed to provide our staff with rapid access to information from any location and on any device. For example, our employees working in our customers' homes will be able to update jobs in real time as well as arranging any follow-up appointments without having to return to the office.

These same solutions will also give customers more choice in how they interact with us, either through our multi-channel service centre, mobile apps or a new secure area on our website.

These technology improvements have all been designed to provide modern, accessible user interfaces, with functional applications. The new systems are integrated with those we already had, and we're adding new integration points through our new task management solution and using robotic process automation (RPA) where legacy technology is too expensive or cumbersome for direct interfaces. This will ensure that our customer-facing applications are fully aligned with our back-office systems via workflows to provide real-time, accurate data across multiple platforms.

Improving our data

An essential prerequisite of exposing data to customers is that it must be accurate. With this in mind, we ran a series of projects to make sure that our data was validated and well structured. Our core business data was then replicated into a new data warehouse to create a 'single version of the truth' for use in management reporting.

We also added layers of other externally-sourced data to build a more complete profile of our customers, leading to the creation of new customer segmentations and a

set of unique 'personas'. These will be used to help us personalise the services we provide to our customers and when designing new processes in future.

Launching our new online services

We're now launching the new secure area of our website, itself a key milestone in the transformation of our customer experience. Our customers can register for online accounts which give them access to a wide range of services and information relating to their homes and communities. The functions available at launch include making secure online rent and service charge payments, requesting a repair, applying for services such as getting a parking permit, reporting anti-social behaviour and providing feedback. Customers will also be able to view the information we hold about them and their tenancy, such as their current rent balance and when payments are due.

The new secure area went through rigorous testing prior to launch, and customers took part in live online sessions to test its functionality, all done during the pandemic when the more usual approach of running focus groups with our customers couldn't take place. We therefore adapted to alternative means of achieving similar ends, with all testing and feedback managed remotely.

Work is now underway to ensure that the new technology is adopted consistently across the business. We're appointing product owners to take ownership of the new products and to help drive their integration. These product owners will showcase the technology not just to those who will be using it, but as an illustration of the wider programme.

We are using data and insight to create a campaign to drive interest and uptake of our online services for customers. We are delivering that campaign largely through online channels, consistent with the ethos of delivering an improved digital service.

What next?

The next stage of our journey will be continuous improvement; we'll be advancing our new business processes through the implementation period to their 'enduring state' once we've made any incremental improvements.

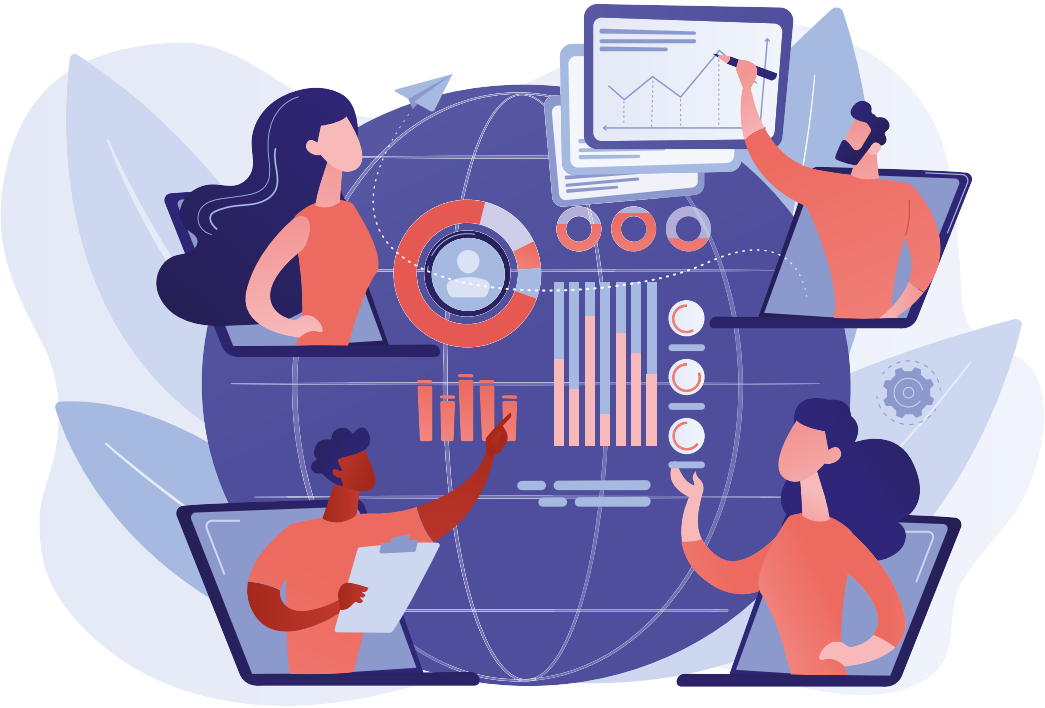
We're also looking at how we can use data to improve customer solutions and to positively intervene earlier to provide better support. Some of this will be achieved through standard data analysis and some through more progressive artificial intelligence, with data-mining techniques used to predict behaviours and trends.

We want to keep investing in technological improvements and add more self-service functionality. Our goal is to deliver the same level of online service that our customers receive from other companies they use. These improvements will extend to capturing data directly from remote devices and using this to improve the way we manage our customers' homes.

We know that some of our customers and some of our services will always need to use other channels, but we also know that there's an appetite for the speed and ease of experience that can only be delivered through the intelligent use of technology.

There will be challenges ahead, but we are determined to implement the changes that will get us closer to our mission to improve the lives of our customers.

Michael Barber is the digital and transformation director at CHP.



Hafod Housing & Aareon – *Re-imagining transformation*

Paul O'Reilly, ERP Solution Manager, Aareon UK

The phrase 'digital transformation' can conjure up a futuristic ideal of fully mobile operations and AI-driven processes that allow systems users to execute business processes at the click of a button with the maximum of efficiency. Some would have you believe that this future is already here!

Arguably, we've all been engaged in digital transformation for at least the past 30 years. The majority of business processes are now carried out using dedicated software, created to process our many tasks in the most efficient and labour-saving manner possible. But the reality is that in many housing providers, business processes have become entrenched over time and the systems that were designed to lighten the load aren't always used to their full potential.

When Hafod Housing began an organisation-wide digital transformation in late 2019, one stream of the programme included a plan to re-implement its main Aareon QL housing management system, which it had been using for over 20 years. This part of the programme was intended to help streamline the use of Aareon QL and ensure that the housing provider was using the solution to its full potential by making its business processes more efficient and freeing up resources to concentrate on delivering extra value to customers.

What were we trying to achieve?

When the transformation team started to gather requirements from Hafod's Aareon QL stakeholders, it became clear that there were conflicting views on what needed to be done within the various teams.

Rachelle Beasley, transformation lead, Hafod Housing, said, "It was very hard to establish common goals. Our colleagues all had different challenges and all used the system in different ways, which meant that there was no clear vision for what they were trying to achieve through the re-implementation."

The transformation team realised that without a set of shared objectives, it was going to be impossible to re-implement the software in a way that successfully met the needs of every part of the business.

Finding direction through quick wins

As a method to establish business process priorities and as a way to build a plan, the team identified opportunities where simply by using Aareon QL more effectively they could make their processes slicker and more efficient. Based on surveys done by the business, the team created a list of 'quick win' changes that could be implemented by Hafod's internal IT team each week.

The 'simplify' project was formed, with a defined process for gathering and processing the quick win changes. The organisation's Aareon QL users could submit their wished-for improvements via a request form. The transformation team then assessed the requests based on the level of impact that the issue and its improvement would have on user experience, customer experience and business value.

Hafod needed to easily identify those customers who might be at risk of falling into arrears. By enabling Aareon QL to do all the hard work and automation around debtor reporting, it was able to increase accuracy, enabling it to support its customers sooner and, in some cases, even before the customer found themselves in arrears.

Improved data collection and analytics also meant that the housing provider could offer more help to vulnerable customers. For example, monitoring the use of food parcels was particularly important because it provided insights that showed where other support might be needed.

The team is also now using Aareon QL to capture responses from customers in a 'question of the month' initiative in which customer service teams proactively gather customer feedback on a range of service-impacting themes.

Having been started in September 2019, the project was in full flight when the pandemic struck. From then on, many of the priority change requests centred on responding to changing customer needs and higher levels of support enquiries.

Beasley said, "Through our project, we've not only focused on enabling our colleagues to work more efficiently, we've also created opportunities to deliver greater value to our customers."

Over the first six months of the project, the 'simplify' project saw Hafod free up 951 hours (132 days) that the organisation could then devote to serving its customers. This has created an estimated budget saving of £543 per idea, worth around £11,000 to Hafod in total.

The key success of the project has been a change in attitude within the business, and the organisation's Aareon QL users are now using the system to its full potential – just through a series of quick and easy changes, the system has been able to hugely improve the efficiency and effectiveness of the whole business. The Hafod IT team is now looking at other ways that its Aareon solutions could strengthen their ability to create value for customers.

Moving forward in partnership

Digital transformation at Hafod is ongoing and is now focusing on process risk and customer experience. For example, Hafod is in the process of implementing Aareon's Mobile Workforce system. This is already reducing the burden of paperwork for field agents and customer service teams while ensuring that information captured during customer meetings is securely and reliably updated on Hafod's central systems. In parallel, Aareon's Self-Service App will allow customers to access all housing services from their smartphones.

Right now, the success of the 'simplify' project has meant that the original Aareon QL re-implementation may no longer be necessary, and the ongoing improvements in user experience prove that the power to realise digital transformation depends on an organisation's attitude to change.

Beasley concluded, "We've created a customised version of Aareon QL without any extra support – even non-IT users can implement changes. By defining the way that our colleagues work with the system, we've been able to ensure that Aareon QL continues to support the evolving ways in which we want to serve our customers. We are looking forward to maintaining our close relationship with Aareon as our digital partner of choice."

Paul O'Reilly is the ERP solution manager at Aareon UK.

Changing the channel for good

Chris Mansfield, Business Development Director, Futr

The mass adoption of new technologies is rarely a smooth curve, rather a journey punctuated by unforeseen lurches and tipping points. Chris Mansfield, business development director at AI chatbot innovator Futr, shares his thoughts on channel shift in the housing sector, and how we can make it stick.

As someone focused on customer contact innovation on behalf of housing providers, the past twelve months have felt nothing short of historic.

When I joined Futr towards the end of 2019, I was convinced that automated customer contact could offer housing providers and their tenants solutions to persistent problems, including easier accessibility of information for all and a more intelligent use of housing resources. The question was timing.

Fast forward 12 months and the pandemic hasn't changed that prediction, it's just made it a lot more pressing.

Hard to reach audiences

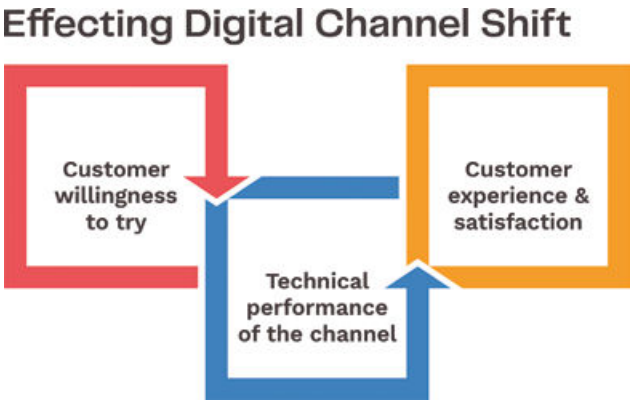
Founded almost five years ago, Futr has built its reputation on delivering inclusive automated customer contact solutions for civic organisations, including emergency services, local authorities and housing providers.

While much of the private sector has been quick to trial and adopt customer service innovation, these more civic markets have often been more cautious in diversifying their channels, being mindful of their harder-to-reach audiences.

That said, many housing providers have been working hard for years to promote digital transformation and channel shift, but it's taken the wider impact of the pandemic on consumers' behaviour to fast-track widespread adoption.

A consumer revolution

A study of 900 businesses by McKinsey has revealed the extent of changes in consumer behaviour worldwide, particularly in the shift towards online and digital channels. The survey found that the number of businesses conducting 80 per cent or more of their customer interactions online by December 2020 had tripled since the start of the pandemic.



The survey also revealed that businesses had spent more on digital activities than on any other business continuity measure since the start of the pandemic. McKinsey's report said, "On average, digital transformation offerings have leapfrogged seven years of progress in a matter of months."

That kind of acceleration only happens once in a lifetime.

Change is only the beginning

The pandemic might have massively accelerated the adoption of new digital channels by customers (often out of necessity) but making channel shift permanent will require three concurrent factors.

Firstly, there needs to be a demand and willingness to change on behalf of the customer. Although the pandemic has accelerated this, in reality the appetite has been growing for years.

For example, our customer Ongo Housing has had a 'digital first, with no one left behind' strategy for a number of years, whereby new channels are offered as a positive option to customers, rather than forcing adoption. Other housing providers, such as Grand Union Housing, have

publicly announced ambitious plans to move 80 per cent of all resident interactions online in future.

When these progressive aspirations are combined with growing web literacy and tech-savviness among tenants, housing providers have increasingly found that new methods of interaction are like pushing on an open door.

Tech readiness

Secondly, once a customer chooses to use a new channel, they're essentially testing its readiness and ability to deliver; you only get one chance to make a strong first impression.

Thankfully, Futr's new generation of intelligent chatbots are the result of five years' housing-specific refinement, learning from every customer interaction. You can't fake that, it's organic.

Once a question is submitted via a landlord's channel of choice (website, tenant portal, social media or WhatsApp), it's then analysed using natural language processing (NLP).

Tenants can then chat naturally with the system, allowing them (not the chatbot) to set the terms of the conversation.

This new level of freedom in expression means customers can ask what they want in their own words and chosen language, rather than having to select from a limited number of pre-programed options, as with early chatbots.

The information presented to the customer in response is determined by a 'confidence score', which measures an enquiry's content against an existing and ever-expanding database of data drawn from thousands of previous conversations.

Customer satisfaction

The third piece in the adoption puzzle is customer satisfaction: if the new channel fails to match or improve on more traditional contact methods, then the customer will refuse, resist or resent the change.

For chatbots, the primary measure of success is the number of automated customer contact interactions that can be completed without the need for human intervention.

Our housing clients are currently achieving successful customer outcomes 80-90 per cent of the time through automated responses. However, the option for human intervention always remains available for when enquiries are complex or can't be resolved automatically.

Housing providers will also measure repeat usage of the channel (its 'stickiness') to gauge customer satisfaction, and in our experience, rates of repeat usage go up month-on-month once a new digital channel becomes established.

Once these three factors hit a certain tipping point, regardless of the reasons that are driving adoption, the channel is here to stay.

Chris Mansfield is the director of business development at Futr.

MRI Software launches Resident Voice Index

MRI Software has announced that it is starting a year-round survey and campaign to capture data about the lives of social housing tenants and satisfaction with their housing.

The software company's Resident Voice Index will collect self-reported user data through a series of surveys and polls. Tenants who wish to participate will share their views anonymously, with data aggregated to uncover trends and key issues faced across the industry.

Once the data collection processes have begun, the data will be published as a regular series of indices and insights into the underlying social, emotional and economic factors that inform tenants' experiences of social housing and their housing provider.

Dermot Briody, executive managing director for Europe, MRI Software, said, "We believe in the power of technology to improve the lives and experiences of tenants, and the launch of our Resident Voice Index is a perfect demonstration of that. Not only will we be capturing the mood of residents across the UK, but we will also be providing a deeper understanding of the factors and trends behind the results, in order to improve housing providers' service provision."

Power up with SharePoint

Tony Hughes, Housing Solutions Strategist, and Kirsty Marsden, Housing Service Design Lead, Technology Services Group (TSG)

SharePoint is all about communication and collaboration and is an ideal out-of-the-box tool for those who need a modern intranet platform. Being part of the Microsoft suite also means integration with other applications is seamless, creating a more streamlined and efficient experience for everyday use.

To demonstrate how SharePoint and Microsoft applications could have a positive impact on housing providers, TSG recently hosted a webinar about the benefits of using SharePoint as a modern intranet platform. We were joined by two of our housing customers, Transform Housing and Lincolnshire Housing Partnership, and discussed with them the main drivers for their intranet projects, why they chose SharePoint, and how this supported improved communication, collaboration and positive change within their respective organisations.

Transform Housing

During the first lockdown, an intranet was identified as being a critical tool for Transform Housing so its implementation was accelerated as part of the housing provider's programme to provide digital support and updates to staff.

Before the implementation of SharePoint, Transform's communications had started to become inefficient as the world turned to remote working; it needed a solution that allowed housing staff to be able to instantly access the data they needed. It was also important to have a central location for information across all departments, as well as consideration for new starters.

Claire Davidson, IT consultant, Transform Housing, said, "We really needed technology that didn't rely on IT. We wanted to start off small and focus on this being the entry point into SharePoint, which is a much bigger piece of work than just the intranet as we look at our wider EDRM requirements."

With a Microsoft-first strategy already part of Transform Housing's digital strategy, the project began with a fresh approach and a blank slate.

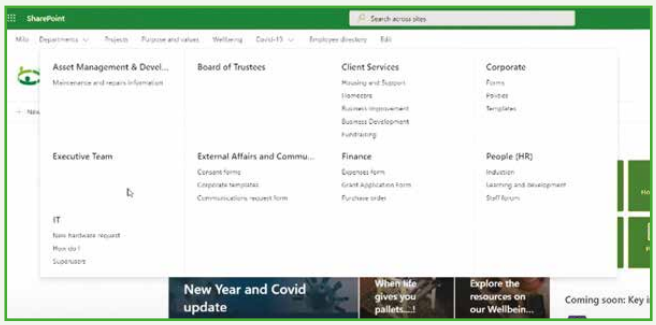
Named Milo by the staff (Masses of Information Logically Organised), the homepage layout was a vital part of the project, so we worked with Transform to ensure it had relevant content that staff members would be likely to access regularly. This included key links, updates, news and announcements, a 'how do I…?' section, departmental sites and the IT status of internal systems. The 'key links' section in particular used Microsoft Forms and Power Apps, staying in line with its Microsoft-first approach and strategy.

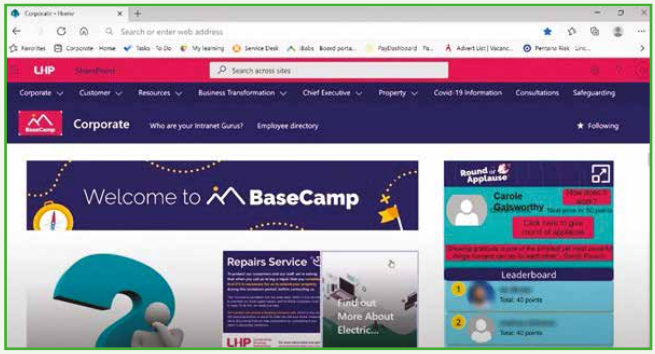
As a result of implementing the intranet, there has been a significant reduction in emails and more collaboration between teams via the intranet.

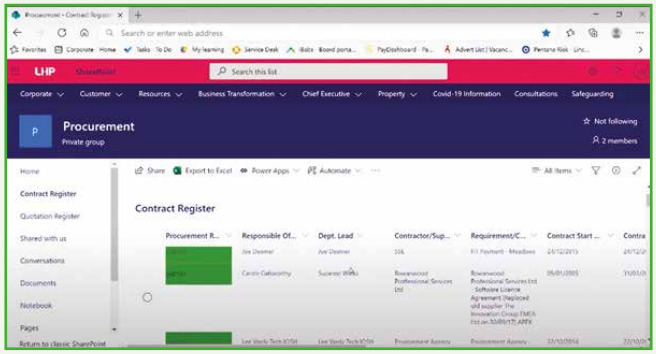
Lincolnshire Housing Partnership

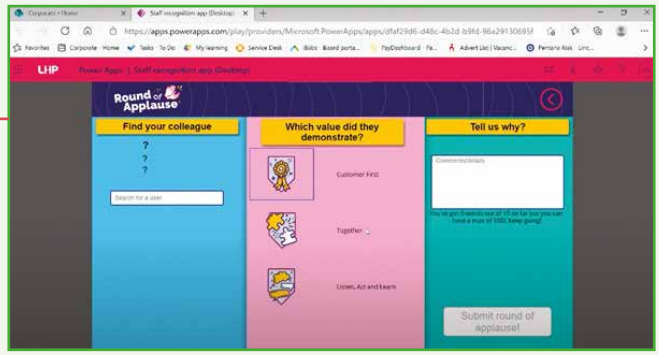
LHP is implementing a digital strategy to provide a modern, agile working environment that uses technology to achieve an efficient, effective and tailored experience for its staff.

The housing provider needed to bring together two separate organisations into a single platform in order to promote its combined way of working and foster a joint set of values and purpose. A centralised location that was accessible to everyone via desktop and mobile devices was also needed to support all use cases.









SharePoint offered the flexibility, ease of access, development and integrations that would hit the key areas LHP wanted to address in its Microsoft-first strategy and would maximise RoI from its investment.

In a similar manner to Transform Housing, LHP wanted an intranet that was easy to navigate for all departments. A strong focus was placed on the information that would appear on the 'BaseCamp' landing page, again named by LHP's staff.

The landing page includes content such as news, integration with social channels on Microsoft Teams to display live posts, social media integration, weekly updates from the executive team, key events and useful links.

Carole Galsworthy, head of ICT and digital services, Lincolnshire Housing Partnership, said, "BaseCamp allows everyone to intuitively find the content they're looking for."

Another important aspect of the intranet for LHP was to support its employees' wellbeing as they work from home. To support this, LHP created a 'round of applause' app using Power Apps; employees can accumulate points given by colleagues, see how far away they are from their next goal and view colleagues' feedback.

Galsworthy said, "It's a really simple and easy way for everyone to say thank you."

The intranet project has improved employee collaboration and the round of applause app has been a big hit with LHP's staff.

If your organisation needs a modern intranet environment similar to Transform or LHP, please get in touch or to view the full webinar, please get in touch with TSG at **info@tsg.com**.

Tony Hughes is a housing solutions strategist and Kirsty Marsden is the housing service design lead at Technology Services Group (TSG).

Signal boost for digital skills

Matt Adam, Chief Executive, We Are Digital

We Are Digital's chief executive, Matt Adam, outlines the digital skills gap facing the UK's employers and the digital marketing roles opening up across the job market for tenants as a result.

Finding work and income-generating opportunities for tenants is an ongoing concern for housing providers. The pandemic has changed the workplace, possibly forever, and finding a job offline in lockdown has become impossible for many.

For younger tenants, the UK's employment opportunities are narrowing. For example, the government's Kickstart scheme, which provides funding to employers to create job placements for 16-24 year-olds on universal credit, has seen some employers reluctant to start placements due to the continuing lockdown. The latest UK employment figures from the Office of National Statistics (ONS) show unemployment is nearly at five per cent; within that statistic are the quarter of a million 16-24 year-olds who lost their jobs during the pandemic.

In-work poverty is also a significant social issue and on the rise thanks to increases in the cost of living and cuts in social security support. The Carnegie Trust recently reported that the minimum wage, introduced in 1998, has done little overall to help the in-work poor (2021). The government has a target to increase the minimum wage to two-thirds of median hourly pay by 2024, but the current crisis has possibly reduced progress towards that goal.

A catalyst for change

And the good news in all of this? The pandemic has been a huge catalyst for social change as offices have moved into new virtual territories. It has also exposed the extent of the digital skills gap faced by the UK's employers and thus created a range of employment opportunities which didn't exist before. Digital roles have seemingly been unaffected by any recruitment slumps; advertised vacancies in the technology sector increased by 36 per cent from June to August 2020. Growth sectors that are currently desperate for employees include e-commerce, digital content, social media and digital marketing.

As the workplace becomes increasingly digitised, interest is surging in closing digital skills gaps. The lack of digitally-skilled workers is a major pain point for almost two-thirds of the UK's businesses (source: FDM Group, 2021). Equally, appetite for digital upskilling is on the rise; nearly 75 per cent of people over the age of 45 say they are willing to invest time in learning digital skills (source: Microsoft, 2021). Nationally, IABUK.com quotes a profound shortage of digital marketing skills, with 50 per cent of new graduates not equipped for this sector.

Bridging the gap

Training is emerging to tackle these national skills shortages. We worked on a pilot project in 2020 with the Greater Manchester Combined Authority (GMCA) and the Lancashire Enterprise Partnership (LEP) to improve digital skills in a contract funded by the Department for Education. Indeed, the LEP's Digital Landscape Summary report (2019) highlighted marketing as, "one of three skills gaps in the incumbent Lancashire digital workforce."

The 12-week training course, known as Digital Boost, specifically targeted diverse and excluded communities and provided participants with the skills and confidence they needed to gain higher-paid roles in the digital sector.

Applications were particularly encouraged from women, black and minority ethnicity residents and those who have historically struggled to access training and education for financial reasons. Young people disadvantaged or displaced by coronavirus were also a focus. Each demographic target was hit in terms of course attendees.

Bringing fresh ideas

Attendees learned how to plan, test and implement and refine digital campaigns, working in teams to design and present a commercial strategy. Our students learn that it is possible to take fresh ideas into competitive, modern marketing businesses, while our training emphasises that diverse backgrounds are an advantage in digital industries where authenticity and individual stories are highly prized. In a boost for attendee confidence, guaranteed interviews with local employers are on offer. Many graduates of the course went on to new, well-paid digital marketing roles in companies of all shapes and sizes.

The training has now been rolled out nationally and is making its way into the housing sector. We recently won a contract with Metropolitan Thames Valley Housing (MTVH) to develop future digital marketing work opportunities for tenants. The move forms part of MTVH's resident and customer empowerment strategy for 18-48 year-olds.

Saba Yazdani, projects and partnerships manager, Metropolitan Thames Valley Housing, said, "We understand that wider support is needed to enable our residents to live well and fulfil their potential, and tackle the inequalities which limit this. The pandemic has brought into sharper focus how there has been a disproportionate impact on the most vulnerable people in our communities, and they are facing increasing challenges and inequity, including higher levels of unemployment.

"There is a growing demand for digital marketing skills. The Digital Boost programme, supported by We Are Digital, will enable us to equip our residents with new skills and increased confidence to apply for better paid jobs within the marketing and technology sector, and provide more direct access to digital marketing employment opportunities.

For employers, the situation is win-win too, with workforce-wide digital skills linked closely to business growth. We have personally witnessed a growing desire to fill digital skills gaps. Indeed, employers in our growing national database, which includes start-ups, SMEs and big corporates, are ready to take on work experience placements, apprentices and early-career roles linked to our training in digital marketing.

For tenants, the opportunities are certainly there for a brighter future. They just need a boost to give them the confidence to grow and to gain higher-paid roles in a digital industry crying out for skilled workers.

Matt Adam is the chief executive of We Are Digital.

Self-service portal success

Tim Lancaster, Managing Director, Arcus Cloud Services

There's no doubt that self-service portals have become an important tool for social housing providers by helping to manage and respond to tenants' requirements. Whereas before, tenants would have had to face long call-times and queues to speak to their provider, they can now easily report any issues, update information or pay rent using a tablet or mobile app.

Not only do these online portals improve communication capabilities between tenants and their housing providers, they can also speed up resolution times, helping to ease pressure on a housing provider's employees.

However, while these portals can bring invaluable benefits, without the right solutions in place to support the technology, problems such as poor connectivity, security breaches and significant downtime can happen. These problems can then lead to increased workloads, poor communication and, ultimately, frustrated tenants.

With that in mind, what technology should housing providers be considering to work alongside and support self-service portals?

Cloud capabilities

Self-service portals need to be supported by reliable and high-performance cloud solutions, and after a year of sudden changes, housing providers will find the scalability of cloud systems really useful because the infrastructure can scale up and down based on tenant demand.

This means that the speed of the portal is not affected during peak times, keeping tenants online and able to communicate with their housing provider at all times. Cloud solutions also make exchanging data between systems much easier so that tenants experience a coherent, joined-up service, irrespective of it being delivered by a variety of different systems behind the scenes.

Telephony solutions

Once a tenant submits information or a request, the housing provider needs to consider the next steps and how technology will help with those steps. Once the information has been submitted, the housing provider will usually need to follow it up with a call to the tenant and/or another party, such as a handyman or plumber. Having the right telephony solutions to handle customers calls and chat will help make this process faster and easier.

In addition to handling calls, email, web chat and two-way messaging, a cloud telephony solution can collect, store and analyse all information on a single platform. Therefore, when a portal query is followed up, the provider will already have all the information regarding that tenant to hand. Furthermore, all correspondence with the tenant can be updated straight away. Therefore, if another employee needs to follow up previous conversations, they don't need to waste time asking another colleague or the tenant for information they have already supplied.

Many housing providers also have several businesses working under their umbrella name, such as home repair companies. Cloud telephony solutions can be integrated with each of the businesses' back-office systems, allowing

each company to access requests from the portals if required. For example, if a tenant submits a request for something to be fixed in their home, this can go straight to the repair company, cutting out any middlemen and, again, saving time.

Stop downtime in its tracks

Downtime caused by outages or unsolved technology issues can cause a multitude of problems. If a tenant can't use the self-service portal or if response times are hindered by slow servers, databases or network issues, this will feel like poor service and result in additional calls.

Since portal usage can be at any time, systems must be monitored and supported 24/7 but most housing providers don't have the budget or resources to do this.

Therefore, housing providers often opt for a cloud monitoring as a service (CMaaS) solution. CMaaS is a managed service system whereby the IT provider can proactively monitor systems, applications, websites and the IT infrastructure all in one place around the clock. In doing so, they can detect and respond to any issues such as hardware malfunctions, security incidents or server failovers, before they affect operations.

Choosing a suitable IT provider

No two housing providers are the same; their respective IT requirements can depend on the number of tenants and portals in use, the breadth of services on the portal and how providers respond and react to information provided. There is no 'one-size-fits-all' solution, so careful consideration needs to be given to ensure an absolute fit around your connectivity, productivity and security requirements.

Today, forward-thinking housing providers choose to seek professional advice before proceeding with a digital transformation. A managed IT provider, for instance, has high-level experts on hand who can provide a tailored consultation and advice on the best IT solutions to meet objectives and strategies.

A managed IT provider can also help housing providers develop scalable and optimised infrastructure to meet new demands, such as a sudden increase in new tenants and self-service portals being used. By having the right technologies in place now, organisations can ensure that self-service portals can be used to their best ability. They can reduce workloads, save time and cost and, ultimately, provide an excellent service for tenants.

Tim Lancaster is the managing director of Arcus Cloud Services, a Timico company.

Connecting hi-tech health and housing

Zillah Moore, Director, Tunstall Healthcare

Digital health has the potential to transform the lives of millions of people and make a significant contribution towards the ultimate goal of preventative healthcare. With that in mind, housing providers and local authorities, as well as the NHS and social care providers, should consider how to meet the needs of an ageing population, and understand the role of technology in connecting older people and those with care needs to support independence, health and wellbeing.

The changing role of technology

Technology-enabled care services (TECS) and the concept of the connected home improve many areas of modern life and provide effective support to people of all ages.

People in their 50s and 60s now are increasingly familiar with technology, so in 20 years' time, 70-80 year-olds will expect technology in their homes. Given how ubiquitous technology is and the accelerating pace of change, this next generation of older people will be not only accepting but welcoming TECS in their homes.

Housing providers therefore need to understand how technology can improve tenants' quality of life and empower people to take ownership of their wellbeing. The latest generation of technology can not only respond to potentially life-threatening issues such as fires or gas leaks but can also offer intelligent enhancements to the lives of vulnerable people. For example, enabling the use of wi-fi across housing developments in order to support increased contact with friends and family, reduce isolation and give access to online activities and services.

Technology also enables people to stay connected and lets key stakeholders such as clinicians monitor an individual's behaviour and wellbeing better. This ensures care is targeted where and when it's needed most for a more 'person-centred' and proactive approach.

Big data gives insight into behavioural patterns, leading to efficient care planning as part of a strengths- and assets-based approach. This predictive modelling can also alert to potential wellbeing issues, enabling more preventative support.

Housing and proposed reforms

The government's recent white paper on 'working together to improve health and social care for all', sets out legislative proposals to build on the collaborations generated during the pandemic, and shape a system that's better able to serve people in a fast-changing world.

However, the role of our sector in influencing health outcomes has been neglected in the white paper. People's opportunities for health are influenced by factors beyond our health and social care services, and the government should acknowledge the role of social housing in impacting the health outcomes of a significant proportion of our population.

Living in a home that doesn't provide a warm, safe and

stable environment can have significant impacts on the wellbeing of tenants. For example, cold and damp conditions are associated with poorer health, such as the development and worsening of respiratory and cardiovascular conditions.

We must address housing and health inequalities and take advantage of the opportunities to help tenants remain healthy and independent for as long as possible. This not only requires collaboration between the public and private sectors, but also a more holistic approach that takes individual health requirements and lifestyles into account.

Why collaborate?

Collaboration between housing, social care and health is vital if we want to give a better quality of life and more independence to tenants. Only by understanding how these three sectors are already connected and facilitating greater collaboration can we more effectively support tenants at home and in their communities.

Health, housing and social care professionals can use technology to deliver a robust platform for health and care delivery, connecting people to enable more proactive and preventative care. Investment in technology solutions now will also mean we have a sustainable, scalable and collaborative network in place if we ever have to face another pandemic.

Looking ahead

Technology must be used to establish a better platform to support housing providers and their tenants. This can only happen via a collaborative approach with health and social care providers, based on more strategic decisions with a long-term focus to shape our services for the future. We're also beginning to see the next generation of predictive care technologies, and over the next few years it'll encompass integration that enables diverse and scalable models of care in our sector.

By using AI and taking data-driven insights from multiple sources, housing providers will use this next generation of solutions to optimise health management programmes by providing personalised and anticipatory care.

There's never been a more important time for the government to work with housing, health and care providers to set out a new vision and commitment to creating a healthy and rejuvenated population using technology.

Zillah Moore is a director of Tunstall Healthcare.

Sutton's IoT plan for vulnerable residents

Sunita Gordon, Lead Member for Finance & Resources, Sutton Council

As a result of the pandemic, demand for social care support is increasing as people recover from the virus or suffer from adverse mental health.

THE INNOVATE PROJECT

The InnOvaTe Project, led by Sutton Council on behalf of the South London Partnership, will use the internet of things to help manage and mitigate new challenges arising from coronavirus, support economic recovery and pilot solutions to help people live better, healthier lives. This initiative is funded by the Strategic Investment Pot (SIP) as part of the London Councils' Business Rates Retention scheme, administered by the City of London Corporation.

Here at Sutton Council, over 70 per cent of our budget is spent on social care and supporting the borough's vulnerable children and adults – this includes our social care teams and the services that they commission from care homes and other providers who give care in residents' own homes. We rely heavily on a combination of weekly phone calls and scheduled visits to residents to keep an eye on any issues which may arise.

As part of our response to the demand for social care, Sutton and Richmond Councils have partnered with IoT Solutions Group (IoTSG) to deploy 200 in-home sensors in February 2021 to improve the safety of vulnerable residents in social housing.

The single sensors are battery powered, connected by a low-power, wide-area network (LPWAN) and placed in the kitchens of the 100 participants. They don't need any wi-fi or broadband connection.

The sensors enable our council officers to be alerted when residents might require help, without the need to keep disturbing them or adding to the workloads of our independent living officers.

This pilot project is part of the Innovate project (see left) to promote IoT use by local authorities. The residents' participation in the project is voluntary and only with the residents' consent.

At the end of the 12-month trial of the IoT sensors and the information they deliver, the intention is to ramp up supplier and business engagement at the same time as collaborating with other agencies operating within the IoT area, such as the London Office of Technology and Innovation (LOTI).

The key emphasis of this trial is that we are strongly respecting people's privacy and any information will be anonymous.

For more information about the project, please visit: innovateproject.org/

Sunita Gordon is the lead member for finance and resources at Sutton Council.

Ready for STP?

Alan Neilson, Founder & Executive Chairman, VerseOne

In a recent survey, we asked, "Has coronavirus and the consequent lockdowns accelerated your digital plans?", and over two-thirds of respondents said yes.

This acceleration in digital is being driven by being able to offer more services online and in better-defined ways. The rise of the 'digital tenancy' is huge for the housing sector and should be welcomed by both housing providers and tenants alike. The ability to report faults and arrange repairs, set up payment plans, onboard new tenants, make and take payments, support universal credit, and integrate data and straight-through processing (see the feature article on page 30) are all part of the 2021 digital tenancy revolution.

Straight-through processing (STP) exists in other sectors and is used to successfully integrate disparate systems with each other. The housing sector should be no different, with a tenant enquiry, report or work request being initiated once and visible to all the relevant teams in order to deliver a positive outcome. Removing the need for manual interventions or to rekey data is a huge cost-saving and ensures that the accuracy of the data is maintained or even improved. A key part of STP is to allow the process to move unhindered through the data pools of finance, people and property and for them to be accessible to everyone.

Two trends in housing that have accelerated because of coronavirus are digital onboarding and online payments, both of which really benefit from STP. One of our customers reported that by the end of last year, 75 per cent of its payments were being processed through a tenant self-service portal and another reported a 900 per cent increase in payments through its portal during 2020.

Digital onboarding and online payments are just two areas of housing providers' operations that either need and/or benefit from data integration and STP. In our experience, the most important requirements are:

- **Data normalisation –** The system gathers and normalises data from multiple and disparate back-office and external sources. This make the data reliable, accurate and up-to-date so more informed decisions can be made.
- **Configurable APIs –** Configure API imports, mapping, outputs and links to business-critical systems through a drag-and-drop interface; integration with the widest set of enterprise systems saves enormous amounts of time and cost. It also avoids the disruption and the cost of 'ripping & replacing'.
- **Bi-directional data transfer –** Through the right integration platform, the ability to pull data into a single, configurable layer and push user-generated changes back into your business applications is vital. This means that all parties have a holistic, accurate and up-to-date view of all the relevant data.
- **Scalable and future-proofed –** The right platform must be designed to be capable of handling huge datasets with high-performance reliability and the ability to evolve and grow as usage increases. This pragmatic and evolutionary approach to integration (rather than a massive upheaval with all the associated pitfalls and costs) aids in future proofing because the platform should grow with the housing provider's requirements.

As an example, VerseOne's Autevo is a dedicated platform for end-to-end, line-of-business systems integration and identity management and addresses the key issues that housing providers face when setting up their digital tenancies. Through effective and seamless integration, one unified view of all relevant information is provided to all stakeholders. This drives down costs and improves service delivery.

Alan Neilson is the founder and executive chairman of VerseOne.

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HOUSING TECHNOLOGY 2021 LIVE BROADCAST

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Jo Sedley-Burke 8 minutes ago
Thank you George and the team, fantastic conference as always. Housing Technology has certainly risen to the challenge of the pandemic

Laura Philip - Aareon
26 minutes ago
we are LIVE on Aareon Booth! Come and join us 🙂

Rob Fletcher - TSG 4 minutes ago
agree, the tech has performed well overall. Top job George and team.

Ciara McMillan - Crimson
11 minutes ago
Afternoon, What a great event, although i do miss seeing you all face to face! Pop to our booth at 4pm for a catch up 🙂

According to many of the guests, speakers and participants at Housing Technology 2021 at the start of March, the first live broadcast of our annual conference and executive forum raised the bar for how digital events should be run.

"BEST EVER DIGITAL CONFERENCE!"

Hosted by George Grant, Housing Technology's co-founder and CEO, and Emma Birchley, the national television news correspondent often seen on Sky News, from a broadcast studio in Bracknell, Housing Technology was streamed over two days to over 450 people around the UK and abroad.

"ONE WORD – SLICK!"

The event opened with Midge Ure OBE, Ultravox frontman and co-organiser of LiveAid, talking about the trials and tribulations of setting up LiveAid in a pre-digital era and how the power of the internet can be harnessed for the common good. The second day of Housing Technology 2021 began with an absolute masterclass in the importance of data in all its forms from 'practical futurist' Andrew Grill. Unlike some other 'high flying' keynote presentations, many of the guests remarked on the day-to-day applicability of his experience and advice regarding how housing providers should be using data more cost-effectively, safely and, above all, intelligently.

"ALL I CAN SAY IS, WOW!"

Over 40 subject-matter experts from housing providers and technology companies streamed their presentations to the Housing Technology 2021 audience over the two days of the event, each followed by online Q&A sessions via our digital broadcast platform as well as 'in talk' comments and discussions for added interactivity.

"A MASTERCLASS IN HOW TO RUN A STREAMED EVENT!"

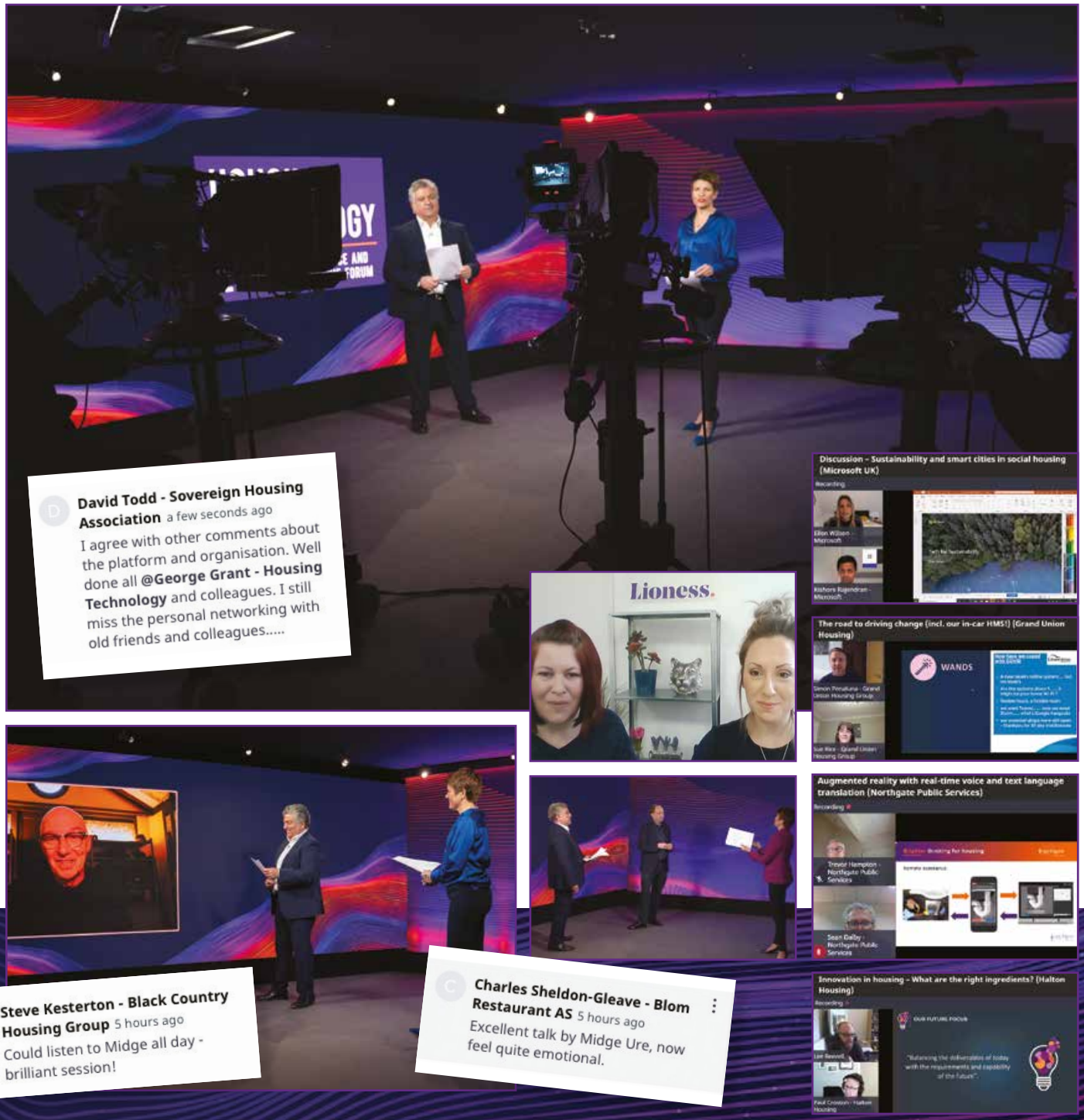
Our annual event's normal physical exhibition stands were transformed into 'digital booths' where guests could talk to and network with the event's sponsors, combined with topic-specific networking areas and a general chat stream for 'informal mingling' within our digital broadcast platform's central 'foyer', all with the aim of recreating the chance encounters and serendipitous meetings that have come to characterise our annual conference and executive forum.

"A BRILLIANT EXPERIENCE!"

We would like to give a truly heartfelt thanks to everyone involved in Housing Technology 2021 –speakers, sponsors and guests alike. Everyone was very willing to embrace this new way of doing things – everyone's collectively open-minded attitude paid dividends for all and encapsulated the very essence of the Housing Technology community.

Rebecca Farrell-Greenhalgh - Yorkshire Housing 2 minutes ago
As a speaker and previous in-person attendee I was nervous about using the platform but thank you to the HT team for the run through last week and for ensuring today went so well.

Rachel Jordan - Splunk an hour ago
Keynote was amazing, love the energy and the emphasis on Data! That's why I'm here to hear about how Data can bring value to Housing - thank you for a great keynote


David Todd - Sovereign Housing Association a few seconds ago
I agree with other comments about the platform and organisation. Well done all @George Grant - Housing Technology and colleagues. I still miss the personal networking with old friends and colleagues.....
Lioness.
Discussion – Sustainability and smart cities in social housing (Microsoft UK)
The road to driving change (incl. our in-car HMS1) (Grand Union Housing)
WANDS
Augmented reality with real-time voice and text language translation (Northgate Public Services)
Innovation in housing – What are the right ingredients? (Halton Housing)
Steve Kesterton - Black Country Housing Group 5 hours ago
Could listen to Midge all day - brilliant session!
Charles Sheldon-Gleave - Blom Restaurant AS 5 hours ago
Excellent talk by Midge Ure, now feel quite emotional.

"Housing Technology 2021 was a masterclass in how to run a streamed event"

THE RIGHT IMAGE GROUP

"The networking opportunities were very well set up and the supporting materials extremely useful."

SOUTHSIDE HOUSING

"Innovative, awesome, inspiring, exciting and informative!"

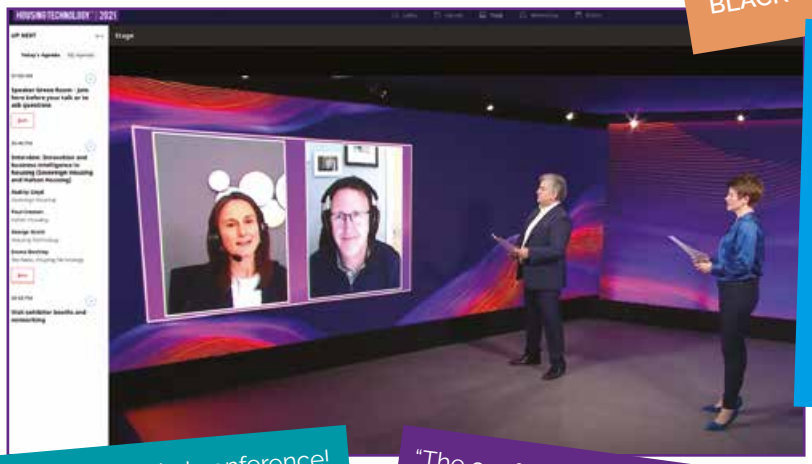
BARNET GROUP

"A superb two days and well worth investing the time! The main speakers and break-out sessions covered a wide variety of useful topics, plus the virtual platform was superb!"

BLACK COUNTRY HOUSING

"Well done for a very professional event – fantastic use of technology and brilliant speakers."

CLEARBROOK ASSOCIATES



"Great event! It was a slick and professional operation that spoke to the potential of technology at a difficult time. George Grant was a superstar in the studio and really exemplified the professional nature of the whole endeavour."

BROADACRES HOUSING

"A great event!"

SOVEREIGN BUSINESS INTEGRATION GROUP

"Great to be a part of it! I must say how professional your webcast was… a great studio and a great team making it all work – it was a pleasure to be involved."

MIDGE URE

"Best ever digital conference! Really professional, just as you would expect from technology experts. This conference has set the bar for best practice in our new working environment. The days of three days in Manchester for a jolly are numbered so I suggest organisations take a leaf from Housing Technology's book and plan to do something similar in the future."

DIRECT WORKS

"The conference worked really well. It was easy to interact with other delegates and very clear how to join. Perfect – I'm so glad I attended!"

FIREANGEL SAFETY TECHNOLOGY

"As a first-time attendee and first-time manager, it was absolutely excellent. So much information on future technology – mind-blowing and eye-opening!"

GREATWELL HOMES

"I thought it was amazing. I can only imagine the amount of work that went into making it, but the end result was slick and enjoyable. Really great content!"

HAVEBURY HOUSING

"Well done team!"

FAST LEAN SMART

"This was an excellent platform and brilliant event overall. It was really well thought-out and organised, delivering everything I wanted to see in a way that was easy to access, informative and functional. I was concerned Housing Technology's annual conference would lose some of its impact over a virtual platform, but I really enjoyed it!"

VIVID HOMES

"A really good use of my time to gain sector awareness."

KEVIN CONNELL

"Fantastic – really thought-provoking and it was great to share ideas. The conference was an excellent opportunity to check in with what other housing providers are working on, what suppliers are offering and also to share our experiences and projects with others."

MHS HOMES

"An excellent few days, with great communications from Housing Technology. I liked the way the sessions were held, with the main stage for the interviews, plus there were lots of people on hand if you got stuck."

METROPOLITAN THAMES VALLEY HOUSING

"Stunning job – I hope you are all very proud. What a great success!"

TSG

"Housing Technology has again come up with the goods in terms of a proving a worthwhile and interesting conference – it has set the bar for others intending to stage similar events. It was great to exchange ideas and see what our peers are doing. You did say the event was not to be missed and you were absolutely right!"

ONE HOUSING

"The organisation, energy and enthusiasm of this event was truly inspiring. Having attended my first Housing Technology conference in 2016, it just gets better and better; a real annual centrepiece for anyone who has a passion and flair for social housing and the digital revolution. And while I prefer the social aspect of a physical event, this was a very good event held virtually, where everyone still managed to feel very involved. Very successful, fun and well done – I loved it!"

PLYMOUTH COMMUNITY HOMES

"One word – slick!"

RENKAP

"Thank you for having us at Housing Technology 2021. We and our partners really enjoyed the two days. We've received great feedback on the event from both our customers and our partners."

MICROSOFT

"Because we're based in Ireland, we hadn't attended Housing Technology's previous conferences. The virtual event suited us perfectly; while I understand the appeal of a physical event, I hope future conferences will have an online presence too."

RESPOND HOUSING

"It was superbly organised with great presentations, plus it was easy to navigate around the digital event platform."

PA HOUSING

"A very enjoyable and well-managed conference. It's too easy to stick to forums that are specific to one's own business area; events like this enable refocusing and encourage a move away from siloed and departmental working. As a relatively new data manager, it's very positive to see so many sponsors and housing providers highlighting both the importance and dangers of data."

PARAGON ASRA HOUSING

"This has set a bar for virtual conferences that would be very hard to beat."

SOUTH LIVERPOOL HOMES

"An enjoyable two days, lots of technology on offer and a good use of delegates' time."

TAI CALON COMMUNITY HOUSING

"A great achievement – much better than any other online event I've been to. I've since been inspired to go out and network more in my role and partner with other organisations to share best practice. Well done to everyone involved – it was an impressive use of technology and a very interesting programme of sessions."

SOVEREIGN HOUSING

"The Housing Technology conference is the only large event that has the key IT decision-makers all together at once. Great show and if you were to only do one show per year, this should be the one."

SOCIAL TELECOMS

"A great achievement for making a normally great event even better. As always, the networking was great. The suppliers went out of their way to introduce themselves and the digital booths worked well."

HOUSING SOLUTIONS

"It was a really good digital event – it was great that it wasn't cancelled due to the pandemic. It was my first Housing Technology conference; it was very professionally set up and managed, and the speakers and presenters were fantastic and very topical."

TEIGN HOUSING

"This is my first experience with Housing Technology; all I can say is "wow!" – the whole experience was awesome and exemplary."

VAILLANT GROUP

"As a closet introvert, attending the event as a live stream was a brilliant experience. I could still talk one-to-one with the sponsors, find out what other housing providers are doing, all without any awkward small talk or sloppy handshakes! I did miss the lunch though; an oatcake and a piece of stale cheese from the back of my fridge didn't quite cut it compared with The Oxford Belfry!"

SOUTHDOWN HOUSING

"Our thanks to Housing Technology. I really enjoyed the two days – lots to learn and things to take away, combined with a very professional set-up and great speakers."

ONWARD HOMES

Housing data... Essential and exciting

Audrey Lloyd, Data Insights Manager, Sovereign Housing

How many of our employees and residents have coronavirus or are shielding or isolating? Do we have enough tradespeople to carry out emergency repairs? How many development sites have had to close?

These were just a few of the questions that needed answers from Sovereign's emergency response team at the start of the pandemic. We needed to provide answers and quickly, but where to start?

Sovereign owns and manages 60,000 homes and has 2,000 employees. Across our operations, we use around 50 different IT systems, not to mention countless spreadsheets. With that in mind, we had to find a way to bring data to the very forefront of maintaining 'business as usual' or at least as far as was humanly possible in a pandemic.

Reducing errors & manual interventions

We also knew that we needed to reduce our reliance on people, themselves operating in a time of crisis, having the energy and time to fill in Excel files. Instead, we identified where we could source data direct from our systems; removing manual interventions substantially reduces the risk of errors in the data. That said, there is a time and place for spreadsheets, such as when the data doesn't already exist and you need a new source quickly, but more on that later.

We first had to decide which information was vital to our pandemic response. Once that was done, we needed a way to present that information in a single, easy-to-use location.

Fortunately, Sovereign always aspires to be a modern, connected business and we already had a strategy for a business-information platform in the pipeline.

Interactive dashboard

There was no time to wait for sign off; the pandemic had brought the need for a platform to centre stage. And so within just five weeks, working with Microsoft's data warehousing and reporting systems, we pulled together an interactive dashboard for detailed operational reports.

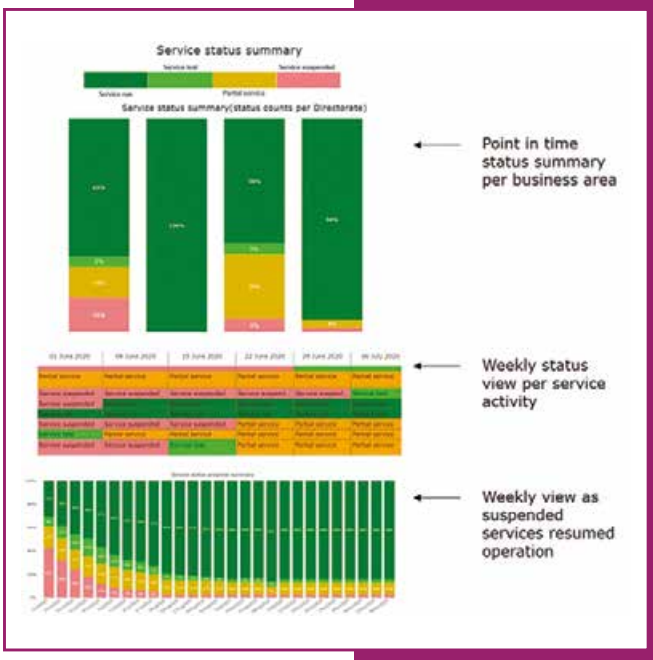
The platform pulled data in from various systems, including Open HR, SDS Sequel and Active H, and then layered it so that we had a 360-degree, real-time view of what was going on. Our executive team and board could therefore make decisions based on what was actually happening right at that moment.

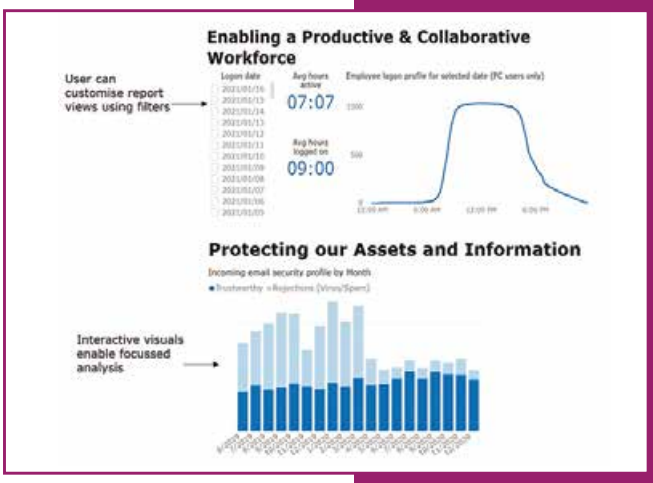
We tracked everything and focused on those activities that mattered most – repurposing trades where needed, speeding up our response to customer complaint hotspots and all the while monitoring the well-being of our people via logon profile data and putting steps in place to encourage healthy ways to work from home.

But, going back to the spreadsheets, what didn't exist was how to monitor 146 individual processes across the business and how they were being affected by the pandemic.

Back to spreadsheets...

Good old Excel still had its place. A template spreadsheet allowed our heads of different service areas to record their current statuses and what they had planned for four weeks to come. This helped to ensure dependencies from supporting services would be in place to help the recovery of business as usual. Excel provided the source to a set of Power BI-based interactive reports.





The data we produced during the past year has absolutely shaped our response as a business, and the opportunity to trial the BI platform was a perfect proof-of-concept for rolling the platform out on a wider basis.

Meanwhile, our BI strategy was indeed signed off and now we are looking to an exciting future as our colleagues realise the potential of the platform we've produced.

More trackable data

Looking ahead, we'll be able to use the platform for more and more because it's not only people, homes, income or repairs data that we can track. For example, we also know that we're responsible for 31,000 trees! And it doesn't stop with internal data; there's a wealth of external data that we're tapping into as well, such as flood risk, crime, demographics and economic factors. I want to help bring data alive and inspire Sovereign to see the numbers we crunch in a new way, not just as boring flat digits on a page. There's a real story to be told and decisions to be influenced by how we use data in the future. I want to make things visual; I want everyone to see data in a new way, just as I do.

Audrey Lloyd is the data insights manager at Sovereign Housing.

More than just a landlord...

George Grant, Publisher & CEO, Housing Technology

It may come as a surprise to those who aren't familiar with the social housing sector, but these organisations throughout the UK have worked around the clock to support their tenants during the pandemic. Many of these are in the front-line services, while a lot have lost jobs and are struggling because of the pandemic. The housing sector's leaders are a pretty dedicated group of people; their core belief is that a home is a fundamental human need and is as much a moral right as education or healthcare.

The CEO of a modern housing provider now has a much wider remit than simply being a landlord. Currently, almost four million households live in social housing, which house approximately nine million people in England. This is just under 20 per cent of all households, with waiting lists growing all the time.

Council housing vs. housing associations

The social housing sector is a diverse part of the housing market with many providers. These comprise a mixture of local authorities and housing association landlords.

Since the 1980s, the provision of social housing has largely shifted from local authorities to housing associations who also take over responsibility for building new homes. It's no secret that the shortage of good quality and affordable homes is a key political issue. Lack of availability has led to huge increases in house prices and rents in the private sector, while the effects of the pandemic, through job losses in the main, has led to repossessions, evictions and newly-homeless people.

Looking after customers

Throughout the pandemic, housing providers made sure that they were able to support their customers. They looked after their own staff first, supplying them with the technology they needed in order to keep tenants safe and secure in their homes.

The core idea of social housing is that it should be more affordable than private renting and offer long-term and secure tenancies. Social renters benefit from better quality homes, better rights and more control over their lives. The opportunity to put down roots in a community means that they can be supported in care and education. In fact, most housing providers put their tenants and community at the centre of their activities through local development and tenant services teams. And aside from looking after properties, a housing provider is also obliged to safeguard adults, children and young people in contact with their services from harm, abuse or neglect.

Leadership in housing

Throughout the pandemic, CEOs and senior management in the sector have had to adapt quickly to support their customers. Many of the CEOs I have met work hard to encourage and support community involvement, the wellbeing of their customers and the maintenance of their properties, and in many cases, they go beyond 'just' achieving regulatory compliance.

Housing staff, apart from front-line and maintenance teams, are mostly working from home. As a consequence, one of the issues that has arisen is the blurring between work and home.

Many members of housing staff are now facing burnout and working much longer hours. Home for many of them is now the office and traditional ways of working have changed dramatically. The sector has had to consider the best use of different technologies to collaborate between teams and find the best ways of supporting them remotely.

It's clear that wellbeing among housing providers' teams lies at the heart of delivering to customers and is vitally important, and we've heard via our dedicated wellbeing channel (jobs.housing-technology.com/wellbeing) about some of the great work that housing providers are doing to keep morale high.

It's all about digital

One of the biggest challenges for housing providers is managing the plethora of data. In order for security to be effective, it needs to continue to evolve. As threats occur, it's vital that the technology designed to keep data safe is up to the job. Housing providers therefore need to continually adapt and respond to new changes and focus on investing in platforms to keep their data and businesses safe.

During the current crisis, data has been a critical issue, especially with teams working from home. Many organisations have had to update and expand their security measures. As organisational systems have become increasingly dependent on technology, they are also more vulnerable to cyber-crime. Many major IT projects have been put on the back-burner as new workloads occurred which could increase cyber-risk.

Housing can be a challenging sector to work in, but it can also be very rewarding for anyone who views work as an opportunity to make a difference. Here at Housing Technology, we're trying to play our part in supporting these dedicated workers to ensure that they have impartial, reliable and up-to-date information on the technologies which help them to do their jobs better for the benefit of their tenants.

George Grant is the CEO and co-founder of Housing Technology.

HOUSING TECHNOLOGY Wellbeing

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