

# HOUSING TECHNOLOGY™

HOUSING | IT | TELECOMS | BUSINESS | ECOLOGY

# 70

#70 EDITION

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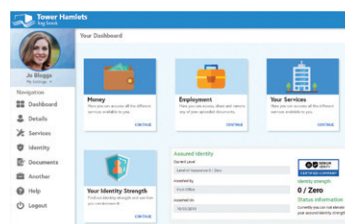


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## The show must go on...

We've started in earnest on the production of the Housing Technology 2020 conference (page 05) and as part of our background activities, it's been interesting to look back to see how the focus and themes of the conference have changed since the first one in 2010 – those themes are a good barometer and bellwether for the wider IT trends in the social housing sector.

The over-arching trend over the past decade is how IT in housing is moving further and further up the corporate hierarchy in terms of its strategic importance being recognised and endorsed.

Back in 2010, the theme of our annual conference was simply around 'IT in housing'; nothing specific and primarily around IT departments reactively serving housing providers' business needs.

Skip forward to 2013 and IT has gained considerable influence in housing providers'

business operations – the themes for the Housing Technology 2013 conference focused on IT as a 'value-adding utility service', digital inclusion, business intelligence, line-of-business applications, BYOD and the consumerisation of IT, omni-channel tenant communications, value for money, and welfare reform and universal credit.

Jump forward again, and the core topics for Housing Technology 2020 include:

- **What's next?** Low code, AI, machine learning, STP, robotic process automation, 'digital twins' and other innovations.
- **Seriously mobile** – Moving towards 'mobile first' now that smartphones are almost ubiquitous.
- **Digital transformation** – From tenant portals, self-service and UX to data management, automation and collaboration.
- **Small but perfectly formed** – IT strategies, software (incl. COTS) and services for smaller housing providers.

- **Business imperatives** – Using technology for cost reductions, business change and innovation.
- **Solid foundations** – Making the most of your core business applications (housing, asset, finance, mobile, CRM, etc, and incl. legacy integration).
- **Refreshing your infrastructure** – Cloud migration, unified communications, PaaS, cyber security and DR/business continuity.

Of course, there is naturally still a strong focus on 'keeping the lights on' but housing providers' technology teams are now increasingly acting as organisational 'pacemakers' – driving business innovation (not just IT) and determining the pace of corporate growth.

In our view, the next stage of IT maturity in our sector should see IT having a boardroom seat as standard, in the same way that, say, finance and governance take their places on the board for granted.

## FORTHCOMING EVENTS

**BT** **HOUSING TECHNOLOGY** **CONNECTED COMMUNITIES 2019** **Analyse Predict Inform**

**HOUSING TECHNOLOGY – CONNECTED COMMUNITIES 2019**

10 September 2019 | BT Tower | London

[www.housing-technology.com/events/bt19](http://www.housing-technology.com/events/bt19)

**HOUSING TECHNOLOGY 2020**

4-5 March 2020

The Doubletree by Hilton Oxford Belfry

[www.housing-technology.com/events/htc20](http://www.housing-technology.com/events/htc20)

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EDITOR  
Alastair Tweedie  
[alastair@housing-technology.com](mailto:alastair@housing-technology.com)  
Twitter: @housingtech

PUBLISHER  
George Grant  
[george.grant@housing-technology.com](mailto:george.grant@housing-technology.com)  
Twitter: @tibcomp

DESIGN & PRODUCTION  
Jo Euston-Moore  
[design@housing-technology.com](mailto:design@housing-technology.com)

EDITORIAL AND NEWS  
[news@housing-technology.com](mailto:news@housing-technology.com)

RECRUITMENT  
[recruitment@housing-technology.com](mailto:recruitment@housing-technology.com)  
[jobs.housing-technology.com](mailto:jobs.housing-technology.com)  
Twitter: @housingtechjobs

SUBSCRIPTIONS  
Subscribe at [www.housing-technology.com](http://www.housing-technology.com)  
or email: [subs@housing-technology.com](mailto:subs@housing-technology.com)

PRINTED IN THE UK BY  
The Magazine Printing Company  
[www.magprint.co.uk](http://www.magprint.co.uk)

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





# Why bad data is a big issue for AI

Trevor Hampton, Director of Housing Solutions, Northgate Public Services

*Google's CEO, Sundar Pichai, has predicted that, "AI will have a more profound impact than electricity or fire" which is quite a write-up given the impact of both these discoveries.*

But behind every new star there's always a kingmaker and in the case of AI, that kingmaker is data.

For AI to prove as transformational as the buzz and excitement around it suggests, some groundwork is needed because AI can only deliver on its promise if it has the right kind of fuel to feed it. If no one scans the letter or makes a note of the call out in the housing management system, it won't be available to provide actionable insights in the future.

So, what can housing teams do to create the foundation needed for AI to make a tangible impact on their business?

## 1. The future is now – the importance of planning for AI

How often have you heard it said that housing providers are sitting on a goldmine of data? While that may well be the case, what's also true is that you need to be able to harness that data for AI to fulfil its promise. If you can't, then it might not be so valuable after all.

It's not just a question of having access to data but having access to the right kind of data. Inaccurate, incomplete or duplicated information held in multiple silos will return multiple copies of the same information and won't provide the expected outcomes in three years' time.

Take a quick works order raised for a repair call-out. Perhaps all the details have not been filled in on the system to save time. What might be a quick fix now will mean that there won't be sufficient detail for AI to be applied effectively down the line.

If there is no record of the repair, the AI will

not know if it was a leaky pipe or a faulty boiler. This will restrict the analysis and the opportunity to predict when a repair or a replacement will be needed next. This may then translate into costly and unnecessary repair visits to a boiler that would have been better off being replaced.

What if 20 repairs are needed in one block? Applying AI could identify if the original installations were all done by the same contractor two years ago and the type of fitting used is unsuitable.

The learning across the database could identify similar properties with the same fittings and allow for a replacement schedule to tie in with a planned maintenance programme to keep costs to a minimum. But this is only possible if the correct data is recorded now.

The key learning point for housing providers is that building accurate data sets now will pay dividends later.

## 2. Creating a data-centric culture

Historically, IT was perceived as a fixer of problems rather than a business driver but as we enter what has been dubbed the fourth industrial revolution, it's maybe time to adjust this mindset across the organisation.

AI is set to have a huge impact in the workplace so it's important to make staff part of the journey. Creating a culture around the value and relevance of data capture and accuracy is critical in this process. If staff know the importance of the data to their future role, they will develop an understanding of why it is important to have electronic records of what they do.

Being aware of how AI can free housing teams from mundane tasks and make their jobs more varied will help, as will emphasising how staff will be needed for the tasks that require more nuanced thinking skills that AI can't (yet) manage.

Housing staff are the front-line; they are the ones able to capture the right information needed to apply AI, so

fostering a whole-organisation approach will demonstrate how capturing data will benefit everyone.

## 3. Focus on all areas

AI's ability to cross-reference data and spot patterns will have untold benefits for the housing sector, helping accurately target funding which is vital in these times of dwindling budgets. But this can only happen if a consistent approach is taken to data collection.

It is not just collecting data in one part of the organisation that is important. All teams need to be involved so that a complete picture of tenants and properties can be mined to create actionable predictions to save time and money.

For example, take tenants who are late with their rental payments. Analysis of their records with AI may show they are late around Christmas and during the summer but are otherwise good payers. This scenario seems to reveal that it may simply be a question of cash flow rather than a persistent inability or refusal to pay.

AI can learn these trends from the payment history and if it has good data in all systems, AI can cross-reference other weighting factors, such as the type of household or income band and then apply that to the whole database.

A housing provider could perhaps then identify 200 families all with the same demographics and weighting factors. These families could then be targeted for early interventions at these regular financial pressure-points to prevent them from falling behind.

Incomplete data sets will lessen the opportunity to form a holistic picture of tenants and are a potential pitfall that housing providers should act to avoid.

## 4. From back-office to boardroom

When we compare housing to other sectors, there are very few housing providers with an IT director on the board; it's time for that to change.



## Why bad data is a big issue for AI

*Continued from previous page*

AI will help housing providers make the shift from reactivity to 'predict and prevent' and the potential for cost savings is enormous. But success or failure will rely on housing providers having the right digital capabilities and data processes in place.

It's time to see IT as less of an operating cost or a tactic and more as a business-

transforming opportunity. IT needs to be represented at board level so that the right strategic architecture is in place to keep up with the accelerated pace of change.

Few industries are as rich in data as the housing sector, which will make artificial intelligence a real game changer. But for this to happen, data must be recognised as the lifeblood of the organisation.

The velocity of growth is such, that without a data vision, housing providers could find they are left behind in the AI revolution.

**Trevor Hampton is the director of housing solutions at Northgate Public Services.**

*Booking now...*

# Housing Technology 2020 Conference

**HOUSING TECHNOLOGY™**  
2020 | CONFERENCE AND EXECUTIVE FORUM

The CPD Standards Office  
CPD PROVIDER: 41135  
2020  
www.cpdstandards.com



*Housing Technology 2020 will take place on Wednesday 4th and Thursday 5th March 2020 at DoubleTree by Hilton The Oxford Belfry.*

After 12 successive years, Housing Technology's annual conference is long established as the pre-eminent IT event in social housing. No other event brings together so many influential and senior IT practitioners in one place, and the feedback from our past guests, speakers and exhibitors speaks for itself.

Housing Technology 2020 will focus on the following core topics:

- **Business imperatives** – Using technology for cost reductions, business change and innovation.
- **Solid foundations** – Making the most of your core business applications (housing, asset, finance, mobile, CRM, etc, and incl. legacy integration).

- **Digital transformation** – From tenant portals, self service and UX to data management, automation and collaboration.
- **Seriously mobile** – Moving towards 'mobile first' now that smartphones are almost ubiquitous.
- **Small but perfectly formed** – IT strategies, software (incl. COTS) and services for smaller housing providers.
- **Refreshing your infrastructure** – Cloud migration, unified communications, PaaS, cyber security and DR/business continuity.
- **What's next?** Low code, AI, machine learning, STP, robotic process automation, 'digital twins' and other innovations.

For further information, please visit [www.housing-technology.com/events/htc20](http://www.housing-technology.com/events/htc20). If you would like to express an interest in speaking, sponsorship or exhibiting at Housing Technology 2020, please email [alastair@housing-technology.com](mailto:alastair@housing-technology.com).

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# Interview – From Beyond Housing to Orchard Systems

Deborah McManus, CTO, Orchard Systems



*Having spent years working with software providers from the other side of the fence in her role at Beyond Housing, Deborah McManus brings a unique perspective to her latest role as CTO of Orchard Systems. We spoke to Deborah about making the move from a housing provider to the supplier side, and the challenges both sides face.*

## Q | Why move from the housing side to the IT supplier side, and why Orchard in particular?

I started working in the social housing sector in 2011, but before that my background was in software and services working in the horse racing industry. While I was keen to get back into a product-focused role, I'd fallen in love with the housing sector, particularly the feeling of working for a company with a real social purpose. Moving to the IT supplier side within housing was the perfect opportunity because it has allowed me to get back into the product side of things while still maintaining that sense of social purpose.

As for Orchard – in my time at Beyond Housing, I worked with many different technology suppliers, and I knew what good looked like and which companies had potential. I could see that Orchard had a real vision for the change they wanted to drive, and this was something I wanted

to be part of. I got a strong sense that Orchard was going on a journey, and I really felt I could contribute to that.

## Q | What were your key achievements and experience at Beyond Housing?

I joined Coast & Country Housing in 2011, one of two housing providers which later merged to become Beyond Housing. I'd say that my biggest achievement was a major transformation project across the ICT team, embedding new functions and processes, and bringing in best-practice frameworks for project management and service management to transform the way we worked from the ground up.

This initial project really went to the heart of how we worked, and while it might not have been the most visible from the outside, it brought in the base level of rigour that we needed to allow us to handle future projects, such as introducing online services and mobile working.

I also supported the merger process between Coast & Country and Yorkshire Coast Homes, leading both teams to merge and work as a single team, with a unified systems journey mapped around consolidation, rationalisation and integration.

## Q | How will these achievements help in your new role at Orchard?

I think the key insight I gained from my work at Beyond Housing is a view of how things look from the other side of the fence.

I've had the opportunity to see every aspect of how housing providers operate, from the regulatory and compliance issues facing boards and the implications for them if these are not met, to the technology and solutions which are missing from the market and how software providers can provide more value, right down to understanding how 'minor' changes in software features can affect an officer's day-to-day job.

This real understanding of how software is actually used is something I'm very excited about bringing to the team at Orchard.

## Q | What misconceptions do IT suppliers have of housing providers, and vice-versa?

As I briefly alluded to above, I don't think software providers always understand the true impact that small changes can have in the housing provider's environment, and how much pressure feature changes and software upgrades can put on IT teams in terms of scheduling, testing and the reality of getting upgrades live.

And although there is an awareness of the consequences of technology issues on housing providers, there's not necessarily a true understanding; from the IT supplier side, it's not always easy to see the impact on individuals within the business.

On the other side, I think there needs to be an understanding by housing providers of the complexity of the software development process, and how what may seem like relatively straightforward changes can have much bigger implications.

Without an understanding of the challenges software providers face, it can be easy to assume that adding a new functionality is simple or that every organisation works the same way, when in fact the software providers have a difficult balancing act to meet a range of different needs and preferences within their software.

## Q | What should housing providers and IT suppliers do differently?

For me, it's about partnership. Choosing a software supplier is not like any other procurement process because rather than just buying a product, you're entering into a relationship for many years.



## Interview – From Beyond Housing to Orchard Systems

*Continued from previous page*

To overcome challenges together, you need to ensure that people are listening to each other, and that's something which I think could be improved across the sector and supplier base. That said, ultimately, it's the housing providers who are the customers, so software providers need to be prepared to take the initiative when it comes to building this partnership and developing their understanding of the organisations they work with.

### Q | What are housing providers' most pressing issues and concerns?

Compliance, first and foremost – the Grenfell disaster has done a lot to highlight this, but it's always been the case. The pressure has never been higher to ensure compliance around the 'big five' of electrical, gas, fire, water and asbestos,

and it's something that's reported on at the highest level.

Data is also a massive issue at a board level, not just in terms of the value and insights it can drive but also at a much more fundamental level. Housing providers work with many large, complex data sets and often have to consolidate data across multiple different systems to demonstrate outcomes and compliance and fuel decision-making. To make this possible, housing providers often need to overcome ground-level challenges relating to storage, accuracy and integration to ensure they're able to trust their data and consistently present a single version of the truth.

### Q | What are your key goals at Orchard?

My key goal is to ensure that we keep our customers at the heart of everything we do. This is something I have always felt Orchard does well, but I want to make sure that every solution we develop is designed with a true understanding of the value it will drive to individuals on a daily basis and support the wider business strategies and targets.

By building this empathy with customers into every aspect of our work, I'm confident we can develop software that addresses the real issues our customers face every day, from the boardroom to the operational staff working with their tenants and residents day-to-day.

**Deborah McManus is the CTO of Orchard Systems.**

## Ongo saves £300k on voids with Kirona



*Ongo Homes has saved over £300,000 after implementing Kirona's Dynamic Resource Scheduler (DRS) software by improving the efficiency of its repairs and maintenance teams arounds its management of void properties.*

The introduction of Kirona's DRS software replaces the housing provider's previous reliance on manual processes to collect data on its empty properties, allocating work to its tradespeople on pieces of paper.

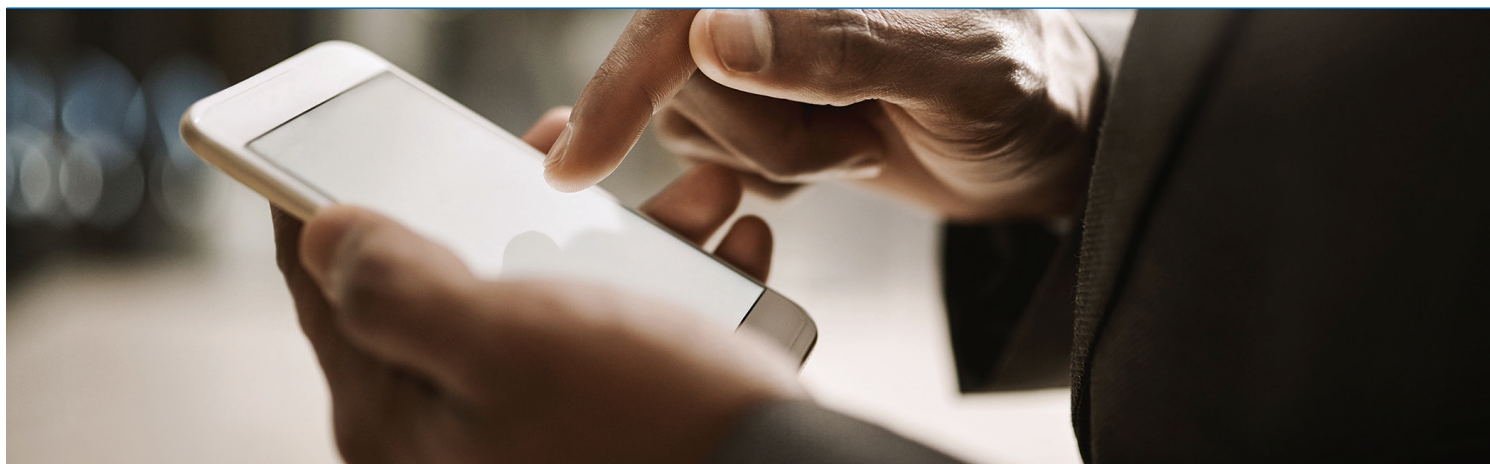
Margaret Slingsby, maintenance service manager, Ongo Homes, said, "After our operatives had completed one job, they would then have to return to the office for the next job – they would be back and forth all day. It was a process that not only left the empty homes team wasting much of their days and inviting errors, but our KPIs were flatlining."

Kirona's DRS is designed to handle the complexities associated with voids, which may require multiple tradespeople, each with different skills, entering the property at any given time. The software determines the most efficient course of action and allocates tasks to the appropriate operatives through dynamic resource scheduling.

Slingsby said: "We wanted to give our voids department real-time visibility of assigned and completed tasks while also syncing data with our back-office team. By introducing DRS, we've been able to reduce the number of tradespeople and upskill existing operatives to carry out void inspections rather than relying on our area managers. As a result, our costs have reduced by around £300,000.

"The main benefit our office staff have seen is the visibility of the void progress, especially when we need to let our allocations department know how voids are progressing and a potential return date. This also helps with workloads and cross-functional working between repairs and voids staff."

# Clanmil's single view of data with Civica Cx



*Clanmil Housing has implemented Civica's Cx Housing digital platform in order to gain a real-time, holistic view of its tenant and property data, replacing multiple unconnected data sources that were hindering the housing provider's front-line staff.*

Having struggled to collate data from a range of disparate applications and sources, as well as lacking a CRM system, Clanmil bought Cx to ensure it has the information it needs to be responsive and to focus services where they are needed. Clanmil's investment in Cx as an early adopter was recognition of its ambition to be simpler to work with, as a customer, member of staff or contractor exploiting the integration power of the open APIs to work more seamlessly.

Tom Potter, digital business transformation manager, Clanmil Housing, said, "We chose Civica's Cx Housing because it provided the platform we needed to create a single view of our tenants and their homes. It will also help us to develop more customer-centric processes. More interestingly, the benefit of Cx providing open APIs allows us to integrate new and emerging technologies in the future.

"Our go-live of Cx was a relatively smooth experience. As with any major software implementation, we expected some problems but with lots of planning, and hard work from both teams, it was pretty straightforward. It's still early days and we're working with Civica and our users to fine-tune the system and to plan our next upgrade."

## **Civica's Cx Regulatory Services at Peterborough Council**

Peterborough City Council (PCC) has chosen Civica's cloud-based Cx Regulatory Services software to manage its regulatory service functions in a new five-year deal.

PCC provides a shared service for Cambridgeshire County Council and Rutland County Council. Implementing Cx Regulatory Services will help to streamline processes across

the three councils and improve service delivery based on a single regulatory service platform to support multiple users. As an integrated cloud platform Cx Regulatory Services includes functionality for licensing, community safety, trading standards, environmental health, housing assistance, housing enforcement and online interactions.

A long-standing customer of Civica's APP software for regulatory services since 1998, the new five-year contract is part of PCC's wider digital transformation programme to move to more agile, web-based ways of working for both staff and citizens.

PCC will implement Cx Regulatory Services in stages, initially introducing the Cx Licensing module to improve working processes by automating routine tasks and ease the burden of coping with high volumes of applications during peak periods. The council then plans to introduce further Cx Regulatory Services modules for trading standards, environmental health, housing assistance and housing enforcement across the shared service to support the three councils' combined digital agendas.

Peter Gell, head of regulatory services, Peterborough City Council, said, "As one of the top four growth areas in the country, we face the challenge of reduced funding combined with increasing demand for our services.

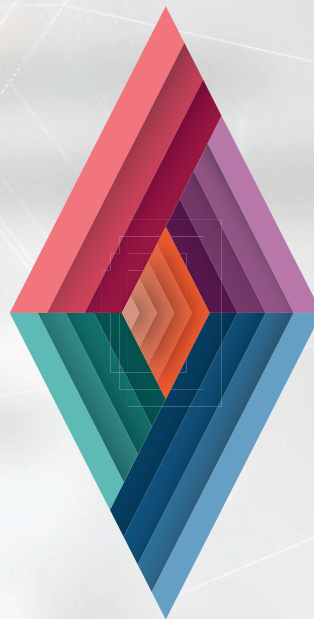
"As a shared service, our new cloud platform will give us a holistic view of our services across the three councils as well as being more intuitive to use and more transparent for citizens. Cx Regulatory Services will put us in a stronger position for the future and it's great to continue working with a long-term partner like Civica which already has the in-depth knowledge of our organisation."

This new Cx Regulatory Services contract follows recent partnerships by Civica with Durham County Council, Redcar and Cleveland Borough Council and Rugby Borough Council.



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**CASTLETON**

# Flagship's Microsoft & ESRI BI-enabled arborists



*How can technology help to manage 3,500 individual and 1,000 groups of trees covering an area from North Essex to North Norfolk? This was the question posed to Flagship Group's business intelligence and GIS teams.*

Victoria Green, business intelligence developer, Flagship Group, said, "Our passion is delivering a great service for our customers, so we were very keen to support our arborists by designing a solution to help them work as effectively and efficiently as possible."

The Flagship BI team developed a Microsoft PowerApp, included as part of Flagship's Office 365 subscription, which all staff can use to request tree works. The app includes functionality to allow attachments, pictures and GPS location, all vital given the wide geographic area covered by the arborists.

Following a tree request, the arborists receive an automated email for them

to assess the work. The arborists then use a second bespoke 'assessment' PowerApp which has been automatically populated from the original request. With this app, an arborist can pinpoint the tree's location, assess the work required, add more detailed information and carry out the necessary planning and when satisfied, the app (via Microsoft Flow) generates an assignment in ESRI's Workforce for ArcGIS software.

Green said, "By using their own PowerApp, the arborists can provide clarity about what's needed, identify the work required and how this will be delivered. This creates significant efficiencies because the arborists can complete the entire process while in the field."

The next stage in the process is assigning the work and this is supported by Workforce for ArcGIS. Part of the solution automatically produces a pre-populated job sheet and attaches each one to its respective assignment. Using Workforce for ArcGIS, arborists can record their start and finish times, any breaks and attach pictures to an assignment.

Andy Blackman, GIS developer, Flagship Group, said, "The use of Workforce for ArcGIS has enabled us to visualise the team's work on a map, combined with the



arborist's live location to enable maximum efficiency when assigning and recording work. This combined with ESRI's Collector for ArcGIS allows the arborists to amend existing and add new tree data while in the field, allowing us to better understand and manage our assets."

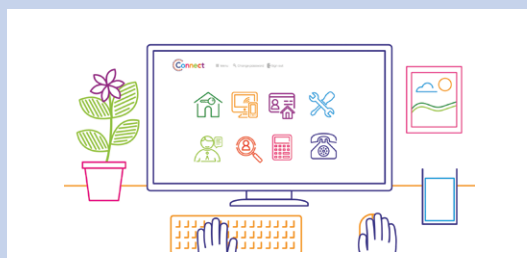
The development of the new process took Flagship's business intelligence team around 100 hours to complete from planning to launch and it is set to transform how the arborists operate.

Blackman said, "What we've done is take an entirely manual and outdated process and automate it, making it easier for everyone involved, from the initial job request to the delivery of the work."

The bespoke system is unique to Flagship who are happy to share their experiences and knowledge with other housing providers; please contact them at [andy.blackman@flagship-group.co.uk](mailto:andy.blackman@flagship-group.co.uk) and/or [victoria.green@flagship-group.co.uk](mailto:victoria.green@flagship-group.co.uk).

## Caledonia Housing launches online Repair Wizard

*Caledonia Housing has added Housing Insight's Repair Wizard to its existing PanConnect-based tenant portal.*



Repair Wizard enables CHA's tenants to request and manage their housing repairs from any connected device, letting them report repairs, upload images of faults and schedule

an appointment direct with CHA's relevant repair contractor.

Tim Calderbank, director of customer services, Caledonia Housing, said, "Following the success of our Connect portal, we hope the launch of our new Repair Wizard feature will continue to help our tenants save time and effort.

"We appreciate the feedback our initial test users have given us and welcome all feedback and suggestions from the growing number of tenants signing up and using Connect on a regular basis."



# Brighter Thinking for Housing

## Great user experience

Simple, fresh interface designed for any device and any browser, giving you access to information wherever, whenever.

## Truly open integration

Open connections to other systems to streamline how you work and transform how you deliver.

## Multi-channel engagement

Built-in CRM and self-service makes every interaction faster and better, freeing you up to get proactive.

## Powerful insight

Aggregate, visualise and interrogate data with ease so you can make the right decision every time.

FLEXIBLE. SCALABLE. INNOVATIVE.

## An open technology for housing

The housing sector is calling out for a fresh approach to managing their customers, processes and people. That's why we've drawn a new blueprint for the technology that's shaping the future.



# How to be a disruptive influence...

Paul Durose, CEO & Founder, Gas Tag

*I remember the first time someone told me, "Gas Tag is the 'disruptor' in this sector." I vividly remember having a spring in my step for the rest of that day, thinking that we're finally making our mark.*

But in hindsight, I'm not so sure that being a disruptor is always perceived in the way people want it to be. It can sometimes have negative connotations. When you create a product or service and you have no direct competitors, you have the field to yourself, which can be attractive at first. While you have no one to be compared with and no one to outperform, it can be lonely and you have to not only bring on new customers but you also have to create and shape the market. When you turn up to your first meeting and say, "Gas Tag has reinvented the gas industry which affects over 23 million households in the UK", your audience's first reaction can be, "Who on earth do these people think they are?"

## Gaining trust

If you are trying to completely disrupt any industry, it's always going to be extremely difficult to achieve. You need to convince people that, above all else, you and your company are trustworthy and, not forgetting in this age of 'fast to fail', that you are financially stable. How do you gain the trust of people and organisations who several weeks ago had never heard of you?

To achieve that positive disruption, you will need to demonstrate that what you have created will help customers in their daily lives, not overcomplicate things and not cost more than they are comfortable paying. In short, you need to be very easy to buy from!

Primarily, your goal must be to somehow find and convince an organisation's 'real innovators', the ones who will take a chance and be the very first to use

your product. This archetype of an early adopter wants to be known as the person who 'thinks differently' and who isn't afraid to take risks. These people are keen to try something out for the potential upside of looking like the hero but are also intelligent and self-aware enough to understand that they can be made to look the fool. For the real innovators, early adopters and risk takers, your product or offering must have the risk vs. reward up front to make the deal happen.

Over the past two years, I've been meeting people and organisations across the UK and exciting them about the possibilities of Gas Tag and how our positive disruption delivers tangible benefits.

## Finding the innovators

At first, our sole purpose was to identify the innovators and enable them to help me to launch Gas Tag. The help from these people and their organisations doesn't stop with simply signing a contract or becoming the first to use it. For me and the team at Gas Tag, these trailblazers have become an essential part of our product development. For this approach to be successful, the relationship needs to be strong and based on mutual understanding and trust. Having this kind of relationship helps tremendously when you are all pulling together with the collective desire for constant innovation. Some of the most impressive features of Gas Tag to this day have been shaped by the ideas of our customers.

You need to ascertain quickly who these 'real innovators' are, compared with those people who merely feign interest and excitement. But these innovators don't exist everywhere; you must remember that every contact still has to leave a strong, positive impression, even on those people who may not want to be seen as cutting edge.

These people will be ready and waiting to leap on your product as soon as they see

it working successfully with their peers. I can speak of this with experience; at Gas Tag, I've met organisations who went 'radio silent' after initially strongly positive meetings and then, more than 12 months later, they approached us to say that they wanted Gas Tag now.

## Positive disruption

To maintain the positive disruptor 'tag', I'm always conscious for the need of constant and never-ending improvement. Working closely with our early adopters and launch partners enables Gas Tag to harness their passion and determination so that it mirrors our own.

Gas Tag as a business can be summed up by our strap-line 'safety through technology'. Our mission is to create greater transparency and accountability across the sectors we work in. I'm always shouting, "Why the hell do we know more about our Uber driver than we do about a gas engineer, working in our homes on appliances that have the potential to explode?" Technology is constantly delivering innovation in how we bank, shop and engage socially, so why not in something we may consider as mundane as keeping us safe and warm?

While the Gas Tag team and I work hard to keep doing the right things, we have many miles to go to reach our goal of a Gas Tag in every property, making the industry safer for all residents across the UK.

Having embarked on the journey, we owe an awful lot to our 'real innovators' out there, those people and organisations who have helped Gas Tag to the point we are at today. Without them, we wouldn't be who we are, so thank you – you know who you are!

**Paul Durose is the CEO and founder of Gas Tag.**



# Housing and the Freedom of Information Act

Philip Brining, Consulting Director, Data Protection People



*The Freedom of Information Act 2000 (FoIA) was enacted as part of a package of measures introduced by the Labour government aimed at improving the operation of the UK government by making it more accountable to the electorate through increased transparency. It directly affects 'public authorities' which are defined in a list contained in Schedule 1 of the Act. Some private sector companies are also affected by FoIA and from 1st May 2018 the Housing Ombudsman was listed as a public authority for these purposes.*

There have been moves afoot for some time to bring housing providers under the scope of the FoIA including calls from MPs, the Information Commissioner's Office (ICO) and public pressure groups. So far these have been fought off by the housing sector and the National Housing Federation, fearful of an apparent loss of independence and increased costs. The latest attempt, the Freedom of Information (Extension) Bill seeks to bring providers of social housing under the scope of the FoIA.

The ICO recently estimated that there is a transparency gap of more than £10 billion per year caused, in the main, by the government purchasing public services from private companies, charities and not-for-profit agencies who are not caught by the provisions of the FoIA. The drive to bring this spending under the scope of the FoIA to improve governmental accountability seems well founded.

## What is the FoIA?

The FoIA provides a general right of access to information held by public authorities in England and Wales

and Northern Ireland. There is similar legislation in Scotland under the Freedom of Information (Scotland) Act 2002. The law is based on domestic statute: there is no specific EU directive which has required the introduction of the law. The ICO is responsible for enforcing the FoIA.

Since the Act came fully into force at the start of 2005, it has given access to a vast number of documents which has enhanced openness and transparency in decision taking by public authorities and has generated much controversy, giving access to various information individuals within public authorities (including MPs) would probably wish had been kept secret.

## How does it affect organisations?

The FoIA broadly affects public authorities in two ways:

- Certain documents and other recorded information held by a public authority must be published into the public domain via a publications scheme;
- Anybody (individuals and organisations) can make requests for information under the FoIA which must be responded to within 20 working days.

One of the effects of this is that organisations caught by the Act need more control over the information they are holding such as: a data classification scheme, detailed information asset registers, effective information and document retention schedules and data destruction arrangements; a method (usually a web site) for managing the publications scheme; and a mechanism for handling FoIA requests including appropriate data-search functionality, as well as a team of people who understand the FoIA including its exemptions, case law and so on.

In many organisations' experience, most FoIA requests are made by journalists on the hunt for stories or for research purposes and the Act has been criticised by politicians for allowing this. However,

these are valid requests for information and must be responded to within the statutory period.

## What should social housing providers do now?

The FoIA Extension Bill is a bill before parliament that aims to, among other things, make providers of social housing, and information held by contractors to public authorities subject to the FoIA. The Bill's passage may arguably have become derailed by the parliamentary time committed to Brexit but if it becomes law, it will have a significant impact on housing providers, who are generally not geared up either to identify information for proactive publication or for handling information requests made under the Act.

The Bill currently states that it would come into effect three months after the day on which it is passed by Parliament, giving a very short lead-in time compared to the lead-in time of over four years provided for when the FoIA came into force.

However, given the work that housing providers and their contractors will have already undertaken in preparation for last year's introduction of GDPR (including data audits, compilation of asset registers and an overhaul of information rights request) combined with the huge advances in data-management technologies in the past decade or so, this doesn't seem to be an unrealistic timetable but nevertheless, it is short.

Social housing providers should brief senior management about the FoIA and the Bill, review their current capabilities to comply with the Act, and define the actions that would be required to comply. They should assess the scope of information they are holding, determine what a publications scheme would look like, evaluate likely modifications to their data classification policy, and detail what information would fall under the scope of FoIA requests, which exemptions might

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## Housing and the Freedom of Information Act

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be applicable and how they could modify their existing information request handling processes to accommodate FoIA requests. They should assess the likely impact on their supply chain and discuss the implications with relevant contractors.

### What should contractors do now?

The extension bill states: "Any contract made by a public authority with any person ('the contractor') for the provision of services to or on behalf of the public authority shall be deemed to include the specified disclosure provision... a provision stipulating that all information held in connection with the performance or proposed performance of the contract by the contractor, a sub-contractor, and any other person acting on behalf of the contractor or subcontractor is,

notwithstanding any provision to the contrary in the contract, deemed to be held on behalf of the public authority for the purpose of this Act or the Environmental Information Regulations 2004."

Contractors to housing providers should: review the contracts they have with their housing customers; assess the information they are holding in relation to their contracts with them; explore and document how this information is managed and catalogued; and detail the work required to ensure information handling complies with the FoIA. They need to assess their ability to respond to information disclosure requests made under the FoIA and bear in mind that the Bill empowers the ICO to have powers of entry and inspection over contractors.

It also extends the offence of altering records with the intent to prevent disclosure to include contractors.

Fortunately, much work should already be in place to regulate, control and monitor the processing of personal data by housing providers and their suppliers on the back of their GDPR work. The trick will be to extend some of these measures to cover FoIA information and the starting point is to undertake a FoIA impact review which, for a few days' work is likely to be time well spent if the Bill passes into law.

**Philip Brining is the consulting director for Data Protection People.**



## Digital identity for vulnerable people

Stuart Young, Managing Director, Etive Technologies

*Etive Technologies is working with the Government Digital Service (GDS), Post Office, DWP and Tower Hamlets Council on a leading public- and private-sector project to implement highly-assured online identities for hard-to-reach customers, that are fully interoperable with Gov.uk's Verify service.*

This beta project will support vulnerable citizens who lack a digital footprint to achieve an assured digital identity and enable them to access public services quickly and efficiently. Local authority data, collected and stored in Etive's 'Digital Log Book' personal data store, will be used by identity providers, in this case the Post Office, to create identity accounts aligned to government standards. From these accounts, citizens will be able to access and complete a range of government and

local authority online transactions.

Martin Edwards, director for identity Services, Post Office, said, "Applications for services often require a lot of effort and information, so avoiding having to duplicate that time and again really helps to simplify the process. Sharing information just once removes unnecessary barriers and makes it much easier for people to access key services. This project comes at a great time with the new, more flexible version of the government verification standards being published, making identity services accessible to more people."

### Gov.uk Verify

Gov.uk Verify is a secure way to prove who you are online. A Verify digital identity can be used to access a variety of government services, such as DWP benefits, without having to go through the identity-checking process each time.

A spokesperson for DWP Digital said, "We will always look to take advantage of new and current technologies as they evolve. The world of digital identity is a key part

of any digital service meaning that DWP will explore a range of solutions right across the spectrum of identity and trust, known as the 'pantry' approach. The Verify solution is part of the suite of products offered in this area, and forms part of DWP's pantry approach."

### Assured identity and local authority services

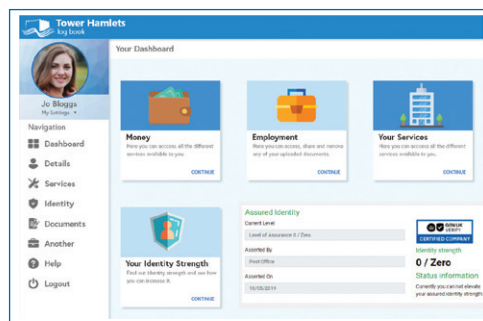
Tower Hamlets Council is aiming to use assured identity as a single trusted login for its website for services and its first use-cases include housing, education and employment opportunities, and tackling poverty as data sources. The standards implemented by Verify are the only standards for digital identity verification in the country and are aiming to reduce the complexity of accessing multiple services provided by both public and private sectors.

Tower Hamlets Council is making more customer services available online so that residents can get what they need through the click of button. A reliable solution for online identity will make the



## Digital identity for vulnerable people

*Continued from previous page*



delivery of these services more efficient for the council, and more streamlined for their customers, supporting wider digital inclusion.

This innovative project follows on from the success of the recent Etime/Tower Hamlets projects which assessed the use of local authority data, collected and stored in a Digital Log Book, to create highly-assured online accounts by identity providers.

For example, with only 38 per cent of universal credit applicants getting through the Verify application process due to a lack of digital footprint, these projects really helped us to understand how we can better support the most vulnerable in society, who are high users of public services during their times of greatest need – after all, proof of identity is a prerequisite to being able to access critical services and to participate in modern social and economic systems.

Don Thibeau, president, Open Identity Exchange, said, "Much is made of the importance of public-private partnerships, and rightly so. The Etime project demonstrates the possibilities and practicalities of collaboration at the local level.

"Change often comes from the edge. More often than not, innovation comes, not from central authorities, but from those who encounter problems at first-hand. The Etime project's pragmatic approach promises progress on some of the most complex problems we face in our online lives.

"Working across departmental, jurisdictional and business boundaries is no job for the timid. The Open Identity Exchange was purpose-built to encourage and support the search for solutions represented in the Etime project."

### The challenge for digital transformation

This beta project will demonstrate how aggregated local authority data can be used to help citizens register for an assured identity with their consent. The project will assess self-asserted entry-level accounts and 'trust elevation' over time from a basic account up to a medium level and understand the user journey for customers setting up an assured identity for the first time.

The government's public-sector transformation plans are based to a large extent on encouraging citizens to meet their needs through self-help and self-management. Fundamental to this is a digital-first approach that provides citizens with the tools and support they require to find information and carry out transactions online.

To deliver large-scale transformation and change, services need to be designed as web-based digital services. This can only be cost-effective, timely and seamless if the key digital components are built once and reused across every digital service, and online customer identity is one of the

critical capabilities needed to underpin a comprehensive digital-first offering.

Councils usually have several different customer-facing systems, each with their own way of verifying and authenticating customers. Councils and government ask customers to register for and use more than one online customer identity to access the full range of online services. There are many conflicting internet access management services (IAMS) with differing levels of security and interoperability which makes it difficult and complex for customers to access online public services.

Adopting government standards has the potential to deliver savings and efficiencies by off-loading the complexity and cost of running a graded, federated and trusted customer solution in-house and being tied to proprietary systems.

John Biggs, mayor, Tower Hamlets Council, said, "This project is extremely important for residents in our borough because many are financially excluded and digital identity aligned to government standards will help to give them the opportunity to have a digital presence to access services online. We are committed to reducing inequality and as more services move online, we want to make sure all our residents are digitally included."

**Stuart Young is the managing director of Etime Technologies.**

## Northgate buys Snook

*Northgate Public Services has announced the acquisition of Snook, a service design agency specialising in the redesign of public and private services to better meet users' needs.*

Stephen Callaghan, CEO, Northgate Public Services, said, "Snook's reputation for designing products and services that are more accessible, relevant and focused on people's needs is unrivalled in the public sector. Combine that with our focus on putting critical information into the hands of people where and when they need it, and the result will be technology solutions that achieve the delicate balance of both meeting the public sector's needs as well as the public it serves."

Sarah Drummond, co-founder and managing director, Snook, said, "In Northgate, we have found a company

that matches our drive and ambition, and one with the resources to fuel our growth. Our research and knowledge of service design will be united with Northgate's open software and capability to deliver."

Snook created the UK's first online police feedback platform, MyPolice, supported the government's Policy Lab division to improve the rental experience for landlords and tenants, and has helped CycleHack with an award-winning initiative to overcome the barriers to cycling in 50 global cities.



# The low-code alternative to housing management systems

Gareth Edwards, Managing Director, Rapid Information Systems

*Housing management systems (HMS) solve a lot of problems for housing providers; if you want to improve customer service and asset management, an integrated approach drives efficiencies and makes you a better landlord.*

Unfortunately, enterprise solutions come with a few inherent problems. For many housing providers, they're just too expensive, and any return on investment from increased productivity and reduced costs takes a long time to materialise. They're also static, one-size-fits-all closed solutions with very few opportunities to localise them for your specific requirements or to innovate in a changing market.

Then there is the digital transformation challenge. Housing providers have huge volumes of data that need to be migrated from their legacy systems to an enterprise solution; that's not an easy job and is also a barrier to embracing cloud computing for many.

Of course, there are many housing providers and local authorities that are getting benefits from their HMS, but if you're looking for an alternative, what are your options?

## Three alternatives to HMS...

Let me propose three options which can deliver an integrated solution with a single view that gives you all the benefits (and more) of an enterprise HMS.

As you might expect from a low-code platform developer like us, these all use low-code as an affordable and flexible way to improve customer service, raise productivity, increase efficiency, and reduce costs.

## A Single View with Real-Time Two-Way Integration



### 1. Use low-code to join up the dots

Instead of getting rid of your existing enterprise software such as housing, document and asset management systems, appointments, subcontractor repairs systems and so on, join them up with low-code.

An application can be built quickly and affordably in low-code that provides a single view so that staff don't have to search multiple systems to get a comprehensive view of the customer. This can be modern, attractive, easy-to-use, and contain exactly the functionality your organisation requires in the language they use.

We've developed this low-code platform for the London Borough of Camden. With a live repairs call-centre interface and landlord's system that reflects how the organisation operates, it brings all the small pieces together in real-time. As a result, repairs are prioritised more effectively, call-times reduced and customer satisfaction levels have increased; repairs are done right the first time.

We've also helped Camden develop a low-code application for their housing application forms and a billing solution, all integrating existing systems to optimise workflows and improve customer service.

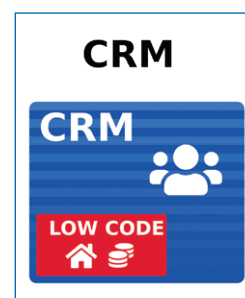
### 2. Microsoft Dynamics CRM and plug the gaps with low-code

Many housing providers are moving or thinking of moving to Microsoft Dynamics CRM. I think it's a great platform and a good alternative to an HMS, and really puts the customer at the heart of operations. However, one piece is missing from Dynamics CRM and that's how to

manage income, such as rents and service charges. A low-code application can solve that problem and integrate this specialist

functionality with a cloud solution like Dynamics CRM.

This option provides housing providers with a customer-centric PaaS solution with a low-code



plugin that gives them the big picture. As with the option (above) of using low-code applications to join all the dots, there's plenty of scope for innovation with an open API, therefore delivering more value for money from your existing systems or solutions such as Dynamics CRM.

### 3. Build an HMS in low-code

With the right low-code platform, it's feasible, even with large volumes of data, to build something as big as an HMS in low-code – I've done it!

However, there are risks with any self-build/DIY project. But since low-code requires minimal coding, has a 'drag and drop' toolkit, and quality and security are built in, the risks are controllable. In-house teams, with standard IT skillsets, can rapidly prototype and deploy applications, reducing costs and giving them full control over their systems.

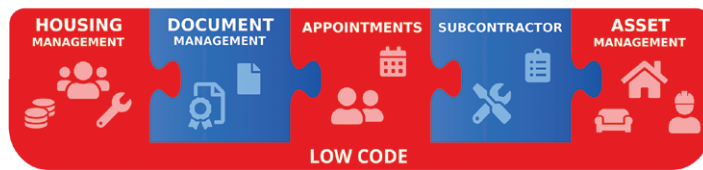
There are different approaches for everyone and that's one of the key benefits of low-code: its flexibility and openness. You can go all in, use a hybrid model, or just build software to optimise your existing



## The low-code alternative to housing management systems

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### Low-code Housing Management Solution



systems with less risk and lower costs.

Low-code platforms also include tools for mobile working, forms, workflow, case management and customer portals, which

is why we're seeing a lot of digital teams in the housing sector using it to enable digital transformation.

It's important to note that low-code also

empowers housing providers to take control of their IT solutions. Applications can be developed by in-house teams, by people who have an in-depth understanding of existing systems, operations and the challenges faced by staff within the organisation. This generally delivers much better localised solutions than a one-size-fits-all enterprise housing management system.

**Gareth Edwards is managing director of Rapid Information Systems.**



## FINANCE MANAGEMENT

# Reimagining compliance

Ryan Dempsey, CEO, The Compliance Workbook



*When I was asked to write this short article, I understood that the purpose was to provide a documented process that defines what we do now, and what the future would look like with technology. Interestingly, my next thought was "how can you reimagine something that people still don't fully understand?"*

Compliance is simply defined as one's ability to act according to an order, a set of rules or a request. Unfortunately, that doesn't really clear up the many aspects of what constitutes compliance in social housing, but it does give us the basis to understand a little more. When I meet

senior housing professionals around the country to talk about specifications and best practice guidance, we always fall back on minimum levels because we believe that's what we will be judged against; ultimately compliance, because of the reporting mechanisms in place today, is the minimum expected output.

With the introduction of technology over the years we can see that compliance, as we know it today, is failing to keep up with the world's advances. This doesn't apply to everyone and everything, but it does apply to data, process and compliance management in housing.

An important question at this point is why? Is it because we're scared to try new things? Or is there more to it? Maybe there is a nervousness that if we adopt technology that can do more with less then we will be forced to spend more even though we are gradually given less. This is an apparent issue right across housing but if you approach technology and embrace

it, ensuring the provider only provides the service and doesn't control it, you can take small steps towards really positive improvements.

Looking at technology now, we can see the ability to trend the data we have to provide insights or knowledge concepts that predict or prompt actions around failing assets. The level of forensic analytics available means that the money you spend on systems that may not need upgrading can be parked, enabling your spending to be focused on what actually is failing.

The housing sector is awash with software companies selling their wares. The hardest thing for you is to find the solutions that have been built to help or fix a problem... and to avoid the ones trying to sell a problem that fits their solution.

**Ryan Dempsey is the CEO of The Compliance Workbook.**



# Places for People invests in Impact Reporting

(L-R) Chris Farrell, Managing Director, Impact Reporting  
& Jamie Dickinson, Head of Social Value, Places for People

*Places for People has invested in Impact Reporting, a Manchester-based technology start-up created by the founders of Reason Digital.*

The housing provider has been working with the software provider for the past two years on its social impact reporting tools. The company is already valued at £2 million after its first year of trading and plans to double its turnover this year, rising to £10 million over the next five years.

Impact has measured over £76m-worth of social value for Places for People over the past 12 months, and its customers include Regenda, Manchester Airport

Group, Network Rail, DWF, Breast Cancer Care, The University of Manchester and The British Library.

Marcus Hulme, social value director, Places for People, said, "We are investing in Impact because we believe social value is an increasing area of focus for all kinds of businesses with a CSR agenda. Impact Reporting's social value tool is innovative, constantly developing and will raise the bar in social-value monitoring across all types of sectors.

"Impact Reporting has fantastic potential – we've seen it grow over the past two years and take on national clients who are leaders in their fields. We're proud to support a new technology company

whose ethos reflects our focus on delivering positive social value and helping people to achieve their potential."

Chris Farrell, managing director, Impact Reporting, said, "Having the support of Places for People, has galvanised our belief that our business will expand further as we grow our client base. This investment will allow us to enhance the functionality of our social value tool, plan our development and increase future recruitment. Social value is increasingly becoming a buzzword for companies, and we offer a bespoke way to quantify all aspects of community, social, environmental and employee engagement."

## QuantSpark's RentSense research for Mobyssoft

*A study by QuantSpark has found that Mobyssoft's RentSense software helps to reduce housing providers' eviction rates by around 38 per cent, cut arrears by 1.6 per cent and reduce the number of tenants in arrears by almost 12 per cent.*



The Mobyssoft-commissioned research from QuantSpark examined over one million social housing tenancies owned by RentSense customers and two million tenancies owned by non-RentSense users to evaluate the impact of Mobyssoft's software.

The study into evictions found that housing providers using RentSense over a three-year period from 2015-2018 had reduced their eviction rate due to arrears by 38 per cent compared with 13 per cent for non-RentSense users.

The impact of RentSense on non-UC arrears was to reduce them by 0.8 per cent in the first year and by 1.6 per cent after two years; across the dataset analysed by QuantSpark, this was

equivalent to a reduction in arrears of £600,000 per 10,000 properties over two years.

Luke Bingham, regional director, Sovereign Housing, said, "From a strategic point of view, despite the fiscal environment and welfare reform, Sovereign's arrears

have fallen year-on-year for five years and RentSense has been instrumental in helping us achieve that. It has also created efficiencies and capacity within Sovereign, giving us greater freedom and resources to tackle welfare reform."

The study also found that housing providers using RentSense reduced the number of tenants in arrears by seven per cent over the first two years of RentSense's use (a cumulative gain of almost 12 per cent).

Jan Goode, director of neighbourhoods, South Staffordshire Housing, said, "The risks we've faced have increased while our internal resources have remained the same, yet our year-on-year arrears have fallen due to our use of RentSense."



# Flintshire Council deploys RentSense



*Flintshire County Council has bought Mobysoft's RentSense software to help mitigate the effects of full-service universal credit and give its housing team more time to support tenants.*

Flintshire was the first local authority in Wales to move to full-service UC in April 2017. The effects have been far reaching for the council, with workloads increasing for the housing team alongside an increase in rent arrears.

David Barnes, revenues manager, Flintshire County Council, said, "The increasing workload has created a real challenge for us. To ensure our rent recovery process is more efficient, our investment

in RentSense will allow our rental income service to track and monitor arrears much faster through predictive analytics, trend analysis and risk profiling.

"RentSense will help us to become proactive and support tenants with their transition to UC and allow us to intervene at the earliest stages of debt so we can help our tenants and sustain more tenancies."

## Lincolnshire Housing invests in Mobysoft's RentSense



*Lincolnshire Housing Partnership has bought Mobysoft's RentSense software to alleviate its administration of universal credit and to give it a single view of its arrears.*

LHP originally approached Mobysoft after its formation from the 2018 merger of Boston Mayflower and Shoreline Housing Partnership as part of its plan to consolidate the two organisations' housing systems.

Wendy Walker, head of income, Lincolnshire Housing Partnership, said, "We wanted to align our working practices across both sites and have one

view of arrears cases that can be reported globally. RentSense works across both of our existing housing management systems which makes reporting and monitoring our arrears performance so much easier."

LHP was also concerned about the impact of universal credit (UC) on its tenants and how this could have a knock-on effect to performance across the group.

It had already seen UC increase the administration time it needed to verify rents, along with a rise in arrears, and needed to create efficiencies to deal with UC claimants' rent accounts.

Walker said, "RentSense will help us create more time for the income team so they can address their caseload and support the tenants that need any additional help."

## MRI Software buys Engage Property Technology

*MRI Software has bought Engage Property Technology, a self-service housing portal provider.*

Prior to the acquisition, Engage was an established MRI partner, first integrating with MRI's Qube property management software more than two years ago. The acquisition is intended to bolster MRI's existing integration between its back-office solutions and Engage's online portals and provide more support for housing providers.

Dermot Briody, executive managing director for Europe, MRI Software, said, "Tenants today expect the highest levels of service and to be treated less like mere renters and more

like community members. Engage's portals are designed with consumers in mind – vital in a market moving towards a customer-centric approach that puts tenant relationships at the heart of each landlord's business."

Mitesh Patel, chief executive, Engage Property Technology, said, "It will now be even easier for housing providers to deploy Engage portals integrated with MRI's property management and accounting solutions, linking data from both ends and delivering more effective customer service to tenants. Our user-friendly approach adds tangible value, as demonstrated by tenants returning to the portal instead of making phone calls to busy housing management teams."



# Better by design

Nigel Thomson, Housing Consultant, Civica

*Today's housing providers face the combined challenge of increasing tenant demand and reduced budgets. Cloud-based technology, AI and automation are providing the answers, improving services for tenants and the way they interact with providers but just as important is how we interact with the technology, as users or customers.*

Software developers now spend as much time on the user interface (UI) and user experience (UX) as they do on the actual programming of features and functions, and they need to take into account the context in which the system is being accessed.

## A seamless experience

A housing officer needs to be able to update the system directly when carrying out a visit, so the system needs to be as easy to use on a tablet or phone as it is in the office. When it comes to tenants self-serving, such as logging their own repair or booking an appointment, the requirement for a seamless user experience increases tenfold. If a tenant can't instantly access the services they need, they will simply pick up the phone and avoid the experience altogether, doubling the time spent in trying to resolve an issue and

adding to the call centre's workload. The tenant is also unlikely to repeat their online experience, for this or any other function.

Housing management systems have been around for the last few decades and have evolved at a relatively modest pace compared with other technologies that have come and gone over that time.

## Starting from scratch

A few years ago, Civica took the brave and unusual step of starting from scratch in the design of Cx Housing, its digital platform for social housing, focusing on the user experience (Cx stands for Customer eXperience) and employing UX designers as well as programmers to provide an intuitive and engaging user interface. As consumers, we don't need to be trained to search for an item for sale on Ebay, so why should it be any different when we're searching for a person or property in a housing management system?

This shift in emphasis required a change in mind-set across our product and programming teams. Civica was able to draw on specific expertise in this area with designers who had developed websites for major commercial customers. This experience was embodied into the core development process, typically involving business analysts to write the specifications and programmers to cut the code.

## Early engagement with users

Another important point is that user interface design is iterative and doesn't

stop with the release of a specific version. The actual UX can only be measured when a piece of software is 'tested in anger' for the purpose that it was designed. So it's vital to engage customers and end-users in the design process as it evolves; some of the best features of Cx have been suggested by early adopters and are often less to do with functionality and more with the way data is presented or made accessible for a particular purpose.

It's critical for the long-term sustainability of any software that customers who have invested in it feel they have a say in its future. Our developers can benefit from their perspective and business expertise, plus the knowledge of their customers and how they think, act and behave, especially when it comes to engaging with a software application.

You'd obviously expect your housing system to allow you to collect rent, manage repairs or help let a vacant property. But today's customers are looking for that interactive Instagram- or Amazon-style experience when carrying out those tasks. So wherever the use of cloud-based technologies takes the social housing sector, be it enhanced AI, IoT or advanced analytics, the user experience will remain key to unlocking the potential of any future digital platforms.

**Nigel Thomson is a housing consultant at Civica.**

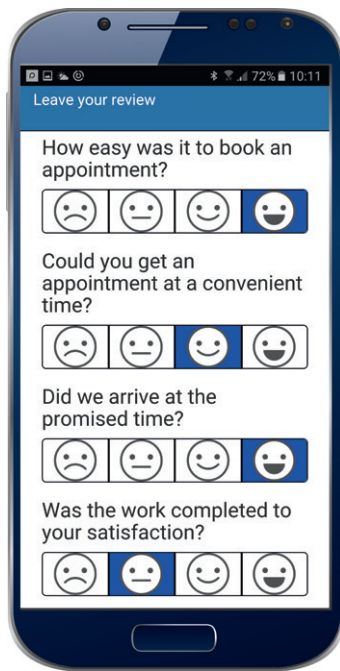
## Sovereign Housing appoints first CIO

*Kevin Ives has been appointed as Sovereign Housing's first chief information officer.*

Ives will join Sovereign's executive board in August 2019 from his current role as digital transformation director at Arriva Trains. As well as leading Arriva's digital transformation strategy, Kevin has had senior roles at Balfour Beatty, Transport for London and Thames Water.

Mark Washer, chief executive, Sovereign Housing, said, "This new role strengthens our top team and reinforces our commitment to creating a sector-leading technology platform for Sovereign. It'll help us respond to our customers' expectations and put our residents at the heart of everything we do, by developing our digital offer, modernising our processes and providing timely and meaningful information across the business."





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# Never mind the KPIs, feel the experience

Martin Joy, Director, Itica

*User experience, customer experience, voice of the customer, customer sentiment, customer focus, customer-centricity... regardless of how you describe it, there's no denying that when it comes to digital, fast, simple and frictionless experiences are becoming the most important determinants of how your customers perceive your service and, by extension, you and your organisation.*

However, this is not the sole preserve of digital and whatever the channel, whatever the service, the goal must be to make the services you offer more useful, easier to use and more pleasurable, all with the aim of delivering a better customer experience (CX).

## Everyone has choices

Some people might argue that CX is not relevant to housing providers because tenants (i.e. customers) have "no choice" and don't need to be "delighted" in the same way that, say, private tenants or owners need to be. Believe this at your peril; everyone has choices and customers of whatever status deserve to receive a quality service and with the proliferation of social media, if someone is unhappy, they won't keep it to themselves.

In an ever-changing sector, who knows where the next opportunity or threat will come from and anyone that cultivates yet ignores an unhappy customer base is potentially storing up trouble for the future.

Having a positive experience by doing what you're supposed to do equates to customer satisfaction but taking that to the

next level (i.e. doing what really matters to the customer) equates to great CX. So, getting CX right is the 'holy grail' but there is a distinct lack of agreement as to its definition and its measurement.

Today, customers are more sensitive than ever to all aspects of their (service) experience and factors affecting this include: customer needs or expectation; product/service features; perceived value of the service being provided; previous experience; customer mood; attributed responsibility for service success or failure; perception of fairness and equity; influence of other customers; and influence of new service delivery models, such as internet shopping and automated interactions with service providers.

## Availability, reliability & recovery

CX has been shown to be a multi-dimensional challenge in which customer perception and rating of service quality have many drivers but of those, availability (service is available when needed), reliability (service is performed dependably and accurately) and recovery (what happens when it goes wrong) have been found to be the most important factors.

What does it all mean? Across all these dimensions, experience is governed by: desired experience (what customers would like to receive), expected experience (what customers think they will receive) and perceived experience (what customers think they have received).

Any gaps will elicit an emotional response – delight, satisfaction, trust and credibility in the case of a positive gap, and sacrifices, dissatisfaction and distrust where there is a deficit.

## CX and revenue growth

Research by Forrester has shown that there is a direct correlation between the quality of CX that businesses provide and their revenue growth. And despite Forrester reporting that 72 per cent of businesses say that CX management is their top priority, the same research then goes on to suggest

that only 14 per cent of brands deliver a good CX – shockingly bad, but is it any better in the housing sector?

Be in no doubt – CX doesn't just happen and needs to be factored in at the outset as part of the end-to-end service design. Doing this helps you identify what customers want at each stage of their interaction with you, how you are currently delivering against those customer expectations, where the pain points are and what causes them. You never know, it may also show how and where you can unexpectedly delight customers, taking you beyond mere satisfaction.

Good service experience design demands customer participation and starts by 'walking in their shoes'. Service quality must cover: basic factors (must-have features); performance factors (expressed needs); excitement factors (unexpressed needs); indifference factors (no impact if present) and reverse factors (adverse impact if present). Now ask yourself, how many housing providers spend time asking the right questions regarding their measures of service quality, service factors and so on? Do you walk in their shoes?

Hopefully we're all agreed that CX is important so now the challenge is how to measure it because, as we all know, you can't manage what you don't measure.

## Measuring performance

The performance management and CX field is awash with three- and four-letter acronyms (CSAT, CES, NPS, AHT, FRT, FCR...) but there really is no single, holistic measure that covers the true end-to-end customer experience. There is no universal standard, no unifying KPI and what we have is a selection of point solutions, each providing valuable insights but each through its own lens.

Some examples include the Forrester CX score which focuses on effectiveness, ease and emotion; the Decibel DXC score which uses big data analytics to link e-commerce website conversion to



## Never mind the KPIs, feel the experience

*Continued from previous page*

revenue growth; Actual Experience who quantify the CX of digital products and services, and DownDetector for empirical digital sentiments through submitted customer insights.

In answer to the inevitable "so what?" question, whatever measurement approach is adopted, it's vital that CX can be tied back to real business outcomes with associated KPIs, people, process, technology and vitally, the capability to deliver the necessary improvements.

A common mistake is to create measures that mean little or nothing to the customer and often have nothing to do with the quality experienced by users in real life – that's a classic fallback of service management, whose performance is often defined in terms of SLAs, particularly in IT where technically-derived KPIs, such as bandwidth, latency, resolution time, call-answer time and ticket closure, are very common.

### Blinded by numbers...

These are undoubtedly important because there might be a lack of quality when an SLA is not met, but relying on them too heavily will risk long-term damage to your organisation; you simply get blinded by numbers and forget about the service. After all, an SLA that has been met doesn't guarantee the user, customer or tenant has actually enjoyed a great experience.

This is a perfect example of a great quotation from Robert McNamara during

the Vietnam War who said, "If you can't measure what is important, what you measure becomes important." Are we measuring what's important or simply what's available?

SLAs are missing something – letting performance be dictated by the one person who feels it the most (i.e. the customer), and as Apple's Steve Jobs said, "You must start with the customer experience and work back towards the technology, not the other way round."

Step forward a new kid on the block that looks set to shake up the status quo by providing an alternative view to the old SLA through a shift towards the XLA or eXperience Level Agreement.

### Experience level agreement

The XLA is an evolution of the SLA developed by Giarte and represents a change in culture by shifting the focus from technical or contract performance to the experience of the customer. Another maturity level is needed to manage expectations of service and to optimise the experience around how this is received. Such agreements are in the XLA and record goals from an end-user perspective, connecting these with the improvement and delivery of any products and services, IT or business.

So how do you create and measure an XLA? This starts with the targeted end-result and re-engineering back to

a relevant way of working and a set of agreements that must then be factored into the service design. The main dimensions are very familiar because they align very well with the service-quality criteria mentioned earlier: reliability, assurance (security, credibility, courtesy, competence), tangibles, empathy (communication, accessibility, customer knowledge) and responsiveness.

XLAs apply to customers, internal staff, suppliers and partners, and require an absolute commitment to quality and functional monitoring. You have to get your staff on board through the creation of 'personas' and mapping the customer journey, but over time you will notice an interesting shift; you might start missing the odd SLA target yet your CX continually improves.

Research has shown that those brands that really want to break away from the pack should focus on emotion and that means putting the customer at the centre of everything, designing your services and metrics accordingly.

And remember: "People will forget what you said, people will forget what you did, but people will never forget how you made them feel."

Maya Angelou (1928 – 2014)

**Martin Joy is a director of Itica.**

## Plus Dane's digital telecare with Appello

*Plus Dane Housing has selected Appello to provide its first digital telecare solutions for residents. Appello will supply digital monitoring services to all 13 of the housing provider's residential and extra-care schemes and will begin installing its digital telecare infrastructure and Smart Living Solutions suite into eight sites, replacing Plus Dane's existing analogue systems.*

From a wall-mounted tablet, Appello's Smart Living Solutions offer room-to-room video calling, video door-entry and faster call-connection times. It can also act as a wireless hotspot so that residents can access the internet without needing a contract with a broadband provider. This also opens up the opportunity for Plus Dane to implement IoT-enabled solutions such as smart sensors and voice-activated systems to control

lights, curtains and heating.

Chris Birch, older person's technology lead, Plus Dane Housing, said, "It's important that our residents benefit from up-to-date technology. As part of our ongoing digital strategy, we know that wi-fi access is important and that video-enabled solutions can reduce social isolation.

"We chose Appello because of the digital changeover taking place for telecare and the resident safety issues associated with this because the networks will no longer support older analogue technologies. As one of the only telecare providers who can offer an end-to-end digital solution, Appello is clearly the right supplier for us."



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Your Housing Group has a diverse portfolio of over 28,000 homes across the North West, Yorkshire and the Midlands, employing over 1,000 people. Having being formed from a merger of separate organisations, Your Housing Group was reliant upon a mix of legacy IT infrastructure platforms with ageing technology. Reliability, agility and remote working were all restricted by the disparate infrastructure, and there were no standardised processes which meant that the productivity of field workers travelling between sites was compromised.

CDW was selected as the preferred partner to plan and implement Your Housing Group's infrastructure transformation. CDW's team of expert Solutions Architects, in partnership with HPE, worked closely with the organisation to design a highly available and scaleable private cloud solution to host network applications and services, centred around HPE BladeSystem and 3PAR StoreServ technologies.

Your Housing Group is now benefitting from a more agile infrastructure platform, which is helping employees with flexible working. Since the completion of the infrastructure project, the organisation has created its first fully agile team and, having proven its value, the same approach is being applied to other areas of the business. The increased reliability of the new infrastructure has been demonstrated by improved uptime and a radical reduction in the number of service failures.

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**SARAH STINCHCOMBE**  
Category Manager - Indirects  
Your Housing Group





# Data insights & learning from retailers

Steve Coates, CEO, Brainnwave

*Four out of five adults in the UK now own a smart phone, with the average person spending one day a week online. As a consequence, the amount of information we share about ourselves – our likes, dislikes, spending habits and places we go – is being regularly analysed by companies who want to know what makes us tick. More importantly, they are using this information to determine how they can improve their own outputs, enhance their appeal and create competitive advantage.*

## Understanding tenants' behaviour

Retailers are particularly good at this. They use our data to better understand our patterns of behaviour and what motivates us to part with our hard-earned cash.

But why am I talking about this to an audience that operates in housing? Because I believe that this same approach could be adopted by housing providers to identify ways in which they can more effectively interact with tenants and bring about positive change for all.

Having worked with several housing providers to deliver improved insights through data, it's clear that there is a genuine desire to better understand tenants.

It's not about the bottom line but about how and where enhancements in tenant management can help to reduce issues,

improve online communications and management channels, and implement more of a 'different size for different people' approach rather than a 'one size fits all', which as we know, doesn't.

In my experience, tenant insights can be broken down into three main data sets:

- Who they are;
- Their behaviours;
- What they think.

## Who they are

Tenants comprise a broad spectrum of individuals. There has been a sharp rise in the 21-35 age bracket as property prices have continued to rise, coupled with a growing demand for family housing as more young adults are living at home for longer.

This shift in the age demographic has led to housing providers actively increasing their online communications and management channels, enabling time-poor tenants to report maintenance issues or make payments during their own downtime periods rather than being restricted to normal office hours, which may require them to take annual leave or leave work early and potentially lose out on pay.

## Their behaviours

Where retailers use data to identify patterns of behaviour related to spending or offer redemptions, we have been helping housing providers to identify tenants' potential issues and trigger points, such as rent arrears, and enabling them to tailor their services and put support mechanisms in place before they become a problem.

With a shift in housing benefits payments and welfare reforms, there has been an increased risk in payments being missed. Personal situations can also change.

A relationship breakdown or sudden unemployment can both bring additional financial burdens and where a tenant has previously been on top of their payments, they might find themselves struggling to cover their rent. Data analytics is helping to predict and safeguard those who are experiencing financial challenges and helping them to manage their cash flow more efficiently.

## What they think

Sustained communications are key to determining perceptions around service provision and where improvements can be made. Housing providers have taken significant steps in changing how they disseminate information and interact with tenants, using decisions informed by data insights.

As a result, tenants are more engaged and feel a greater sense of ownership of their property, leading to a more positive and engaged relationship between them and their housing provider.

By breaking down and better using the data available in these three core areas, housing providers can cut through complex and weighty volumes of information to focus solely on those insights which can help them make effective decisions and deliver positive change.

In the same way as retailers use their data to target specific audiences with specific offers and opportunities, housing providers can take the same approach and work it to both their own advantage and that of their tenants.

**Steve Coates is CEO of Brainnwave.**





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**Mark Woosey - Director of IT, Notting Hill Genesis**

*"itica continues to deliver exceptional value for our organisation. Its thorough and focused sourcing process has, to date, resulted in enhanced service levels and savings on a key contract."*

**Christo Gouws - Director of IT and Transformation, Network Homes**

*"itica is playing a critical role in assuring that we make the right decisions in support of our digital ambitions, challenging our key stakeholders and decision makers through its structured thinking process."*

**Patrick Dawson - Chief Information Officer, Paradigm Housing Group**

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# Diving in at the shallow end

Sam Dart, Head of Digital Technology Services, Sovereign Housing



*Sovereign Housing's head of digital services, Sam Dart, will be speaking at Housing Technology's 'Connected Communities 2019' event at the BT Tower in London on 10 September. He has been at the forefront of a shift to a cloud-based portal at Sovereign Housing.*

Making life as easy as possible for Sovereign customers is at the heart of the development of our customer portal. We expect to see online bank statements in seconds or to buy food in a matter of minutes, so why shouldn't Sovereign residents expect the same when paying rent, arranging repairs or undertaking other simple actions connected with their accounts?

## From two portals to one...

The Sovereign/Spectrum merger in 2016 meant two customer portals running side-by-side. One was modular, the other an outdated SharePoint solution. At that point, our choices included sticking with one of the existing portals and transferring data over or creating a similar model that incorporated both businesses' systems. But to provide what our customers wanted – a digital-first, mobile-enabled, fast and flexible service – we quickly realised that neither of these models would do.

So our IT and customer insight teams and product owners worked together to think bigger. How could we make a customer portal the primary contact channel, freeing up those on the phones to deal with more pressing and complicated matters than simply taking rent payments? What would customers want, and expect to be able to do with their technology ten years into the future? What if Sovereign merged again –

how would we absorb another business's systems? The challenge was to get people to see a problem that might not yet exist.

## Enterprise CMS

When developing our portal, we knew that we wanted to capitalise on customers who were ready for online, and as such, we couldn't afford to be tied to a system that might become obsolete before we'd even launched it. This is why we went for an enterprise CMS product. Rather than spending years developing and then delivering something that was Sovereign-specific, only to find that the world had moved on by its release date, we picked an off-the-shelf product and worked with a partner to configure it.

Removing the clunky burden of traditional systems from our residents, leaving them with easy, self-service end-to-end online journeys was, and remains, our priority. And instead of guessing what they might want, we've asked for feedback as we go along, continuing to build and adapt our product. It's been quite a change of mindset.

Microsoft Azure offers us the scale and resilience that we need to get this done and Kentico-EMS offers sector-neutral enterprise-grade CMS, with capabilities within the platform that are closely aligned to the type of features we want to provide. With this system, we control our own destiny, are resilient and, even better, it's our intellectual property to do as we will with in the future.

## A decoupled architecture

With this in mind, we decided that our customer portal would feature a decoupled architecture – separating the customer-facing solution from internal systems. Instead of linking the website with line-of-business systems, using bespoke point-to-point interfaces, an API layer was used to retrieve and return data from an aggregated integration database.

We use the Microsoft Azure Managed Instance, using a set of ETL processes to extract information from multiple line-of-

## SOVEREIGN'S TIMELINE TO CUSTOMER CLICKS

- **DECEMBER 2016:**  
Sovereign/Spectrum merger and initial portal discussions
- **SPRING 2017:**  
Creation of the business case to the board
- **FEBRUARY-JUNE 2017:**  
Used the 'digital outcomes and specialists' CCS framework to procure professional services
- **AUGUST 2017:**  
Discovery phase
- **SEPTEMBER 2017:**  
Portal build began
- **MARCH 2018:**  
Launched portal with a minimal viable product (MVP)
- **JUNE 2019:**  
New capabilities added each month to date

business applications, which aggregates the data in a single, application-agnostic data model. This means that our wagon is not permanently hitched to the same systems, and if we want to change them, we can.

This is because our customers are not 'one-size-fits-all'. We've carried out extensive customer journey mapping. Sovereign Living, leasehold, market rent, shared ownership and affordable rent customers all access different parts of the system. Using Google Analytics, Mouseflow analysis and eye-tracking, we've monitored behaviour, checking which parts are most popular and which pages are ignored.

The 'heat' is shown as colours onscreen, with red showing where people linger

## Diving in at the shallow end

*Continued from previous page*

longest. This tracking can display minute detail – are areas of the site called by the right name, how quickly do our customers find pages, are they clicking on the right sections to complete actions? It also helps us to think about future investment – why splurge £30,000 on a feature if people aren't going to use it?

So here we are a year on, confidently continuing to add iterations. We've given residents the opportunity to access fire risk assessments at the touch of a button and send handy reminders via 'push' notifications. In a year, we've only had one outage, meaning the system has been

available for 99.3 per cent of the previous year, compared with previous systems that needed input on a week-by-week basis. We don't have to shut down to make fixes, and our 16,000 residents are now reporting 89 per cent satisfaction with their payment journeys.

We've seen almost 100 per cent organic growth in 12 months, from 8,000 to 16,500 users, as customers find us using search engines. Our business case talked about 60 per cent of users, but we don't want to cap it; if we can continue to improve our offering, we'll continue to see people coming to us.

We didn't take this approach because we thought it would be easy (it's not been without hitches) but now we're keen to share our experience. Other housing providers may not be looking for the exact product that we've created, but helping those developing new technologies to recognise what customers really want, and how to work back through systems to get them there is something we can help with.

**Sam Dart is head of digital technology services at Sovereign Housing.**

## Pure Fibre Housing signs CCG in Wales

*Cartrefi Cymunedol Gwynedd is the first housing provider in Wales to sign up for pure-fibre broadband from a new non-profit infrastructure provider, Pure Fibre Housing.*

Pure Fibre Housing, a community interest company (CIC), will provide full-fibre infrastructure to housing providers on a non-profit basis. It is part of the i4 Technology Group founded by Welsh fibre entrepreneur Elfed Thomas.

Pure Fibre Housing is already working on site at its first project, with Cartrefi Cymunedol Gwynedd. The partnership will provide tenants of two developments in the Meirionnydd area with the latest connectivity technology, with upload and download speeds of up to 1000Mbps (1Gb).

Huw Evans, development and new builds manager, Cartrefi Cymunedol Gwynedd, said, "It was great to work with a local

company who are literally down the road from our Bangor office, and we are really pleased to be one of the first housing providers in Wales to offer our tenants full-fibre options. Providing our tenants, especially in rural areas, with excellent connectivity, speed, value for money and reliability is something we are really proud of."

Elfed Thomas, founder, Pure Fibre Housing, said, "A good internet connection is becoming as essential as running water. Typically, social housing properties have been neglected in the full-fibre rollout, despite clear evidence that nationwide digital inclusion will have a positive impact on the UK economy.

"We want to ensure that everyone throughout the UK can take full advantage of what good connectivity can offer; our partnership with Cartrefi Cymunedol Gwynedd has allowed us to get off to a flying start in achieving that."

## Tunstall's Housing Services Portal

*Tunstall Healthcare has launched its Housing Services Portal, closely integrated with its widely-used Communicall tele-healthcare devices and software.*

The Housing Services Portal runs as an app on Windows tablets, connected via wi-fi to the Communicall Vi system to provide a live view of residents' activities. Tunstall reported

that the portal optimises care management time, improves operational efficiency, facilitates risk assessment and reduces administration costs.

The portal has a number of functions, including a real-time picture of the activity levels of residents being monitored by the system. Housing providers' monitoring staff can see at a glance which residents are active through a handy colour-coded system and various factors, such as smart sensor activations, can be interrelated in order to prioritise and manage care.







# GreenSquare self-serves with Orchard

*GreenSquare Group has implemented Orchard's Digital Self Service platform to improve customer experience and the efficiency of its service delivery.*

After analysing the cost of engaging with its tenants, GreenSquare found that its telephone-based contacts were costing around £5 per transaction compared with just 5p for digital contact methods. Along with the housing provider's wider aim of offering its tenants a wider choice of contact channels (including self-service),

this huge disparity in transaction costs was the catalyst for it to find a solution that could capitalise the cost efficiencies of digitising more tenant engagements.

As an existing Orchard customer for its housing and finance software, GreenSquare began its digital self-service project with Orchard in 2017. Throughout the development and implementation processes, the housing provider received support from Saxon Weald and Futures Housing, other Orchard Digital Self Service customers.

By implementing Orchard Digital Self Service (branded 'myGreenSquare'),

GreenSquare has given its tenants an extra contact channel with greater choice and flexibility in how and when they can communicate with GreenSquare.

Julianne Britton, head of customer services, GreenSquare, said, "We see the launch of myGreenSquare as a significant step in achieving our aim of delivering simply brilliant services. As an important part of that, Orchard Digital Self Service allows our tenants to access a wide variety of services from booking repairs and making payments to updating their personal details anytime, anywhere using any device they choose."



**HOUSING  
TECHNOLOGY**



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## Connected Housing 2019 – Housing Technology at the BT Tower

*Housing Technology and BT Business are making their annual visit to the BT Tower in central London to host our new 'Connected Communities 2019' one-day event on Tuesday 10 September 2019, kindly supported by Aareon, Castleton Technology and Itica.*

With its core themes of 'analyse, predict & inform', Connected Communities 2019 will cover how housing providers can streamline their internal operations and tenant engagement through innovations in self-service, CRM, data management, 'mobile first' delivery, process automation, AI, analytics and business intelligence.

The event will open at 9am on Tuesday 10 September 2019, followed by some brilliant business/IT presentations

from Aareon, BT (incl. a leading BT 'futuurologist'), Castleton Technologies, Connect Housing, Housing Solutions, Itica, Sovereign Housing and Wales & West Housing in the BT auditorium, interspersed with lunch at the top of the BT Tower. The event will close at around 5pm.

Places are strictly limited (due to restrictions at the top of the BT Tower); please visit [www.housing-technology.com/events/bt19](http://www.housing-technology.com/events/bt19) for further details.



**CASTLETON**



# Bringing people together – Transforming customer service with Microsoft Teams

Alex Black, Chief Technology Officer, Enghouse Interactive



*More and more businesses are focused on optimising the customer journey. They are mapping out the way customers interact with them and their typical process of 'flowing through the organisation', and then looking at how they can best streamline that process in order to improve the customer experience.*

With the customer journey continuing to become ever-more important to organisations over time, more businesses are handling more of the routine or predictable interactions through self-service or automated channels. The remaining queries and interactions tend to be complex or awkward, often requiring the involvement of multiple parties to resolve. That is why we are seeing growing numbers of organisations making more active use of remote access or mobile technologies and putting in place collaboration environments like 'sandpits' or 'boxes', where several people can join forces to work on the same issue.

## Reaching out across the enterprise

We are now seeing this focus on collaboration positively impact many different areas of customer service. Take car insurance as an example. If the renewal or new policy request ticks a number of standard boxes, the process is straightforward and can be handled entirely in the front office by the customer service agent. If it is more complex, however, and the car needs to be insured immediately, it may need the involvement

of actuaries in the middle office. More complex still, and it is likely to be referred to the back office where underwriters will need to work on it.

Using a traditional communications approach, this is likely to be a long-winded and protracted process, potentially involving multiple interactions with the customer, and inevitable delays and frustration. The key to resolving these issues lies in businesses integrating the contact centre environment at the heart of their communications approach with the latest collaboration tools, most notably using Microsoft Teams.

Applications like Teams effectively allow organisations to extend the contact centre from the frontline agent into the middle and back offices, enabling them in turn to streamline the business process and improve the customer experience into the bargain. The tool combines workplace chat, video meetings, file storage, and application integration to deliver a powerful collaboration environment. In the car insurance example above, an agent could potentially use it to get almost instant access to relevant people in the middle and back offices and complete the customer's policy renewal while they are still on the phone.

## Benefits for all

In contrast to the alternatives such as email and traditional voice telephony, these kinds of collaboration hubs offer a very fluid means of communication, ideally suited to customer-facing businesses who want to build a responsive, interactive and productive customer service environment.

The core concept behind Microsoft Teams, for example, is around bringing everything together, from people to conversations, content and tools. Users can share assets such as calendars, files and emails in real-time. Moreover, because tools like this are typically cloud-based, it's easy for anyone

to access them wherever they are and on whatever device they are using.

## Mobile support

With the latest collaboration tools, delivering support for mobile devices is becoming increasingly seamless. Going back to the earlier car insurance example, an assessor could share photographic evidence of a damaged car, taken on their phone, with the head-office team, together with explanatory notes in near real-time to help inform a policy claim or renewal.

All this capability helps make the customer service team much happier, of course. It reduces friction in the process and agents have the peace of mind of knowing that they can draw on the expertise of the wider team and through the latest collaborative technology get relevant information back to the customer faster. As the old saying goes, "the happier the agent, the happier the customer."

In today's complex customer interaction environment, collaboration is key to delivering the best possible customer experience. Thanks to the emergence of the latest communications hub-based technologies, that kind of collaboration is increasingly within the reach of most businesses.

**Alex Black is the chief technology officer at Enghouse Interactive.**



# The 'in the instant' revolution for housing repairs

Paul Swannell, Sales Director, Localz

*Deliveroo, eBay and Uber are just a few of the organisations leading the way with exceptional, instant customer experiences. By giving customers control, reassurance and convenience these companies have built trust and brand loyalty during a time of uncertainty.*

Consumers are becoming accustomed to Uber-style services with transparency and real-time reassurance. This standard of service has set the benchmark for all sectors and now customers are starting to demand the same experience from all organisations they engage with.

Applying Uber-style customer experiences to repair services in the housing sector not only benefits tenants but improves overall operational efficiency and saves costs. Ian Stewart, commercial sales manager, Castleton Technology, said, "With an industry average of 15 per cent no-access failed appointments and each failed appointment costing around £65, it's vital for housing providers and contractors to reduce the time wasted and costs of these failed appointments to improve services for tenants."

Our advice on the key steps to ensure frictionless appointment-based experiences in the housing sector:

## 1. Be digitally available

It's vital that service providers are available and visible on a variety of platforms – telephone, email, social media, online chat and mobile apps. It is important to continually review the channels your tenants are actually using and asking for so you spend time and effort in the right places. By making appointment bookings digital, the housing sector is set to ensure time and cost savings and increase the happiness of tenants using the service.

## 2. Inform and reassure

Research shows 65 per cent of consumers say that viewing their contractor's ETA is the most important feature for a service provider. This is particularly important in the housing where the length of appointment windows vary greatly.

On the day of the appointment, give the tenant full details of the service, including the name and photo of the operative who's due to arrive at their house. Provide the tenant with real-time location tracking so they know when to expect them. Not only important for vulnerable tenants, this detail of service is fast becoming a must in the age of 'Uberization'.

For example, an 'on my way' real-time ETA notification with map tracking has seen no-access failed appointments drop by almost 20 per cent for British Gas using the Localz service.

## 3. Empower customers & operatives

Enabling two-way communications between the operative and the tenant removes friction, enabling important information to be passed between them with no need to join the call-centre queue. To avoid nervousness about sharing contact details, ensure communication channels use masked numbers and are deactivated once each job is complete.

## 4. Back-office transparency

As well as providing tenants with progress transparency, provide the same real-time insights for your colleagues in contact centres, planning, scheduling and so on. Having a history of locations visited has value, but the most useful information is the current location of each operative, where they are going next, and how long it will take them to get there. This dramatically speeds the process of answering customers who still call to query an ETA as well as supporting resource-allocation decisions.

## 5. Listen and encourage feedback

One of the key learnings from Uber is its request to rate your service at the end of

each journey. Research has found that 40 per cent of customers want to provide feedback. Asking consumers to 'rate' and feedback on the service leads to them feeling

cared for and, if you respond in the right manner, listened to. It's no surprise that it's also essential for improving your services.

By applying the above principles, a rare win-win-win can be achieved for all parties involved:

- Landlords and contractors make cost savings from better first-time access, fewer inbound calls and rapid query resolution. They also enjoy a great PR opportunity.
- Tenants are delighted by total service transparency and the ability to communicate direct with their assigned operatives. It frees up their time and reduces anxiety.
- Operatives find it makes their jobs easier and more productive, and they relax when they are reassured that they can't be tracked and contacted by customers night and day. Operatives also find they are dealing with happier customers who haven't been kept 'in the dark' all afternoon.

The expectation for Uber-style, frictionless service is there in the housing sector. Is your technology ready for it?

**Paul Swannell is the sales director of Localz.**

What do your customers expect from you on the day of service?

Innovating last-mile communication and enhancing your mobile workforce productivity

65% say viewing the mobile worker's ETA is most important

32% find live locations on a map important

54% demand job status notifications

41% want to rate the service



The Localz platform delivers real-time location and accurate ETAs, notifications and enables customer feedback.

localz



# Total visibility for your technicians

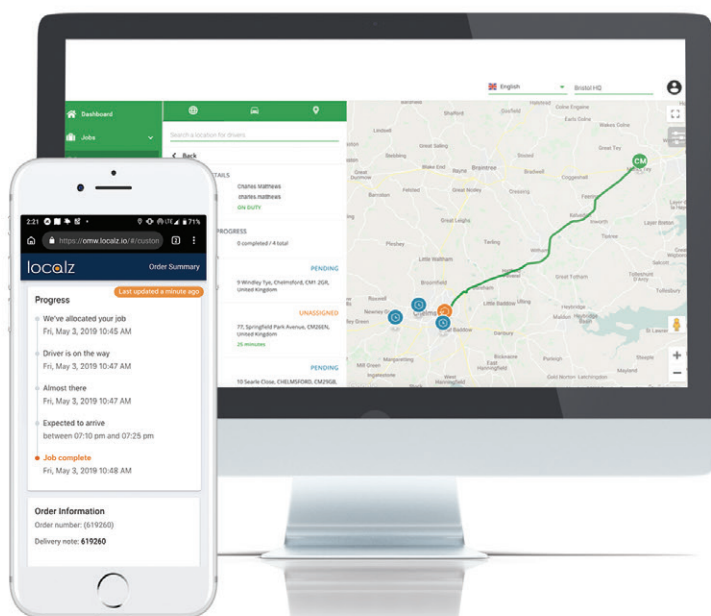
Keep your customers informed with clear, real-time location visibility they can trust.

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less failed appointments

**30%**  
reduction in red calls chasing ETA

Real-time progress tracking delivered to customers' phones

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# The future of housing management systems



*Housing Technology asked experts in housing management systems (HMS) from Civica, Northgate Public Services and Shaw Consulting about the role of HMS in today's IT and business operations and what to look for when selecting and implementing a new HMS.*

## The latest HMS

Commenting on the difference between today's latest HMS compared with many housing providers' existing HMS, Civica's director, Mark Holdsworth, said, "Previously, the biggest step change for HMS was moving from 'green screen' to Windows. Today, the change from Windows to fully web-based systems is just as revolutionary.

"Having a web-based system allows staff to access and work on their business systems just as they do with apps in their everyday lives – on any device, anywhere, anytime. It also includes all the modern capabilities that web-based apps deliver, such as cameras, portals, mapping, e-forms, EDM, meaning that housing providers no longer need costly separate applications. It also allows for easy deployment into the public cloud, such as Microsoft Azure and Amazon Web Services, which can dramatically cut the cost of deploying and managing IT systems."



"We don't believe that any of the current HMS have been truly built to be provided as a software-as-a-service solution."

Chris Shaw, Managing Director,  
Shaw Consulting

Shaw Consulting's managing director, Chris Shaw, said, "Many of the existing HMS that housing providers are using were not designed to work on a mobile device and require a local installation of the application, either on the PC or a remote desktop. Most organisations deploy a remote desktop such as Citrix, which then adds additional cost and maintenance;

newer HMS have a responsive design which auto-scales across any device.

"Existing HMS tend to be specialist in nature, work in isolation of each other and duplicate a lot of data, such as tenant details, property information and warning flags. Organisations have tried to bridge this gap by integrating these applications, although the degree of success is very dependent on the options for integration offered by each supplier and the housing provider's own in-house capabilities. Some of the newer HMS have better options for integration, such as the use of APIs for web services, but these still tend to be closed and rarely come as standard. We therefore don't believe that any of the current HMS have been truly built to be provided as a software-as-a-service solution."

## Is your HMS really necessary?

With the influx of 'generic' ERP systems into the housing sector, do housing providers really need a dedicated HMS instead of, say, an ERP system or commercial off-the-shelf software (COTS)?

Northgate Public Services' director of housing solutions, Trevor Hampton, said, "Yes, an HMS is definitely necessary. A dedicated HMS offers more information about a tenant or property through embedded data, which generic ERPs can't provide without expensive and complex integration.

"Housing providers were tempted at first by the promise of easy navigation and the latest integration tools within ERP systems. But ERP had a mountain to climb in terms of ensuring the technology could adapt to the very specific functions and processes needed for housing. This is no longer an

issue because HMS quickly caught up on the technology and now the sector is benefiting from the latest off-the-shelf tools which address the housing sector's specific needs."

Chris Shaw said, "This is a question that we've been asked a lot recently. The answer depends on the size of the housing provider, its IT team's capabilities, the range of services it provides, how many of those services are outsourced and the organisation's approach to risk. For large housing providers delivering a wide range of services, ERP offers the opportunity to consolidate multiple applications and their associated data into a single system, while improving the visibility of real-time information to staff across the business in a personalised format, such as a dashboard tailored to their role, as well as simplifying the introduction of technologies such as AI and machine learning.

"However, we believe that for smaller housing providers, a modern, dedicated HMS will meet 90 per cent of their needs. The chosen HMS should enable the business to both consolidate many of their existing applications and integrate the others to ensure they work together effectively."

## Extending existing HMS functionality

When considering the idea of why housing providers can't just keep their existing HMS and then add a web services or presentation layer around it, Civica's Holdsworth said, "They could do that, but that removes the opportunities that cloud-based software can deliver, such as creating a single view of data, integrating customer portals with chatbots or simply delivering services using mobile. Fully



web-based systems also allow business logic, such as .Net web services being contained in the application to be deployed via the web and integrated with other software.

"Old technology wrapped in a web layer doesn't allow that approach. There is a purity of design in cloud-based software; the cost of ownership is reduced compared to those with a presentation layer, where multiple technologies need to be managed and lots of bolt-on services maintained."

Northgate Public Services' Hampton said, "They can add a web services layer because most HMS suppliers are providing more open integration paths. However, housing providers need to assess their skills and budget to develop this integration; for larger providers, this may well be the better option but using the existing HMS' web services will avoid the technical integration and is a lower cost option."

### Avoiding risk, disruption and expense

Given that the implementation of a new HMS is a significant risk, disruption and expense, what are key factors in its selection and procurement? Shaw Consulting's managing director said, "The selection process must look beyond a simple technology comparison and consider how the full enterprise architecture of the proposed solution fits with the organisation's wider strategic aims and objectives as well as its people. Given the level of investment required, the final choice should be used to transform the way the business operates, not just to replace an existing system with a slightly more modern one."

"It's also vital that the selection process properly considers 'softer' challenges such as project management, the transformation of the organisation's culture and the implementation approach. Importantly, never forget that your staff will have a major influence on the success or failure of the new HMS."

Northgate Public Services' Hampton said, "It's important to look at whether the system you have today will be able to accommodate new technologies such as AI and IoT; these technologies will be essential to understand the challenges facing your tenants and ultimately improve your services. For example, housing providers currently rely on planned maintenance programmes to ensure properties are in good condition, and when problems arise, it is up to tenants to highlight if a repair needs to be carried out."

In contrast, AI and IoT devices will be able to predict when a boiler is likely to fail, how long a household appliance will last, and if a house is at risk of becoming damp.

"Ultimately, HMS offer very different levels of capability and it's important to understand what you are getting. Question whether the system is open, is it using the latest technology and crucially, does the vendor have the technical vision to develop a platform to meet the housing needs of the future?"



"The biggest pitfall is housing providers trying to just implement a newer version of their existing HMS."

Mark Holdsworth, Director, Civica

### Pitfalls to avoid

Civica's Holdsworth said, "The biggest pitfall is housing providers trying to just implement a newer version of their existing systems. They must take the time to fully explore all the new capabilities which a new HMS can bring. Modern systems also allow users to hold much greater and richer data, and the effort spent gathering this data (preferably before the implementation begins) will pay huge dividends later."

Northgate Public Services' Hampton said, "One of the biggest hazards can be losing sight of the end goal. Each housing provider has its own set of challenges that it is trying to address so it's imperative when implementing a new HMS that the team focuses on those specific priorities. However, take the time to 'co-create' your new HMS with customers, business users and technology specialists in order to develop a system that works for everyone."

### Taking the lead from your HMS

Given the central role played by an HMS in most housing providers' operations, to what extent does an HMS dictate the rest of a housing provider's strategy/decisions regarding its other business applications?

Civica's Holdsworth said, "As a system which is core for business operation and data, it has a big impact. It will dictate what can be delivered within the software and what additional requirements are needed to integrate with. For example, if the HMS can be delivered from the cloud and is inherently mobile then this will be fundamental to the housing provider's strategy for hosting and agile working. Integration is also vital; if the HMS can readily integrate with Microsoft Office 365 and SharePoint then this can fundamentally change the way an

organisation delivers productivity and document management capabilities."

Northgate Public Services' Hampton said, "The HMS should have a huge influence on the direction a housing provider takes with its other business applications. It's important to look at whether your HMS can offer any additional services you need to avoid the unnecessary expense of add-on apps and systems. Integration is expensive and can result in data management and processing issues which can weaken the user experience. So, if you do need further capabilities, check whether your HMS can integrate with them up front."

### Looking ahead

Looking to the future of HMS, Shaw Consulting's Shaw said, "Improved self-service and mobile/agile working for staff is key, as is how your HMS can work with the latest technologies. It will need to integrate with 'virtual assistants' to provide 24/7 service operations, make greater use of machine learning and robotic process automation (RPA), adopt AI for front-line service operations and improve data visualisation including augmented analytics."



"A dedicated HMS offers more information about a tenant or property which generic ERPs can't provide without expensive and complex integration."

Trevor Hampton, Director of Housing Solutions, Northgate Public Services

Northgate's Hampton said, "Without doubt, we will see HMS suppliers making the most of AI so that they can better triage tenant and property issues. In the future, HMS will be able to fully harness the latest automation technologies to provide housing providers' staff with a complete picture of each tenant and property, making it easier and faster to address the root cause of complex customer issues, ultimately enabling housing providers to achieve the best outcomes for their tenants."

**Housing Technology would like to thank Mark Holdsworth (Civica), Trevor Hampton (Northgate Public Services) and Chris Shaw (Shaw Consulting) for their editorial contributions to this article.**



# Castleton adds Localz 'Find My Engineer' solution

*Location and mobile technology experts Localz have been announced as a new software partner for Castleton Technology, with the addition of its 'Find My Engineer' solution to Castleton's existing suite of housing software.*

Ian Stewart, commercial sales manager, Castleton Technology, said, "With an average of 20 per cent failed appointments and each failed appointment costing up to £100, it is vital for housing providers to reduce the wasted time and costs associated with

these failed appointments in order to improve services for their tenants. Our partnership with Localz will help our customers achieve this objective."

The 'Find My Engineer' solution provides the ultimate transparency by giving customers access to real-time location tracking and ETAs when the operative is on their way. Localz research shows that 65 per cent of consumers say that viewing their service provider's ETA is the most important feature on a service provider's mobile app.

Housing providers using the 'Find My Engineer' solution will also benefit from reduced inbound calls to their call centres, such as frustrated tenants asking, "My loo is blocked but I need to pick up my children from school – what's

the ETA of my plumber?", and replacing it instead with a real-time map tracking their engineer so they can see if they're 10 minutes away or 2 hours away.

Localz customer portfolio includes British Gas, who achieved a 17 per cent increase in the first-time access rate of its engineers through the Localz platform.

Charles Bullock, partnership director, Localz, said, "Localz's new partnership with Castleton Technology demonstrates its ongoing drive to innovate. The integration of our 'on my way' technology into its housing management solutions offers not only increased productivity savings for its housing customers but also a great customer experience for those housing providers' tenants."

## HomeServe becomes fast, lean and smart

*HomeServe is now using Fast Lean Smart's mobile scheduling and route planning software for its boiler installations division, with the result that it is getting to its customers 25 per cent faster than before.*



Richard Wilson, IT director for boiler installations, HomeServe, said, "We had previously always relied on the personal knowledge of our planning team to know which sales surveyors and engineers would be best suited for a job in terms of geography, availability and skills. We wanted software that could make smarter and faster decisions than our planners.

"A lot of the scheduling tools we looked at were just about filling white space – in other words, finding gaps in people's diaries to fit in appointments. We wanted a more dynamic tool, one that would be continuously optimised, looking at every appointment and every field worker collectively and scheduling everything in the most optimal way."

Having researched Fast Lean Smart's FLS Visitour and FLS Mobile software for real-time scheduling and route optimisation, it began a proof-of-concept (POC) project which included an assessment of the software's ability to integrate with HomeServe's back-office systems.

Wilson said, "Integration was a key requirement for us. We needed to know that FLS Visitour could integrate with our service management software. With an FLS pilot, they wire it all in and prove it to you, and we saw immediately that FLS lends itself to integration.

"Most software will do about 80 per cent of what you need or really want it to do. In our case, when we install a boiler, we need to schedule a field engineer to do the installation and an electrician to do the wiring. FLS will link the two jobs, even if they take place on different days. This means that if the installation appointment needs to be changed, FLS will move the electrician appointment simultaneously."

Winter is the busiest time of the year for boiler installations so HomeServe needed to move from its POC pilot project to live operation very quickly so that everything would be ready in September 2018 before the temperature dropped and calls for new boilers started flooding in.

Wilson said, "FLS is very good on configuration without the need for customisation. We didn't have the appetite, time or the resources to develop our own boutique functionality. We needed a solution that was already fully functional, which we could tweak to fit our requirements without writing code.

"FLS saves us time in the office, gives us total visibility of who is doing what, and has enabled us to get to our appointments 25 per cent faster than before. It has really highlighted how efficient your scheduling can be when intelligent software does it for you."

# Protecting lone workers...

## A day in the life at Thirteen Group

Sarah Johnstone, Neighbourhood Coordinator, Thirteen Group



*Sarah Johnstone has been a neighbourhood coordinator at Thirteen Group for over eight years. Here she gives a snapshot of her day and describes how the lone working device she uses helps her to feel safe when working on her own in Middlesbrough.*

To try and describe a typical day is difficult because one of the things I like about my job is that no two days are the same. One day I'll be out inspecting properties, another I'll be interviewing families who've applied for a new home and another day I could be responding to ASB complaints.

Although my job is very rewarding, there's no denying that it can sometimes be tough, and on occasions I find myself faced with challenging behaviour where I need to be reactive and think quickly on my feet. Thankfully, these instances are rare, but it's on days like those I'm reassured that I go out on every visit with a range of specialised security products.

We use a key fob-style device with built-in GPS from Orbis Protect. This is attached to our staff lanyards and slots into a moulded ID badge. We activate the 'amber' function on this device every time we visit a customer and this information can be used to identify our location. In the rare event we need to activate the SOS function, the call is monitored and recorded, and this information will be passed to the emergency services if necessary. Thankfully, I don't need to use it often, but it does give me peace of mind.

### Early morning

A typical day will start at 8am. I arrive in the office, grab a coffee and catch up on emails and paperwork. I'll then head out to visit customers in some of the 350 properties I look after in Middlesbrough. Before I leave, I'll familiarise myself with

whom I'm visiting, check their details on the system and see if there are any reasons why they shouldn't be visited alone, in which case I'll ask a colleague to come along with me. Even if we go out in pairs, we both make sure we use our devices.

While I'm visiting customers it's also a good opportunity for me to keep an eye open for any neighbourhood issues such as fly-tipping, minor damage to properties and graffiti.

### Mid-morning

We get 100s of applications for our properties. I get so much satisfaction from helping people who really need a home, find one. I enjoy showing prospective customers around our properties, but for my own safety I always have my device with me and switched on.

I'll normally go back to the office at noon for a spot of lunch which also gives me the chance to catch up with some of my colleagues.

### Early afternoon

One part of the job we thankfully don't have to do often is carry out evictions; we will only seek legal action as a last resort. We provide a wide range of tailored tenancy support services for customers and only if all attempts to help have been exhausted will we take this action. If it is necessary, I work alongside a fantastic team of professionals including the local police, partners and other colleagues to help make sure this goes as smoothly as possible.

Once again, my device is essential, and I will have already alerted Orbis before I arrive, activating the SOS function so I can speak to the call handler and inform them of what I am doing and ask them to keep the line open. They will monitor the call, and if anything escalates where my safety is compromised, they are ready to help and, again, will contact the emergency services and provide them with all the required information.



### Late afternoon and the end of the day

Towards the end of the day, I might have an interview with a customer to discuss a tenancy issue, in one of our office meeting rooms. Where I am, all our rooms have CCTV and panic alarms, plus I can use my device during interviews too. It's also useful for walking to and from my car and I like the fact I can activate it if I feel vulnerable, speak to someone and tell them when I am safely inside my vehicle.

### Peace of mind

Over my eight-year career as a neighbourhood co-ordinator, I do think that being a lone worker has become safer than ever. Orbis's discrete alarms really offer peace of mind and the alarm-receiving centre is so valuable. Knowing there's someone at the end of the device to listen, able to locate me using GPS and can get the emergency services to me if needed, feels very comforting as a lone worker.

I'm passionate about safety, and I regularly attend training sessions for colleagues, sharing my experience and showing them how to use these safety products.

Being a lone worker has the potential to be challenging, but it's encouraging to know that Thirteen ensures there are support systems in place for my safety and wellbeing.

**Sarah Johnstone is a neighbourhood coordinator at Thirteen Group.**





# Gaining Cyber Essentials certification at Link

Gareth Renaud, ICT&D Services Technical Team Officer, Link Group

*As part of our on-going work towards digital security, Link Group has recently been accredited with the Cyber Essentials certification.*

The government-backed scheme helps organisations ensure adherence with security best practice for protection against the most common cyber-attacks. Cyber Essentials seeks to help businesses defend against most cyber-attacks, attacks which are generally very basic in nature; these attacks are often described as the digital equivalent of a thief trying lots of doors until they find an unlocked one.

## Preparing for Cyber Essentials

We decided to prepare to achieve Cyber Essentials a few months before our regular cybercrime audit. This meant we were well positioned when the audit arrived because we discovered these audits would be based around the standards outlined in the government's Cyber Essentials scheme (CES). The objective of introducing CES into Link's strategy was to improve our cyber resilience by aligning as closely as possible with the CES baseline of security standards.



The process for gaining CES certification begins with familiarising the business with cyber security terminology and adopting techniques to secure the digital

infrastructure. This leads to the completion of a self-assessment application which treats the risks associated with the most common cyber threats. This exercise removes the business from those which would be considered as 'low-hanging fruit' to the attackers.

While our ICT&D service was already adhering with a subset of the Cyber Essentials requirements, a large programme of change was needed to broaden our compliance with the recommended security standards stipulated by CES across five areas: boundary firewalls and internet gateways; secure configuration; access control; malware protection; and patch management.

We did have some challenges to overcome to meet all the standards, mainly due to our ICT&D services being weaved into many remote sites and distinct business areas, requirements and activities across Scotland. The work included the introduction of new policies and procedures, hardening configurations, refreshing hardware and purchasing software specifically to help manage security in our ICT&D services ecosystem.

## Mobile 'sandboxes'

While we did have a mobile device management (MDM) package, we decided to upgrade to a solution which would isolate all our business apps in a 'sandbox' on each mobile device. This enforced a defined standard regarding device compliance, configuration, control and reporting to deliver more robust assurance to the business.

To gain further intelligence and monitoring capabilities regarding our infrastructure, network and servers, we deployed vulnerability agents to monitor all our servers and a subset of desktops and laptops. These monitors determine if patches have been applied successfully and can detect security misconfigurations. The findings from this effort informed our security risk register and will trigger its vulnerability remediation processes.

In addition to this, we introduced a robust password management system comprising a series of encrypted vaults to facilitate the generation and storage of unique and cryptographically complex passwords for our administrator accounts.



## Security training for staff

We also instituted security awareness training for all staff. This heuristically-guided training covers social

engineering such as phishing emails, malicious websites and details best-practice security hygiene. The training is delivered during staff inductions and internal events and we will soon roll out annual online refresher training on the core security awareness concepts. Importantly, of all our security-related interventions, the training has had the most impact.

At the start of the training we discuss the 'cyber security conundrum' which poses three questions: who is to blame; what do we have to fear; and who is responsible?

We summarise that it is the attackers to blame and that they should fear the legal ramifications of their actions. Staff are urged not to be afraid as fear paralyses and, finally, we agree everyone in the organisation is responsible for security.

Staff are then trained to identify warning signs in emails (such as hyperlinks and attachments) which signify that they may be malicious. Encouragement is given to report any email, website or behaviour on their computer or mobile device which they are uncertain about, regardless of the degree of uncertainty. A reporting button was also rolled out to all email clients to make the reporting process just three easy clicks.

This exercise has acknowledged the ability and capacity of Link staff to be our strongest allies in terms of helping us to defend the business from external threats. The security awareness training was developed and informed by academic research into how to effectively design and deliver security awareness training. The training package was also shared with the Scottish NHS via The School of Design and

## Gaining Cyber Essentials certification at Link

*Continued from previous page*

Informatics at Abertay University to help them to design a security awareness program.

Our staff report multiple phishing emails every day; our ICT&D service then analyses and blocks malicious content from those emails. We also make a point of always thanking and letting the reporting member of staff know the conclusion of the analysis and any actions taken as a result of their report – very few of the reports turn out to be false positives.

### GDPR compliance

Cyber Essentials is also a good way of showing compliance with GDPR; the Cyber

Essentials website says, "The Information Commissioner's Office (ICO), whose job it is to uphold the GDPR in the UK, recommends Cyber Essentials as a good starting point for the cyber security of the IT you rely on to hold and process personal data."

Interestingly, we have also noticed that during procurement exercises, Cyber Essentials has started to become a common theme in the desired ICT&D security requirements of tenders. Securing Cyber Essentials is only the beginning of our journey towards cyber resilience. Our next goal is to get ready

for compliance with Cyber Essentials Plus and to build our compliance toward best-practice security management frameworks such as COBIT (control objectives for information and related technologies and to adopt a subset of the United States' National Institute of Standards and Technology (NIST) guidance.

**Gareth Renaud is an ICT&D services technical team officer at Link Group.**

# Synapse360's hyper-perfect Dell EMC solution for Bernicia



*Bernicia has completed its migration to a new Dell EMC 'hyper-converged' infrastructure, with the deployment carried out by Synapse360.*

Adam Watson, network and infrastructure manager, Bernicia Housing, said, "Following sustained growth, our old Nimble infrastructure was creaking at the seams. Performance was erratic, we didn't have the IOPs we needed, we were running out of storage and connectivity was slow.

"While we knew we had to replace the infrastructure, we didn't want to replace like-for-like. Not only did we want a next-generation solution that would provide the performance and scalability we needed, we also wanted a solution that would be very simple to manage. After all, our role is to help the business be more effective, not to be a slave to our infrastructure."

Bernicia decided that a hyper-converged solution would best address their requirements and chose Dell EMC's VxRail, with Dell EMC's platinum partner Synapse360 selected for actual deployment and migration.

Watson said, "There was a good momentum about the Synapse360 team's approach, and the deployment and migration went perfectly with no downtime. The Synapse360 engineers also helped us to migrate our VMWare VDI environment to the platform even though that wasn't part of the project.

"VxRail ticked all the boxes for us. There's a crazy amount of IOPs available, it's highly scalable and because of the 10Gb switches, our comms are fast too. Most importantly, many of our routine management tasks have been automated and can be performed with just one click. That's given us a lot of time back, so much so that we've been able to accelerate our deployment of an important new housing management system."

Bernicia reported that the new platform is delivering noticeable results, with no more performance spikes that previously affected everybody's desktop because the all-flash storage delivers consistently high performance while the new Dell EMC data protection software offers almost instantaneous recoverability.

Watson said, "It's fabulous! There really are no negatives and it's a doddle to manage. Synapse360 know hyper-converged technology inside out and our experience of working with their team has been excellent – they are now a preferred supplier and a trusted partner."





# Trends driving digital disruption

Paul Sexton, Chief Technology Officer, Castleton Technology

*The adoption of public cloud technology in the housing sector has been slower than initially predicted, largely due to concerns around security, latency, vendor lock-in and cost control. The emergence of multi-cloud is set to combat these barriers by offering housing providers the ability to balance workload across edge, private cloud and public cloud environments, delivering better RoI from IT spend, enhancing IT performance and mitigating the risks associated with individual clouds.*

Looking at what is driving IT disruption this year, there are four key areas – multi-cloud, AI capabilities, storage and cyber security.

Multi-cloud is the latest trend in cloud adoption and differs from a more traditional hybrid cloud environment. Where a hybrid solution offers a pairing of private cloud, such as Castleton Technology's cloud with public clouds such as Microsoft Office 365, multi-cloud uses more than one public cloud to perform different tasks. A multi-cloud environment may also combine software-as-a-service (SaaS), platform-as-a-service (PaaS) and infrastructure-as-a-service (IaaS) solutions or make use of several private and public cloud solutions.

#### Multi-cloud reduces supplier risk

Simply by leveraging multiple cloud providers, you can 'mix and match', selecting the best services from several providers, while reducing the financial risks associated with being dependent on a single provider and vendor lock-in.

Organisations are also moving towards multi-cloud to mitigate the risk of localised hardware failure, such as a single datacentre going offline. It's therefore imperative that when evaluating cloud providers, you evaluate their cloud credentials. Castleton's investment into a cloud provision from Europe's largest datacentre, located here in the UK ensures our customers get the security, power and network connectivity they need. As one of only four datacentres in the UK on Microsoft Azure's premium 'FastPath', we can not only move workloads rapidly between our own internal datacentres but also between Castleton and other public cloud providers.

#### Micro-service architectures & software containerisation

A multi-cloud strategy also demands a multi-cloud IT security policy for the many software vendors you may be using. While organisations usually have only two or three key software providers, when it comes to security, they may have up to 30 different vendors. Therefore, software providers will need to architect their applications in such a way that security can be applied to their products at an infrastructural level.

Using 'container' technology such as Kubernetes, solutions can be wrapped into a micro-service architecture so that at any one time a single aspect of the software can be worked on and tested without affecting the entire software package.

A micro-service architecture also enables security to be applied at the network or infrastructure level, so whether your software product is migrated from on-premise to private or public cloud, it doesn't matter because you've wrapped it into its own 'container'. This means the software, including your security, is portable and can move seamlessly between multiple clouds without being affected by their individual security protocols.

The security of business-critical data is increasingly important, and this is where working with cloud providers is beneficial. While most on-premise customers don't have the technical know-how to develop a robust cyber security and response policy, cloud providers' SOC (security operations centre) teams manage these situations day in, day out.

#### The 5G & IoT revolution

AI and machine learning are also major disrupters in housing and are already delivering clear benefits. AI can reduce call centre and customer service costs, increase productivity and improve the service experience for tenants.

Currently, one of our customers is deploying the use of devices like Amazon Alexa which enable tenants to enquire about rent balances, pay rent, report repairs and raise queries. It is anticipated that this will reduce call centre costs by up to 30 per cent while also expediting service. While AI is still very much an emerging concept in housing, we are seeing early adopters embracing this digital channel and we will see more and more AI-driven solutions come to the market because it will play an essential part of building smart homes for the future.

Alongside AI and machine learning is the big roll out of 5G across the UK this year. EE has already enabled many of its cell towers in the major cities while Vodafone, Three and O2 are set to follow. The fast data speeds enabled by 5G, combined with the proliferation of industrial IoT, will impact the social housing sector, particularly around maintenance and repairs.

For example, sensors that can detect fault and predict failure in boilers or identify moisture in the loft in advance of a leak can capture data and automatically report back before any damage occurs. The benefits of this kind of 'fix before fail' technology is profound, especially in terms of potential cost savings, but it will

## Trends driving digital disruption

*Continued from previous page*

also impact the planning of smart housing for the future and revolutionise the way housing providers manage and maintain their estates.

### Storage as a critical issue

With developments in AI, IoT and machine learning comes a huge increase in data gathering and data storage requirements. Data is going to be one of the key currencies moving forward, yet research suggests businesses currently only actually use two per cent of the data they've gathered for intelligence purposes and decision-making.

At Castleton, as we bring together more information through our various solutions, we can put the data through our business intelligence solutions and identify trends. Increasingly, this will help us support our customers in making better business decisions, such as determining the

optimum way to interact with tenants or identifying new opportunities for generating revenue.

Storage is key because the amount of data will exponentially increase. In addition to the data already harvested from a direct tenant interaction such as a phone call, IoT devices are now collecting data by the second and loading it into databases for trend analysis. As storage requirements increase, so will storage costs, therefore having the right underlying infrastructure and storage solution, capable of scaling with the data generated, will be vital.

### Planning ahead

At Castleton, we have already geared up for these changes. Our multi-million pound investment in the latest data technologies, NVMe extreme performance storage, SSD solid-state storage, cold storage and, importantly, our multi-cloud capability

mean we can interact with different multi-clouds as required. Castleton can make sure customers' storage and data is where it needs to be and can seamlessly transition from one environment to another, to and between clouds.

Housing providers need to prepare too. It's important to think about a multi-cloud strategy and multi-service architecture to build in the flexibility you will need, together with a security policy that can be adopted by service providers and third-party suppliers to ensure that your technology stacks are secure and future-proofed.

**Paul Sexton is the chief technology officer of Castleton Technology..**

# Grand Union's £1m Castleton infrastructure deal



*Castleton Technology has embarked on a four-year managed service project at Grand Union Housing Group. The project is valued at around £1 million, with the initial cloud and unified communications implementation expected to be completed by August 2019.*



**Simon Penaluna,**  
IT Director, Grand Union  
Housing

Castleton's multi-cloud approach for the housing provider includes an 'edge' systems refresh, private-cloud hosting in Castleton's 'tier four' accredited datacentre, public-cloud hosting of Microsoft 365 and Microsoft Unified Communications.

To ensure a robust infrastructure, all these services are secured with Castleton's backup and disaster recovery platform, all connected via a new software-defined WAN and wireless LAN. As part of Grand Union Housing's move to a more modern working environment, staff hardware is being refreshed with around 200 state-of-the-art Dell laptops, managed by Castleton's mobile device and user environment management solutions.

Simon Penaluna, IT director, Grand Union Housing, said, "Castleton's IT and network infrastructure will set us up for the future, enabling us to achieve our ambitions and our 'customer

2020' strategy by allowing our staff to work in an agile way on an efficient and resilient technology platform."

Dean Dickinson, CEO, Castleton Technology, said, "After our recent £1 million investment in developing our datacentre facilities, we're in a great position to fulfil our customers' demands for robust, flexible and scalable multi-cloud platforms. This new project with Grand Union Housing absolutely demonstrates this capability."

Paul Sexton, CTO, Castleton Technology, said, "With concerns around security, latency, vendor lock-in and cost-control, there is a desire for organisations to have a more balanced distributed workload across edge, private cloud and public cloud environments through a multi-cloud deployment. This ensures the greatest RoI from their IT spend and mitigates the risks associated with individual clouds."



# iOpt gains £600k investment for housing IoT development

*Technology start-up iOpt has received a £600,000 seed-funding boost for its housing-focused IoT plans.*

Established in 2016 in Glasgow, iOpt uses data analytics, smart sensors and IoT technology to enable housing providers to remotely monitor the internal environment of their property assets. iOpt's bespoke algorithms and machine-learning techniques predict when and where issues such as mould growth will arise, allowing preventative interventions before repair costs or tenants' health issues escalate.

With several pilot projects in planning and established relationships with

Maryhill Housing, Renfrewshire Council and the UK's Building Research Establishment, the £600,000 investment will be used by iOpt to focus on further developing its products and services and employing up to six skilled staff members over the next two years.

The company's lead investor is Mactaggart & Mickel Investments, the investment arm of one of Scotland's leading house builders. The other two corporate investors are Scottish Investment Bank, the investment arm of Scottish Enterprise, and a US-based global leader in IoT technologies, as well as several private investors.

Dane Ralston, founder and managing director, iOpt, said, "We're absolutely delighted to receive this funding which will let us scale up to the next stage. After

three years of being in business, we can fully realise the potential of our product and the difference it can make to housing and asset managers in the running and maintenance of their property portfolios, significantly reducing their maintenance bills and extending the life of their assets.

"Ultimately, iOpt gives asset managers the visibility to make smart, informed operational and strategic business decisions. However, we're also very excited that iOpt has the ability to help vulnerable tenants who may be struggling with fuel poverty by spotting changes in their environment and identifying the necessary steps to improve their living conditions."

## Cross Keys Homes begins CityFibre IoT trial



*Housing properties across Peterborough have been transformed into a 'smart city' pilot project between Cross Keys Homes and CityFibre. The project will explore how a network of sensors deployed throughout Cross Keys Homes' properties could monitor health, safety and environmental factors as well as deliver cost savings.*

The trial at three residential locations in Peterborough uses a network of sensors transmitting real-time data back to a network of antennas connected to CityFibre's full-fibre network in the city, with implementation support from Comms365.

Claire Higgins, chief executive, Cross Keys Homes, said, "At the beginning of the trial we could never have guessed just how many uses and benefits the IoT technology would uncover. We have found new ways to ensure our homes are comfortable, safe and eco-friendly by addressing condensation, security,

fire risk and energy waste, which in turn have led to significant cost and efficiency savings. The potential for this technology to transform operations for other housing providers and different public services is immense."

During the trial, next-generation sensors were used to monitor humidity and condensation to improve the comfort of tenants while reducing the need for damp treatment or repair, and environmental sensors were used to address wasted heat in communal areas. Noise sensors also delivered further benefits by monitoring unauthorised

activity in vacant properties, while parking sensors alerted staff to illegal parking in front of emergency exits. Additional sensors also were used to monitor levels in water tanks and detect fire risks such as open fire doors.

Clayton Nash, group product head, CityFibre, said, "This has been a fantastic opportunity to evaluate the potential of our new full-fibre networks to support the IoT use-cases of the future. And while we don't know how our lives will be transformed by IoT, we do know that this future will be built on a backbone of full-fibre infrastructure."

# Transferable IT skills & becoming a housing trustee

Barry Alford, Trustee, Rapport Housing & Care



*I realised a few years ago that I wanted to become a board member for a housing provider and so be able to continue using skills and knowledge gained during a wide-ranging ICT career. The idea fitted in with the voluntary work that I have done for almost 20 years, helping resolve ICT problems for the more disadvantaged members of society. And as an aside, this type of voluntary work is very rewarding; if you feel so inclined, please have a look at [charityithelp.org.uk](http://charityithelp.org.uk) and [abilitynet.org.uk](http://abilitynet.org.uk).*

Matt Cooney and Dilip Kavi from PA Housing gave me many useful pointers, such as what can you offer that will help a housing provider move forward on their digital agenda? I started to look for a post in earnest after finishing at PA Housing in October 2018 and was fortunate to be successful on my first attempt.

After an initial filtering interview by one of the housing sector's leading recruitment agencies, I reached the second-stage interview at Rapport Housing and Care's head office in Kent. The six-strong interview panel (chairman, chief executive and four other members) was initially rather daunting but it soon developed into a conversation of equals (which I've always found to be indicative of a good interview).

As with any interview, any prior research will be time well-spent:

- Get a copy of the housing provider's annual report, business plan and ICT strategy (although they may not want to release all of these).
- Their website is an obvious calling point, so can you suggest any improvements?

- What is their governance and viability rating, stock profile and area of operations?
- Read their articles of association.
- What particular problems are they are facing and what you can do for them?
- If you're still in post, your current board directors may know the housing provider in question and be prepared to give an opinion.
- Do you know anyone there (very likely in our sector)?
- Your current governance team should have the NHF and housing regulator's publications on assurance, risk, compliance and so on.
- [www.nedonboard.com](http://www.nedonboard.com) is a very good source of information.

Coming back to the interview, on my way there I made a point of visiting one of Rapport's flagship schemes, which paid off and went down very well in the interview, though you need to be careful how you slip in such facts; do monitor the 'temperature' of the interview.

As we were leaving the interview, Rapport's chief executive, Leon Steer, said that they had other candidates to see over several weeks and so it would therefore be some time before I should expect to hear back from them. I was therefore surprised to hear the following morning that Rapport wanted to offer me a trustee post.

It's worth explaining here that trustees, board members and non-executive directors (NEDs) are essentially all the same thing. Housing providers are increasingly paying their NEDs, typically a few thousand pounds per year. For the sake of disclosure, Rapport doesn't pay (although they have considered the matter) and I wasn't interested in payment; it was simply a very good, mutual fit for both parties.

If you are thinking about following a similar path to become a trustee of a housing provider, there are a few things worth knowing and considering:

- Few housing providers ask for ICT skills and experience; more commonly, it's financial, development or operational experience that they want. ICT will usually be sought if they are about to embark on a big upgrade/replacement programme.
- How well do you meet the role's 'person' specification (make sure you specifically address each requirement and do not just lazily refer to an attached CV)?
- The logistics of travel (for which expenses are usually paid).
- Time commitments – adverts will often say "six board meetings plus one strategy planning day per year", so an apparent total of seven days. I'd recommend at least doubling that figure to allow time for reading board papers, asking (pre-meeting) questions and doing your own research.
- In the fullness of time and dependent on your own skills and performance, you may be asked to join a committee, such as overseeing the housing provider's financial performance; again, double the apparent time commitment.
- Expect and look for a housing provider that has a board appraisal process.
- Don't forget that being a board member is all about maintaining a high-level oversight and strategic view; you're not an operational director (other people are already being paid to do that) and you should only get involved in details if something is awry or if something hasn't been well explained.

Having only recently joined Rapport, it's too early to give you my view from 'the other side of the table' but in a future article I will hopefully cover life as a trustee, what I'm learning and, more importantly, what I'm giving back.

**Barry Alford is a trustee at Rapport Housing & Care.**





# Regenda's new housing data landscape

Craig Round, Business Analyst, Regenda Group

The  
Regenda  
Group

*At Regenda Group, we are working on the implementation of a large-scale digital strategy – led by our business transformation team, the project aims to improve services to tenants and internally between teams.*

## One version of the truth

One of the main aims of our strategy is to create 'one version of the truth' for data which is displayed in all performance and operational reporting across Regenda. This move will help us operate more efficiently as a business and ensure that all reports across the entire business are reporting from a single source of data.

To help us achieve our objectives, we bought a 'data preparation' platform, Data Academy from Insource, for our data warehouse. This low-code platform is mainly used in the NHS and the automotive industry to handle hundreds of millions of records and apply many processes and routines to assist in the data quality and transformation of data which it handles.

We have rigorously planned the implementation of our data preparation platform and data warehouse so now all the data in Regenda's business applications will be consumed by the Data Academy platform, creating a single presentation layer in our data warehouse. This forms the basis of a 'golden thread' – once the presentation layer from our data warehouse is connected to our business intelligence platform, we can then begin delivering inspiring and exciting dashboards to the business.

Running in parallel to the Data Academy project is the implementation of our new business intelligence and performance management platform. Known as InPhase, the platform will deliver all performance and operational reporting across the

group using information available from the Insource data warehouse. This creates massive business gains because any element of performance can be identified at any point in time from any part of the business. In the past, if financial information and operational information was needed in one report, it would be a huge effort to retrieve the data from multiple source systems; with this design, we have one report in one location, delivered by one solution.

To support our front-line teams, such as income management who manage our arrears process, we also want to harness data to help us deliver a better-informed service by deploying the right resources at the right times to the right locations. Our business transformation team is currently building predictive analytical dashboards for repairs and arrears management. The dashboards, which are being built in SSRS and Power-BI Pro, will use data from our data warehouse and also from IoT sensors in our properties.

The benefit of designing and implementing the data warehouse with data preparation tools which are then serving a performance management and reporting system is that it is agnostic, rather than specific, to the system or system version from which the data is being fed. The data warehouse processes are mapped to handle each individual system and apply business rules to the data to ensure it is ready for use.

It doesn't matter what systems plug into the data warehouse as long as they are correctly mapped. This means that if any back-office systems change, you simply remap the data fields and continue to access quality data-driven reports. Ultimately, the data warehouse has given us full control of reporting and the assurance that teams across Regenda are accessing the same data.

## Data quality

The information provided through our data warehouse will only ever be as good as the

data that it is provided. Unfortunately, free-form inputs mean that human error can result in incorrect data being submitted.

In order to lower the risk of incorrect data being submitted, we're building data-quality service libraries (DQSL) along with using SQL DQS services and cognitive learning services. We are also building data preparation processes in the Insource platform so that we have automated checks and alerts delivered to the data owners when a rule is breached. This allows the data owner to then amend the breach in the back-office system. This not only improves our data quality but ensures that the individual department or service has full ownership of its data rather than the report writer.



The Regenda team (L-R): Paul Rothwell, Craig Round, Nina Peters, Michael Birkett, Helen King, Lucy Melkowski & Colin Inkson

## Innovative data driven solutions

The implementation of our data warehouse has also created opportunities to explore innovative data solutions for our assets team.

We recently won an HQN 'housing innovators' award for our digital solution to monitor boiler repairs and moisture levels. The award's prize, from Amazon Web Services (AWS), has allowed us to look at implementing and testing the ideas we have around IoT deployments in our properties. Data from the sensors would be sent back to our data warehouse, with any problems triggering an alert for the

**Regenda's new housing data landscape***Continued from previous page*

necessary department of any issues or changes in status in the property. Our maintenance and repairs teams could use the information to proactively carry out repairs and handle issues more efficiently and cost-effectively.

It isn't just cost savings that could be achieved through proactive customer service. If we know what is needed for a repair call-out before entering

the property, we can ensure that our operatives have the right tools and parts to complete the repair first-time around. And by linking the data provided by the sensors into our supply chain, parts can be ordered automatically when an appliance has reported a specific fault.

Innovative digital solutions are giving housing providers the opportunity to improve their data and reporting

standards. At Regenda, we are working hard to be at the forefront of these changes because we believe managing our data, performance and reporting in this way will further our goal of regenerating places to create opportunities and improve our customers' lives.

**Craig Round is a business analyst at Regenda Group.**

# Introducing 'The Housing Technology Guides to... 2019'

*After 12 years of publishing the Housing Technology bi-monthly magazine and our annual market intelligence reports, we are delighted to announce the launch of the Housing Technology Guides 2019/20.*

Based on direct requests from housing providers, combined with Housing Technology's own market intelligence and analysis, the first series of Housing Technology Guides will cover:

- AI, machine learning & robotic process automation
- Asset management
- Business intelligence, analytics & reporting
- Compliance management
- CRM, tenant engagement, UC, self-service & UX
- Data management
- Digital transformation
- Finance management & payments
- Housing management
- Infrastructure refresh/renewals
- Low-code development
- Microsoft Dynamics
- Mobile working
- Repairs & maintenance



Each guide will deliver in-depth coverage of a specific technology and/or business area relevant to the social housing sector. With editorial contributions from selected IT suppliers and housing providers, each guide will offer a 'one-stop shop' view of a variety of topics, distributed free of charge to the entire Housing Technology community and beyond.

As a consequence, if you've experience and/or knowledge of any of the areas on the left, we'd love to hear from you and welcome you aboard as an editorial contributor to the guides.

Please email [alastair@housing-technology.com](mailto:alastair@housing-technology.com) if you would like to know more about how you can be involved in and contribute to any/all of the above topics (and/or suggest your own topics), or visit [www.housing-technology.com/htg](http://www.housing-technology.com/htg).

**RESEARCH****EDUCATE****INFORM**



# Less haste, more speed

Jonathan Sharp, Director, Britannic Technologies

*Digital transformation gives housing providers the ability, among other benefits, to create seamless communications and to transform business processes. And particularly in the case of housing mergers and acquisitions, seamless communications are essential when faced with two (or more) telephony systems, networks and call centres.*

## Deconstructing digital transformation

Digital transformation doesn't have to be a complex mission hampered by large budgets or lengthy timescales. With help from external technology suppliers and consultancies, you can simplify your digital transformation by deconstructing it into manageable projects while still creating a well-thought out strategy that integrates with your existing technologies.

## Proof of concept

The next step is to test out the solution by piloting it to reduce the fear and risk of change. Cloud-based solutions make it much simpler to test out new ideas quickly and provide you with cost-savings and flexibility to add on technology and applications when desired.

## Investment protection

This year, with Brexit looming large, the fear of spending is still prevalent, with companies wanting to reduce costs and extend the life of existing systems. The good news is that housing providers need to rip out existing systems and replace them. They can protect their existing assets and add on technologies and applications when desired. A solution provider can work with you to discover where using technology will improve the customer experience, while reducing costs at the same time.

By adopting a flexible cloud infrastructure, you can produce 'micro services' through open APIs, using your existing technologies and deploying new ones as and when you require, giving you the flexibility to augment existing systems with unified communications, AI and automation.

## A seamless tenant experience

Disruptive technologies such as AI and robotic process automation (RPA) can drive internal and external engagement.

Some tenants want to use self-serve contact centres to access the answers to basic questions; a conversational AI solution can self-learn the content from your website and the tenants' conversations that take place in webchats, recognising and pre-empting their needs. If the enquiry becomes complex or they want the next level of detail then they can choose to speak to an agent either by phone or video. This enables agents to focus on delivering an outstanding service and reduces callers' frustrations from being transferred from one agent to another.

## Improving efficiency

AI and RPA can also be used for housing providers' staff, for example to automate contracts, rent statements and reporting, helping to make the administration side more efficient and enabling mobile staff to spend more time focusing on delivering a superior tenant service rather than on paperwork.

Staff can spend less time on admin and more time out visiting properties to determine what repairs need doing, then hold a video call with maintenance teams showing them the issues and book in the repairs. Alternatively, tenants can perform the same task on their mobiles.

## Integration is the answer

By creating a 'smart inbox', you can ensure that everything is viewed within a single portal, making it easier for the agent and the client. All interactions are

then integrated over an orchestration layer, connecting everything together in the front and back offices. A Forrester survey revealed that 64 per cent of its respondents stated that a lack of a single view of information was one of their biggest challenges in CRM.

Integration is the backbone of technology, and if a technology project fails to deliver it is often due to a lack of front- and back-office integration.

Tenants want to be able to select how and when they communicate with their housing provider, and they expect it to be a seamless experience. This is impossible to deliver if agents have to manage multiple systems simultaneously. The objective of a multimedia contact centre is to deliver a joined-up customer journey but that can only be delivered if all the systems are integrated into the front and back offices.

## Transforming business, not just IT

Digital transformation is not just about the technology; it is about the wider organisation and how technology can be used to increase the RoI on human capital and boost revenues.

AI and RPA jointly provide you with the flexibility to discover new ways of working to increase productivity, efficiency and effectiveness by improving internal and external process, transforming your business to strengthen and deepen internal and external client engagement.

## Less haste, more speed

More speed and less haste – digital transformation is an evolutionary journey and best approached like stepping-stones. There is no need to rush and get a quick fix that will only deliver short-term gains. It is advised that you approach it strategically so you can have a well-thought out strategy and solution that will be delivered with speed and deliver long-term gains.

**Jonathan Sharp is a director of Britannic Technologies.**





# Beyond intelligent automation in housing

David Levenson, Founder, Coaching Futures

*In a quest to find out more about robotic process automation (RPA), I visited Blue Prism World at London's cavernous ExCeL exhibition centre in April 2019. So what is RPA, who is Blue Prism, and why hasn't the housing world tuned in yet? Of the reported 2,000+ attendees, I counted just three representatives from two housing providers on the event's mobile app.*

## What is RPA?

RPA is usually understood to be the application of systems or software with artificial intelligence (AI) capabilities to handle high-volume, repeatable tasks presently carried out by people. RPA is used for process-flow solutions by robots (or bots) which can complete tasks based on sets of instructions and take decisions based on queries such as "if this happens, then do that next".

Instead of the term 'bot', the RPA industry is inclined to refer to 'digital workers' and RPA itself is evolving into 'intelligent automation' (IA); this is where the technology starts to coalesce with other branches of AI such as machine learning or deep learning.

And this is also why the housing sector is starting to attract interest from solution

providers such as Blue Prism and its partners. They have noticed that housing providers want to digitise their tenants' experience. They understand the financial challenges faced by housing providers and understand their need to raise their levels of performance and tenant satisfaction.

In short, the AI industry is gearing up to serve the housing sector and, as with other innovations, the early adopters will gain an advantage.

## Beyond intelligent automation

Blue Prism is an example of an IA solution provider using its human and AI capital to extend the range of its offering to customers. Its web-based 'process discovery tool' simplifies the task of assessing, qualifying and prioritising processes to be upgraded based on their propensity for automation and value to the business.

One of its latest products is Blue Prism Decipher which offers AI-powered document processing. Decipher will reportedly be pre-trained and optimised to work with inbound documents such as invoices. Digital workers will be able to input invoices into accounts payable and then match the invoices to outstanding purchase orders, seamlessly.

This will be music to the ears of anyone in housing responsible for data management, a perennial Achilles heel when technology transformation projects and upgrades are happening. Any data analyst will claim that getting the underlying information right is more than half-way to solving the digital experience puzzle.

## A new landscape for housing

There are so many other topics to unpack such as the difference between unattended and attended RPA which has shaped both the industry's development and market choices.

Blue Prism, the original pioneer and market leader, is now in a three-way battle for supremacy in the RPA/IA market with the likes of UiPath and Automation Anywhere. The 'big four' consulting firms are all in the mix too, as alliance partners to the AI/IA solution providers – there were over 20 big consultancy firms exhibiting at Blue Prism World. I talked with some of them and came away with the impression that for housing providers, choosing the right partner is as strategically important as selecting the right underlying AI/IA software.

Still not convinced that AI is right for social housing providers or that housing associations are ready for bringing digital workers into the workforce? Well, Blue Prism World may not have pulled in the housing providers this year but there were many representatives in evidence from local authorities, councils and government.

As Derek Miers, a transformational change strategist at Gartner caustically said, "The world has been automated. And, let's be honest, the future is automated. And if you don't automate then someone will come along and eat your lunch!"

**David Levenson is the founder of Coaching Futures.**

## Decision Time for Parkhead Housing

*Parkhead Housing is now using Decision Time's suite of governance tools to help them to structure and manage their meetings, encourage proactive risk management and monitor their organisational performance.*

James Strang, chief executive of Parkhead Housing and president of the Chartered Institute of Housing, said, "Sound governance is absolutely crucial to any successful organisation. How we take governance, how we manage it, how we process it and how we embed it in everything we do requires us to use certain tools.

"Decision Time has allowed us to make our meetings completely strategic in nature, at the same time allowing our board members to have maximum information to enable them to make better-informed decisions. It also means that we need to have fewer meetings each year – the difference between where we were before Decision Time and where we are now is measured in light years!"



# Bridging the gap between technology & business success

IT is at the heart of every business – equally, our clients are at the heart of our business. This is why our goal is to align technology with organisational strategy and objectives to ensure IT best supports you.

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