$[\Pi]$ Housing management **HOUSING**[®] S Finance management **E** Customer management **TECHNOLOGY** Feature - GIS & spatial analytics ΗĤ GIS & spatial analytics 賜調 Infrastructure HOUSING | IT | TELECOMS | BUSINESS | ECOLOGY General news A new deal for ORM & **Rent Arrears** Ministry of Housing, Communities & Local Government housing... What's - Effective Microsoft's Management, digital? Forecasting and A new deal for social housing Page 41 Page 10 **C ASTLETON** Page 14 Housing Technology 2020 - Book now! Page 08 Inspiring, eye-opening and reassuring." MIDLAND HEART If you only attend one Pictures of meaning One size can never fit all conference, make it Housing Technology." Page 13 Page 29 EQUITY HOUSING Very r<mark>ele</mark>vant & the best opportunity to network with our peers." HOUSING PRIMA GROUP Mind blowing – such a positive response!" 2020 CONFERENCE AND EXECUTIVE FORUM INE HOUSING iOpt joins Places for Midland Heart moves to low People's start-up challenge code with OutSystems Page 33 Page 25 10 SPECIAL FEATURE **GIS & spatial** Peabody's GIS in the cloud Curo's Aareon-powered analytics in housing self-service portal

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AAREON SMART WORLD ... AND YOUR CUSTOMERS

GIVING YOUR CUSTOMERS ACCESS TO SERVICES 24/7

The most important relationship in the social housing industry is that between landlord and customer. With the digital solutions offered by Aareon Smart World, housing providers can digitise their customer relationships and become more service-oriented. From the online customer portal to the smartphone app and call centre operations, all of the different solutions integrate seamlessly.

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DISCOVER YOUR DIGITAL WORLD

EDITOR'S NOTES

September 2019

MOVING FAST & SAVING MONEY

From our recent 'Connected Communities 2019' event at the BT Tower (see page 42), which covered some pretty diverse business and technology areas, we've compiled an interesting and consistent group of pointers around the successful delivery of business-related IT projects.

- Speed Aim to move fast and nimbly with new projects, with an emphasis on the rapid creation of minimum viable products (MVPs) that can be tested, reviewed and refined (and where necessary, scrapped). The focus on web-based, modular IT services should encourage a 'move fast and break things' mindset.
- Cost and procurement The government's CCS frameworks cover almost every category of IT and business applications that housing providers could need. Frameworks are generally

faster and cheaper than OJEU-style procurements and what you might lose in terms of bespoke fitting to your needs (the 80/20 rule), you'll gain in terms of agility, speed and cost. Furthermore, a 'capped time and materials' basis for new developments gives you more control than a fixed-cost approach and greater ability to evolve your needs throughout the project (c.f. MVPs, above).

- Diversity Project teams comprising members with diverse backgrounds have been repeatedly shown to deliver the best results across criteria such as innovation, time and cost. Aside from the moral and ethical aspects of pursuing an equality agenda, you will achieve better results by actively seeking out diversity.
- Culture and demographics You know that the demographics of your tenants are changing, so too are the demographics

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TECHNOLOGY 2020

of your staff and colleagues, therefore take a look at the culture of how, when and where your staff want to work. While your new cohort of workers might prefer WhatsApp instead of email, they still have the same aspirations from their careers as older generations, as well as being more tech-savvy – so reassess which technology tools best suit them to achieve your corporate objectives without blindly clinging to the vestiges of an outdated working culture.

• Data, data, data – The most brilliantly executed project is doomed if your underlying data sources are inaccurate and inconsistent; or in other words, don't put old wine in new bottles because it'll still taste horrid.

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FORTHCOMING EVENTS

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HOUSING TECHNOLOGY IN CONJUNCTION WITH AAREON EMPOWERED TENANTS - How to create truly customer-centric housing services Breakfast Briefings: 07 November (Manchester) & 28 November 2019 (London) Register online: www.housing-technology.com

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Webinar: 2pm | 09 October 2019 Register online: www.housing-technology.com

and recovery

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Effective management, forecasting

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It's fair to say that from an IT systems' perspective, the housing sector is at a crossroads in terms of how it deals with the challenges of mobile, digital, data management and, most recently, capabilities such as AI and IoT.

Meanwhile, the IT procurement history in the sector has been predominantly 'best of breed' acquisitions, mainly because the traditional housing system vendors were focused on their core systems, with a policy of partnering with other suppliers to fill in any gaps; at the beginning finance, asset management and scheduling, then latterly mobility.

Best-of-breed and niche suppliers

This spawned a plethora of niche providers of specific functionalities and those same main vendors then recognised that those niche providers were driving changes in buying behaviours and that customers wanted a broader range of capabilities. This led to many big vendors acquiring those niche providers, thus further complicating the purchasing decisions for their customers.

At the same time, these main vendors were recognising, albeit very slowly, that their core systems were lagging behind and required modernisation to meet the need for digital, mobility and data integration. This resulted in huge investments, although the vendors adopted different approaches, ranging from adding new and improved functionalities and better integration capabilities through to new systems being entirely redesigned from the ground up.

Technology reviews

Many housing providers are broadening their activities into other areas, such as commercial activities and off-site property manufacturing. At the same time, mergers between housing providers are

You can't get there from here...

Martin Joy, Director, Itica

creating businesses of increasing size and complexity. Add in the 'digital agenda' along with service integration, process automation and increased regulation, and it's no wonder that housing providers will be reviewing their current systems' portfolios.

How to go about making these solution decisions is an article in its own right, but it's certainly not straightforward with such a confusing landscape in front of us.

It does beg the question; could today's smorgasbord of vendors' solutions have been averted? Do we believe that it's about the survival of the fittest and we simply have to wait for the outcome of a long and painful consolidation and rationalisation process?

No standard methodology

The next question is then whether those suppliers will have the firepower to deal with the implementation and migration issues because there won't be a 'standard methodology', driven again by that model where the systems' 'patchwork quilts' are rarely of the same pattern. At this point, management consultant Peter Drucker's famous adage rings as true today as ever: "The greatest danger in times of turbulence is not the turbulence, it is to act with yesterday's logic."

What could be done differently? Is there an alternative way of behaving that genuinely puts the customer at the heart of our thinking, such as transformational decisions being facilitated through housing providers working together to apply pressure on solution providers, or solution providers working together to deliver more joined-up architectures? Or perhaps an arrangement that sees economies of scale, with risks and rewards being shared, and power residing equally across all parties?

Imagine a world in which housing providers have proper strategic relationships and the vendors wanted them as well... and actually listened to their customers, where housing providers collaborate with each other to work in partnership with the vendors. Unreasonable, unlikely or absolutely necessary?

Collective impact

The collective impact (CI) concept was originally coined by the Foundation Strategy Group (FSG). This suggested that organisations that are all working toward common social outcomes can achieve a more significant, positive and sustainable impact if they work together rather than in their separate silos... probably obvious, but worth stating nevertheless.

FSG identified five common components for organisations engaged in social change initiatives: a common agenda; shared measurements; mutually reinforcing activities; continuous communications; and the support of a 'backbone' organisation.

Bridging the gap

Understanding these fundamental CI components and achieving positive changes as a result can be a big gap to bridge for a variety of reasons. A key element in driving this success is the ability for the participating organisations to evolve their cultures in order to develop a new way of collectively engaging with each other.

The participating organisations must share a common agenda for reform, be willing to engage in mutually reinforcing activities, and collaborate with a range of other public, private, regulatory and community organisations with overlapping interests. This can be a challenge when those organisations have a history of competing against each other for funding and, in some cases, for populations to serve.

Implementing the kind of cultural change needed by organisations participating in a CI initiative would demand a wellexecuted change management process. In order for CI's five foundational components to add value in terms of collective gains, each member of the collective must adapt the way they run their business in potentially fundamental ways, probably in

You can't get there from here... Continued from previous page

turn rubbing against the existing beliefs and assumptions people have used as a guide for their work for a long time.

Profit vs. not-for-profit

Of course, there are two competing dynamics here because we're talking about for-profit organisations collaborating in a not-for-profit sector, so while there will hopefully be common goals and values, the different commercial interests of the two perspectives must also be taken into account. I have avoided the use of 'sides' because that arguably reinforces the 'them and us' approach which has often acted as a barrier to meaningful collaborations.

Why would housing providers decide to collaborate in this way? Speed of delivery, economies of scale, new engagement models, standardisation, cost, interoperability, risk mitigation, doing the right thing are perhaps just some of the reasons.

There will be winners and losers, but the ultimate beneficiaries should be the tenants. In the meantime, do we really feel comfortable with the continuing state of affairs, where hundreds of millions of pounds of public funds are being spent to deal with an important issue that could have been dealt with in a very different way, and yet could still be?

Do we have the collective determination, will and belief to take a different approach, forge a new path and be stronger together?

Martin Joy is a director of Itica.



Tai Ceredigion Cyf has replaced its ageing housing management system with ActiveH from MIS-AMS to consolidate its data from different siloed sources and deliver 'a single version of the truth' across the organisation. The system is scheduled go live in April 2020.

The Welsh housing provider undertook a stock transfer from the local authority over a decade ago, inheriting the existing housing software in the process. The new ActiveH solution will include a core housing management module, mobile working, asset management and a contractors' module for maintenance job costing.

Gavin Harvey, head of ICT and business improvement, Tai Ceredigion Cyf, said, "ActiveH will deliver a single, reliable source of information across the whole organisation so that we can be confident we have the right information to hand.

"By contrast, the old system was really showing its age – it was expensive to make even the smallest changes and required us to bolt on other systems to fill in the blanks. Keeping on top of which source of data was the most up-to-date was almost impossible and extremely frustrating for

Tai Ceredigion Cyf installs ActiveH from MIS-AMS

(L-R) Kate Curran (Director of Corporate Services), Steve Jones (Chief Executive) & Gavin Harvey (Head of ICT), Tai Ceredigion Cyf

our housing officers because every query required several telephone calls.

"MIS-AMS took a refreshing approach with its tender which was significantly different from others, offering considerable value for money. We also received universally positive feedback from the customer references – no one had a bad word to say about the company or its software – which is rare in the housing sector."

Family buy-out at MIS Group

Twin brothers Andy and Chris McLaughlin have completed a management buy-out of their family business, the Cheshire-based MIS Group, supplier of the well-known ActiveH housing management system.

The McLaughlin twins have bought MIS Group through a four-year deferred consideration for a near eight-figure sum. The business has been bought from its founder, their father, Stewart McLaughlin and includes housing management software supplier MIS-AMS and MIS Emergency Systems.

The group had a turnover of £9.2 million in FY2018 (up from £8.7 million in FY2017) and has 92 staff based in its offices in Northwich.

Andy McLaughlin, group finance director, MIS Group, said, "It's very much business as usual – I joined the group 18 months ago as its finance director and Chris has



(L-R) Chris and Andy McLaughlin, MIS Group

been managing director of MIS-AMS for the past five years where he has grown revenues by almost 50 per cent.

"There will be no change to the group structure; we are in excellent shape, with plans for further growth to over 100 employees before the end of 2019 and future expansion plans entailing investment in our local area and more jobs in 2020."

As part of the buy-out, the group has also launched a third company, Incline-IT, to provide managed IT and cloud services to complement its housing customers' existing ActiveH deployments.

Chris McLaughlin, managing director, MIS-AMS, said, "Many of MIS-AMS's housing customers tell us that they're increasingly looking for ways to outsource the hosting of their housing management system to become more efficient and reduce costs. It's therefore a natural step for Incline-IT to manage our housing customers' IT estates more widely."

Purpose reigns

Mark Elias, IT Infrastructure Manager, Coastal Housing Group

Should all projects follow a recognised methodology? Having recently become a Prince2 practitioner, I was convinced that yes, they should. And, as the saying goes, if all you have is a hammer then everything looks like a nail, in the blinkered view I had at the time I was sure that the project methodology of choice in Coastal Housing's IT department should be Prince2... why not?

When we recently started to think about replacing our on-premise PBX/ISDN telephony system with a hosted/SIP solution, I was naturally eager to adopt Prince2 methodology for the project. I was going to put together an in-depth PID, determine roles, lay out a detailed timeline of dependencies, stages and boundaries, produce clear project product descriptions and so on, referring over and again to the weighty, sticky-note littered, ink-defaced manual I'd proudly managed (no pun intended) to bring back from the excellent course. Because it was excellent. I wanted to go into super verbose-mode, producing documents, spreadsheets, diagrams and yet more documents, all evidencing that Prince2 was the correct approach because, hey, look at all this evidence! I knew that Prince2 can be tailored. I knew that a PID can be one sheet of paper and so on, but what I didn't know, and this was essential, was that I was putting the cart before the horse before we had even begun, or rather, the methodology before what mattered, and what mattered was to first ask: should all projects follow a recognised methodology?

When our head of IT, Shane Griffiths, suggested that we should use the services of Vanguard, our 'systems thinking' partner, to help us shape the project, I was thrown (which was not entirely surprising, given that I was putting the cart before the horse). But he was right to do so. I'm not for one moment suggesting Prince2 isn't fit for purpose. What I am suggesting though, is the need to be clear on purpose and then find and do what fits. I know this now and it's deeply changed my view of how to approach projects.

Rather than labour through an albeit reassuring methodology whether it suited our needs or not, we experimented with some simple activities and went from there. We ran a Mind Map workshop with users, guided by Vanguard; we distributed a survey with just one killer question (what does a perfect telephony system look like?); and asked representatives from all departments to write a 'what matters' statement. The purpose became crystal clear, all without IT doing much at all. Vanguard then guided us through an exercise in which we envisioned, individually, all the steps involved in the work and then compared notes. This led to an elegant timeline of important dates, constraints, actions, ownerships and an approximate buffer for absorbing any changes.

And that was it – everything we needed to make the project a success, and all it took was a couple of days. So much for my hammer. As Vanguard said at the time, "When you have clarity of 'what matters' and 'purpose', elegant and simple solutions present themselves. The difficulty is that these elegant and simple solutions often challenge the accepted approaches. As such, it's vital to test the assumptions behind these accepted approaches."

The materials gathered were then worked into what became the RfP which, because all of the preliminary work that had been done (and most of it by our end-users), was an absolute pleasure to produce. How often can you say that? Our intention evolved from being as informative as possible into being as open as possible, producing a document that put the burden, for want of a better word, on the supplier to demonstrate that their solution was right for us and was fit for our purpose. We constructed simple, open questions and compiled them into the themes that emerged from the Mind Map. For example, under the theme 'The system tells me what I want to know', we asked questions such as 'How do users see and manage their telephony information?' and 'How are contact directories maintained?'. And under the theme 'The system works wherever I am', we asked 'How is access from anywhere achieved?' and 'How does using the service differ across the varying methods of access?'. The structure just fell into place, effortlessly.

By leaving our position open, aside from stipulating that the system should be hosted, potential suppliers were tasked with being curious about our setup, to ask us more questions than we asked them, to tell us what matters about their platform to us, rather than us ask them. What better way to gauge a supplier's hunger for a contract than to be vague, non-prescriptive and ambiguous? Also, we suggested that suppliers visit us but we didn't insist on it. Again, this proved to be an invaluable strategy; if you don't visit and ask all the questions you need to, how can you be sure that you'll be fit for our purpose? I can say here with confidence that if we hadn't experimented first, we wouldn't have arrived at this approach. Again, so much for my hammer.

As for the suppliers who did visit, each had something very positive to say about the documentation we provided. Some said it was refreshing to not be forced into recommending specific, limited solutions due to over-prescriptive requirements. Others said that because we asked open questions, they felt liberated and passionate about demonstrating that their solution was right for us; one even said that the RfP was the best they'd ever seen. Proof that simple, collective activities can work more effectively than formal, burdensome procedures? I'm not saying



Purpose reigns Continued from previous page

that, had I gone full Prince2 and produced a user benefits-based RfP, heavy with detail, descriptions and demands, we wouldn't have had an adequate response, but I am saying that simply asking the business 'what matters?' and laying this out in a straightforward manner gave the documentation a quality that clearly evidenced that the process had been, dare I say it, fun. Our end-users had fun in the workshops; the IT department had fun translating their handwritten Mind Map into a Visio diagram, and consequently both the project team and visiting suppliers had fun engaging with each other to ascertain if their solution satisfied our purpose. It was fun to watch suppliers think, to perceive their cogs whirring, to observe their creativity, liberated from the weight of prescriptive chains. It was fun to reflect afterwards on who asked what, and who didn't. The whole experience felt light and enjoyable – two words one would hardly associate with project management.

The proposals we received reflected the liberated creativity we observed, making it very hard for us to arrive at a shortlist,

so if there's one downside to how we approached the project, it's that!

Once we select a successful supplier, it might be the case that it's appropriate to adopt a formal methodology, to align with the supplier's requirements, but now that I carry a light toolkit around my waist instead of a heavy hammer in my hand, I'll need some convincing.

Mark Elias is the IT infrastructure manager for Coastal Housing Group.

Aareon deployment at Cheltenham Borough Homes

Cheltenham Borough Homes went live in August 2019 with Aareon's QL housing management system, 1st Touch Core Mobile and Digital Solutions by Aareon.

The project was led by the housing provider's service improvement team in tandem with Aareon during the 18-month transformation programme.

Steve Slater, executive director of finance and resources, Cheltenham Borough Homes, said, "Over the past four years, we've been working towards a more efficient and enhanced service for our tenants and providing better access to our business information. "Aareon has provided great support to us in reaching this milestone. That a programme of this significance has been delivered as effectively as it has been is a testament to the commitment of everyone involved in the successful deployment of the Aareon QL software."



Dan Curtis, Director of Technology, Innovation & Business Intelligence, Equity Housing

Equity goes live with Aareon QL Equity Housing has completed the implementation of its new Aareon QL housing management system. Dan Curtis, director of technology, innovation and business intelligence, Equity Housing, said, "The first phase of our overall Aareon implementation has gone very well and all of the Equity staff are now working with Aareon QL.

"The objectives for this project were to improve choice for tenants, provide more support for staff and enable better sustainability for the group. We've already seen a positive change in the business and we're confident that once we have completed the implementation of Aareon's 360 Customer Portal and 1st Touch Self-Service App later this year, it will be a completely transformational experience for both Equity tenants and our staff."

Hitachi Solutions wins Microsoft partner award

Hitachi Solutions Europe has announced that it has won Microsoft's 2019 'global government partner of the year' award.

Over the past year, Hitachi Solutions has delivered innovative Microsoft solutions for customers across housing and local and central government including transforming tenant engagement with housing providers across digital and other channels, using IoT to reduce the cost of care services and improve citizen care through 'wearable tech' and smart sensors in homes, creating 360-degree views of tenants, internal business operations and external contractors, and replacing legacy systems with interoperable, secure and always up-to-date platforms based on Microsoft Dynamics 365 and Azure.

Steve French, CEO, Hitachi Solutions Europe, said, "To receive this accolade from Microsoft is recognition of our commitment to work in partnership with public-sector customers, our strong collaboration with Microsoft and the hard work and dedication of so many passionate people in our teams. Our ethos is to understand each sector's challenges, to be at the cutting-edge of what is possible using the Microsoft Cloud and to recruit and develop the best possible talent."

Housing Technology 2020 Conference Book your place soon!



Registrations for the Housing Technology 2020 conference and executive forum (March 4/5, Oxford) continue to flood in, so if you are thinking about coming to the housing sector's leading and longest-established technology event, we'd suggest you reserve your place now (particularly as hotel rooms and overnight accommodation sells out very early).

For 2020, our conference's main themes are covering:

- 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.

Sponsorship and exhibitor places

We have now filled 90 per cent of the available sponsor, exhibitor and IT accelerator positions so if you/your company is interested in having a presence at Housing Technology 2020, please email george.grant@housing-technology.com as soon as possible to discuss how you could be involved.

Further information about Housing Technology 2020, please visit: www.housing-technology.com/event/ housing-technology-2020-conference.

KEYNOTE PRESENTATION: DR KEVIN FONG, OBE



CONFERENCE AND Executive forum

Dr Kevin Fong has worked as a doctor with NASA and currently flies as part of a helicopter emergency medical service (HEMS) crew in the UK. As a front-line emergency physician, his expertise lies in understanding teamwork, risk management and decision-making under extreme pressure.

With degrees in astrophysics, medicine and engineering, he is also something of a renaissance man. Having worked with NASA's human space flight programme in Houston, Dr Fong also has a unique perspective on science, technology, exploration and the limits of the human body which he has brought to life in his incredible talks inspiring a global audience at both public and corporate events. In 2015, he delivered the prestigious Royal Institution Christmas Lectures, and in 2019 he was awarded an OBE for services to science, medicine and healthcare in H.M. The Queen's birthday honours.





Webinar invitation 9 Oct 2019 2pm



HOUSING | IT | TELECOMS | BUSINESS | ECOLOGY

Rent Arrears Effective Forecast, Management and Recovery

Universal Credit has changed the way that many Social Housing residents pay their rent, resulting in substantial increases in rent arrears.

How can you help your residents?

This webinar, chaired by Housing Technology will explore how new technologies can identify vulnerable tenants at risk of falling into arrears before it happens. Discover how proactive digital communications will improve resident satisfaction, enhance customer service and increase rent collection payments.

Sponsored by Castleton Technology Ltd



Register your place at: www.housing-technology.com

CASTLETON

A new deal for housing... What's the role for digital?

Steve Dungworth, Founder, Connectology

This autumn the leaders of the social housing sector will be looking at how to implement 'A new deal for housing'. It's over two years since the devastating fire ripped through the Grenfell Tower block in West London and left 72 dead and hundreds homeless. Since then there have been several inquiries and policy consultations on how to respond. The response to the government's Green Paper is expected soon, and for those of you who missed it first time around, here are the five principles that will underpin a new, fairer deal for social housing tenants:

- A safe and decent home which is fundamental to a sense of security and our ability to get on in life;
- Improving and speeding up how complaints are resolved;
- Empowering residents and ensuring their voices are heard so that landlords are held to account;
- Tackling stigma and celebrating thriving communities, challenging the stereotypes that exist about residents and their communities;
- Building the social homes that we need and ensuring that those homes can act as a springboard to home ownership.

A new deal for social housing, Local Government

What will the 'new deal' mean for those of us in ICT, digital and data departments? Have you started talking to your colleagues on the changes to systems and data that you'll need to make this happen?

I've no idea on how policymakers will influence the housing sector's leaders but there are three areas that strike me as opportunities to increase the digital inclusion of our customers, residents and tenants, and I can sum those three areas up in a single word – empowerment.

Empowerment is part of the conversation for just about every social change agenda, from equality to having a decent place to live. It's also a word which underpins our technological drive; the very essence of the web and social media empowers millions of people to influence decision makers directly – empowerment = digital = empowerment!

1. Data analytics

"For residents to be empowered, they need good information on how their landlord is performing compared to others." Those are the opening words of the government's Green Paper chapter on the subject. It's therefore reasonable to expect changes in the way that KPIs are collected and reported – perhaps even just one sector-wide measure on satisfaction. Will we get a simple and effective Amazon-style star system?

The Green Paper also proposes that landlords must publish KPIs covering five areas: repairs, safety, complaints handling, resident engagement and neighbourhood management, including dealing with antisocial behaviour.

So, I expect business intelligence and customer service teams to be busy refining their data to ensure it can easily be reported back to the regulator. The regulator already has a model for collection through the 'global accounts' returns; will this be the model for performance information, and what will they ask for and how frequently?

2. Data sharing

With brilliant data, there's a brilliant opportunity. What if we could find a way to share key information about all social housing assets and allow providers to develop technology solutions that customers and staff can use?

Have you heard of 'fintech'? Fintech is the financial services revolution, where new





applications, processes, products or business models from different providers give customers an end-toend online

experience. It's the thinking behind new products and services such as PayPal, Monzo and comparison websites which have revolutionised the way we think of money.

With that in mind:

- What if your data on decent homes, gas safety certificates and asbestos registers was available through a single customer portal for the whole sector?
- What if every repair logged against a property was available for suppliers to compare with each other?
- What if the regulator could look directly into your asset management system?

All of this is possible with a bit of collaboration and entrepreneurship and I expect it to be available in the future. But it would be disruptive and I expect we would see some resistance to this level of transparency. As I say, what if?



3. Innovation

A 'new deal for housing' sounds quite exciting, doesn't it? It feels like something we can all get behind and an opportunity for innovation to make things work better. So, what would be on your list and how can technology meet the principles of a new deal for housing?

A new deal for housing... What's the role for digital? Continued from previous page

Some ideas from us:

- A minimum standard for social housing websites – the information that must be included and how often it should be updated.
- A lobbying/petition app so that residents could get support from local community and have their views formally considered by housing providers.
- With more teams creating video content for their website, what about the next step: HATV – board meetings televised or on webinar in order to open up the behind-the-scenes decision making in the housing sector?

If you'd like to tell us what you think will be important in supporting a new deal for housing, please have a look at our short online survey (www.surveymonkey. co.uk/r/tfkrvkx) – we're keen to hear your views and ideas.

Steve Dungworth is the founder of Connectology.

Designer Software wins Molendinar Park Housing

Molendinar Park Housing has signed a five-year contract with Designer Software for its HomeMaster housing and finance software.



Molendinar Park Housing Association

Julie Smillie, director, Molendinar Park Housing, said, "Excellent service delivery and value for money are obviously vital to us, and by switching to HomeMaster we are confident that we will improve both. We are excited to implement the new system and are very much looking forward to working with the team at Designer Software."

In addition to the core housing and finance functions, the housing provider is also planning to use HomeMaster's asbestos, property compliance and case management modules. The new system is expected to be operational by November 2019.

North View Housing opts for HomeMaster

North View Housing is set to implement Designer Software's HomeMaster web-



based housing and finance



management system. The new system is planned to be operational by December 2019.

Euan Anderson, director, North View Housing, said, "We have been impressed by the Designer Software team and their in-depth understanding of our requirements. HomeMaster's complete operational mobility will allow us to really improve staff productivity and enhance our tenants' overall digital experience."



How to build better technology

Shariq Kochhar, Editor, Plentific

Let's start with a search for affordable housing in the UK... the first thing you'll find is uncertainty. We need more homes, and we needed them yesterday. But just building homes isn't enough to solve the nation's affordable housing crisis. Millions of people already live in social housing, with a waiting list that's twice as long. Tenants are expecting and demanding more, and prospective tenants even more so

At the same time, we take certain social technologies for granted, such as Uber for a car, AirBnB for a holiday or Spotify for music on the go. Consumer technology is influencing tenants to seek streamlined, frictionless platforms that are as easy as they are intuitive. The bad news? The sector can't seem to transform itself quickly enough to build better customer experiences, with trust, accountability and transparency at the heart of them. What's even more concerning is that, in a technology context, we are starting to talk about complex concepts, such as 'community' and 'engagement' as if they are easy to nail down, or worse, can be synthesised into a metric to sell the dream of a new product or service. *Continued on next page*

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We need to rethink the community opportunity in housing and showcase a better role for technology to play in social design. We can build technology with communities, without needing to reduce 'community' to a buzzword. Here are some ways to accomplish this:

1. Learn from other sectors and disciplines

The retail sector is the benchmark for good customer experiences. It empowers customers by making them expect more, and housing providers can learn from some of the simple solutions it uses. Today, 72 per cent of retail customers expect a response to an issue within an hour. PwC says that the housing provider of 2020 will be working with digital 'natives', no more 'traditionals' or 'transitionals'; natives that will expect their housing provider to put them first.

Imagine a framework within housing providers that could make this possible today - allow tenants to share simple, instant messages that get speedy support from an operations team. Apply it to a service request and you could have the beginnings of a self-service model on your hands.

More search platforms are also becoming streamlined in a Google-like manner. Amazon uses AI, much like Google's 'secret sauce', to predict what you might be interested in. Then apply that same idea to a housing community, using rich data augmented by AI, to understand a resident's pressing needs and the information they're looking for.

2. Map customer journeys & pain points

One housing provider chose to give new residents a kettle when they moved in, but this received poor feedback. Why? When the customer journey was mapped, it was discovered that the residents would have preferred the money to have been spent on part-payment towards a removal service or food-vouchers to help them stock up their new home. Now, the same housing provider has a starter pack including all the food and lodging essentials a typical resident might need. It's far more successful because most social housing customers are just £150 away from being overdrawn. The right kind of help at their most vulnerable stages goes a long way. The housing sector is a treasuretrove of dynamic data on which better digital investments can be made to enable a better experience or to disrupt existing, inefficient processes such as repairs.

3. Build a disruptive framework for positive change

Think of digital as a change-enabler, not a technology. Instead, think of digital as a framework that makes things as easy as possible from a human perspective. We looked at the retail sector but customer experience in the public sector isn't necessarily about exciting, shiny technologies; it's about making vital interactions less painful. A web site that gives tenants the information they seek, in as few steps as possible is a good example of such a framework. You get what you came for and leave just as quickly – simple, streamlined and painless.

There's debate about whether Uber has accomplished this. But Uber's also done for logistics what wheels did for horses. Its on-demand, accountable and responsive nature is the 'disruptive' standard to beat. Social housing needs exactly this, both in terms of communicating with residents and delivering housing services.

If the Uber model was applied to how repairs and maintenance are handled in social housing, it would provide the opportunity to record every repair from 'raised' to 'resolved' through a simple interface. It would also be possible to weave affordability into the supply chain by streamlining the administrative burden and therefore reducing transactional costs.

4. React less and predict more

The oft-quoted 'first-time fix' mantra is vitally important but so is knowing which

lift is going to break down next and fixing it before anyone gets stranded on the 15th floor. Reactive repairs impact the bottom line of every housing provider as well as customer satisfaction metrics, too.

Agile working capabilities woven into the IT fabric of housing operations will allow a housing portfolio's entire data to be visible at the touch of a button, raising the possibility of identifying heat maps and patterns in repairs, maintenance and asset lifecycles, as well as the ability to automate many of the processes associated with raising, procuring and tracking of those repair and maintenance activities.

5. Leverage the community

The ethos of 'build with, not for' is that, when it comes to 'socialtech' or 'proptech', we must identify the real people our work is intended to benefit. Resident collaboration is the first step towards humanising technology and measuring engagement.

Understanding and leveraging a community's underlying purpose is the first step, as shown by the small, day-to-day community interactions such as helping someone move in, taking in a neighbour's parcel, joining the residents' committee, sponsoring a walk or fixing someone's tyre.

With repairs and communal maintenance, we can use this community-thinking to offer a better service to residents. A local tradesperson, who understands the community better than a 'tier-one' contractor, is invested in upkeep because they also call the same community home.

This also results in a more sustainable approach to procuring repairs, by localising them and giving small businesses the opportunity to grow and invest money back into those same communities. It all starts with the same basic tenet of lending a hand to your neighbours.

Shariq Kochhar is an editor for Plentific.

Thirteen selects Trace Solutions for rent and service charges

Thirteen Group has signed a three-year contract with Trace Solutions for its BlueBox software to automate the service charges

and rent calculations for its 34,000 properties.

Rob Thompson, senior finance manager for income services, Thirteen Group, said, "BlueBox will massively improve the way we set our rents and service charges. The team are very excited about the new software's ability to help us make savings by reducing our deficits in service charges between costs and expenditure."



One size can never fit all

Vic Harrison, Managing Director, Integrator Housing Solutions

Planned maintenance and asset management systems have been used by many of the largest housing providers in the UK for decades, but smaller providers have often been excluded due to the high cost of those systems.

Suited to your needs

Although cost has been the main barrier in the past for these smaller housing providers, we believe that the new reality of cloud-based systems will change this and allow any size of organisation to use the very latest technology on offer.

The future of the housing sector is 100 per cent digital, and the internet together with cloud technology, will reduce the dependency of IT departments to look after systems on their own servers. Maintenance and updates will be carried out instantly by their suppliers. And one of the main advantages to surveyors, housing officers, directors and board executives will be instant access to records of their housing stock; anywhere, on whichever device they prefer to use, whether in the field or in the board room.

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Is your software driving you?

In the social housing sector, we have a reasonable number of software providers who offer various applications. And it is not uncommon for a housing or asset management system to be sold to an organisation for us to then witness the organisation adjusting its own processes and workflows to meet the paradigms set by that software package. This is the 'tail wagging the dog' approach and is ultimately the least efficient and effective way forward for housing providers.

When an organisation buys into a software provider's ecosystem, they shouldn't be



subject to prescribed requirements set by the system. Vendors shouldn't think of themselves as software companies, but instead as providers of software solutions. The organisation has the requirements, and the software should meet these, and with as little friction as possible.

While there will be common needs within a market sector (due to government legislation, for example), individual organisations will also always have their own ways of working, and it is a problem if those ways are impeded by the software tools themselves.

What are the signs that a software system is limiting in this way?

- Does the client need to change their internal terminology to use the system?
- Does the client need to rethink their concepts of asset hierarchy to make it 'fit' with the package?
- Does the client need to modify their team structure to fit with various permission limitations?
- Does the client need to modify the way they report on information, to match supplied formats?

How can asset management solution providers avoid these limitations?

• Allow clients to rename or create new terms in the system to match their

existing nomenclature.

- Allow clients to configure the user structure themselves to follow their existing workflows.
- Design systems that can be used differently by different users 'out-of-the-box'.
- Design systems that can respond to changing requirements without redeveloping fundamental areas.

This can be achieved in the real world by bringing user customisation to the forefront of the product. The client uses the term 'asset ID' instead of 'UPRN'? Let them rename it themselves. They have an idiosyncratic way of categorising their stock? Let them design their own hierarchical structure for assets. Taking this kind of approach from the ground up means less work for the provider later and makes the users feel more like they have a tool at their disposal, rather than a new set of rules to follow.

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Additionally, designing systems with a modular approach means that when, for example, the government comes up with a new requirement for clients, development can respond faster, without affecting other areas of the system. Clients can purchase the modules that are relevant to them, and aren't weighed down with a bloated system full of options that are just taking up space for them.

'One size fits all' is not true in the world of software solutions; we should aim for 'suited to your needs, whatever they may be'.

Vic Harrison is the managing director of Integrator Housing Solutions.

Housing Technology & Castleton Technology's exclusive webinar on arrears forecasting

With universal credit changing the way that many tenants pay their rent, typically resulting in substantial increases in rent arrears, how can you help your tenants?

Housing Technology, in conjunction with Castleton Technology, is hosting a webinar on 'Rent Arrears Forecasting – Effective Management, Forecasting and Recovery' at 2pm on 09 October 2019.

This exclusive webinar will explore the new technologies available that can help you identify your vulnerable tenants at risk of falling into arrears before it happens. During the webinar, you will discover how proactive digital communications

CASTLETON

can improve tenant satisfaction, enhance customer service and increase rent collection payments. The webinar will also feature presentations from Connect Housing and New Gorbals Housing who are both already reaping the benefits from these solutions.

To find out more, please visit www.housing-technology.com.



Connect Housing has selected an asset management and housing solution from PIMSS Data Systems and Castleton Technology, the first client win after the start of the two software providers' strategic partnership earlier this year.

The complete overhaul by Castleton of Connect Housing's IT systems will support the transformation of the organisation's service and business enhancement processes. Following an

PIMSS-Castleton secure Connect Housing

in-depth competitive tender process facilitated by Alysium Consulting, PIMSS and Castleton will work in partnership to deliver their integrated solution.

In addition to the core asset management system, Connect Housing has also opted for PIMSS's planning, contracts, asbestos, energy, compliance and tasks modules. The implementation is expected to be completed in 2020.



Alpha's speedy accounting with Real Asset Management

Alpha has implemented dedicated fixed-asset accounting software from Real Asset Management to manage its property portfolio, replacing its previous spreadsheet-based and time-consuming processes.

Gemma Livesey-Scicluna, assistant management accountant, Alpha, said, "Before buying RAM's software, our assets were maintained in our housing management system with an import created annually which involved approximately four weeks' work between ourselves and the software provider to get the data in and verified. To make matters worse, we were then managing our non-property assets separately via spreadsheets.

"It was essential to select a system which would support the monthly calculation of depreciation and one which could produce the required journals for our Exchequer finance system."

RAM's software will centrally track and

control Alpha's housing assets such as bathrooms, kitchens, boilers and electrics as well as its non-property assets such as computers, mobiles, tables and chairs.

Livesey-Scicluna said, "We are definitely expecting some quick wins from RAM's fixed-asset software. Having the capability to schedule monthly depreciation calculations will not only enable huge time-saving efficiencies and simplify our year-end procedures, but also give us more control over our month-end accounts, ensuring timely and accurate reporting for FRS 102."



Now in our 10th year of helping Housing Providers to focus on what matters most

"itica is a pleasure to deal with, wholly professional with deep subject matter expertise in the housing sector. I would not hesitate to recommend them or use them again."

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

Get in touch to find out how we can help you!

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Would you like a receipt for that?

Handing over digital control to the customer

Rob Smyth, Executive Director for People, Digital & Change, Silva Homes

Digital technology has the potential to re-define the relationship between housing providers and their customers. It determines their access to information, ability to book services and their overall experience with their landlord.

Silva's strategic plan sets out a commitment that 80 per cent of customerinitiated transactions will be conducted online by 2021, from a starting point of just 10 per cent. For a housing provider with over 14,000 customers across the South East, we saw it as a necessary investment to reflect the lives of our customers and to help engage in a more modern and sophisticated way.

This project isn't without its challenges so to navigate any unseen obstacles we worked closely with customers and colleagues. From the design of our new website to the functionality of our selfservice portal, their views have been formative throughout the project. Before embarking on such a large-scale project, we needed to understand our customers' needs and wants and match those to a digital solution while implementing the changes in a way that also improves the efficiency of our staff.

Empowering our customers with self-service

Historically, most customers have contacted us through our in-house contact centre (CEC). If someone had a query or wanted to request a service, they would call us. Most customers assumed that speaking to us direct was the best solution but actually it's expensive and inefficient for the business and far less convenient and flexible for the customer. We decided that an alternative method of interaction was urgently needed.

By analysing data coupled with conversations with staff and customers, we identified the services that would have the biggest impact if we went digital. In the process, we made communicating with us easier, faster and more convenient. Enter our online customer self-service My Silva portal which enables our customers to report incidents, book and schedule repairs appointments, set up direct debits and report hazards, all from the comfort of their own home and without even speaking to us.

We had originally considered deploying the portal module of our core housing management system but in order to optimise the experience of our customers and remove any limits on future developments, we chose to build our own in-house solution. Because it is open source and makes use of APIs, we can customise the design and user interface, improving the look and feel. It's also more responsive so we can address any issues or improvements instantly without having to wait for fixes from our third-party supplier.

Personalising the digital experience

Having an attractive, personalised and friendly digital experience is vital. Housing customers are unlikely to compare the digital services of different housing providers; instead, the likes of consumer brands such as Netflix and Amazon Prime will lead the way in affecting their perceptions of our online presence.

In the previous version of our website, the sheer quantity of pages and density of text meant that many users were simply unable to find the information they were looking for. When designing our new website (launched in August 2019), we prioritised the user experience, removing over 50 per cent of the pages to make it easier to navigate. In order to decide what information should be kept and what should go, we analysed data to identify the key information that our website visitors want to find and removed the rest.

Our homes are not one-size-fits-all models and neither is our new website. We focused on providing a personalised experience for each of our customer groups, making it easier for them to find relevant information and improving their experience. For prospective sharedownership home buyers, we have developed a Rightmove-style page, complete with filters and scrolling images, while our existing customers can find information about managing their home in another section of the site.

We sought not only to understand the digital requirements of our IT-savvy customers but also those who live in our independent living schemes who may not have access to online resources. To support them, we gave them training as well as offering online help via Live Chat.

Looking ahead, we are using our data more and more to inform decision-making and to improve our understanding of our customers. Our contact centre software will be replaced and our digital systems integrated to enable front-line staff to view data in all relevant systems, even while out and about. And before any process goes online, it is redesigned to make it more user-friendly, with a view to integrating it with other digital systems.

Internal integration

At the same time as improving our customers' digital experience, we looked at the systems our staff use in their daily work. If our customers are going to conduct 80 per cent of their interactions with us online then our own technology must support that. New hardware has been introduced, alongside an intranet,

Would you like a receipt for that? Continued from previous page

and we're in the process of moving many of our key business processes to the web and promoting the use of Microsoft 365.

Naturally, there has been some resistance from our staff around this new way of working. Some question whether our customers want to go online (they do) and whether a particular process can go online (it always can). Our new 'experience designers' have been invaluable in supporting the project and ensuring that our digitisation complies with customer and staff feedback.

Conclusion

To optimise our digital presence, we have worked hard to understand our customers, identifying their needs and working out how they want to interact with us, and then we have put measures in place to enable this. And over the next 12 months we will continue to build and integrate services that digitise our existing processes, including systems for new lettings, independent living, anti-social behaviour and housing visits; approaching this 'Homeric' digital project from a people and processes perspective will enable us to build solid foundations for the future.

Rob Smyth is the executive director for people, digital and change at Silva Homes.

Eden Housing's digital continuum with Orchard

Eden Housing has extended its existing contract with Orchard for a further five years in order to continue and expand its digital transformation programme, with continued emphasis on better tenant services and more streamlined internal operations.

When Eden Housing's small IT team found themselves struggling with multiple systems, they began to look at their overall strategy and software systems. Signing a five-year agreement with Orchard has meant that Eden Housing now has access to the full range of Orchard modules and solutions, allowing it to move more of its operations into a single system, thereby improving efficiency and providing a single source of data across the business. As part of the implementation of the systems, teams from Orchard and Eden Housing ran a series of workshops to investigate how the system could be best implemented to provide Eden with the results they need at the same time as identifying significant cost savings.

By digitising and automating processes, Eden Housing's staff can reallocate their time and resources to adding value to the business and providing quality customer service. For tenants, new technologies such as digital self-service facilities will provide a polished, user-friendly experience, offering convenience and transparency.

Orchard's digital solutions are also helping Eden Housing to efficiently record and manage inspections, monitor and service their assets and housing stock better, and reduce administration and paperwork across all areas of compliance.

Curo's Aareonpowered self-service portal



Based on Aareon's suite of digital software and services, Curo Group has launched its MyCuro self-service portal. Following its launch earlier this year, Curo has already successfully signed up over 2,300 tenants to its new online service.

After implementing Aareon's QL housing management system in 2011, Curo has since implemented Aareon's digital solutions such as the 1st Touch Self-Service App and now its 360 Customer Portal.

Tom Battersby, director of ICT, Curo Group, said, "We have a good, long-term relationship with Aareon as the supplier of our housing management software. We installed its 1st Touch Self-Service App in July 2016 for iOS and Android with no issues, and Aareon's 360 Customer Portal has now given us the extra functionality we were looking for, including guaranteed integration with our existing back-office systems.

"By reducing the cost of serving customer transactions, we have more money to invest in our existing homes and services. For example, over 60 per cent of our inbound calls relate to repairs or rents, taking up roughly 16,000 hours of staff time. Moving more of our tenant communications though the portal ensures things such as account balances and key documents are available to our tenants at any time."



Digital transformation in housing

Graham Hopson, Product Manager, Orchard

For many businesses, digital transformation is shifting from a long-term aspiration to an urgent requirement. Customers increasingly expect to use digital methods to manage their interactions with brands, and have come to expect the level of personalisation, efficiency and control that can only be achieved with end-to-end digital transformation.

Digital transformation is more than just a customer service tool; the improved efficiency, responsiveness and powerful insights that can only be delivered through digital transformation are a significant competitive advantage, meaning organisations who don't make the shift early enough could struggle to demonstrate the same levels of performance as their more digitallymature peers.

However, reaping the full benefits of digital transformation means more than investing in some new technology and automating the services you already provide – it means a complete rethink of how your business runs and integrating your practice into the current digital- and technology-dominated culture in which your customers and employees live.

Cut costs and increase efficiency

According to a 2018 Chartered Institute for Housing report, 79 per cent of housing providers see cost efficiencies as the driving factor for their digital transformation efforts. Digital self-service platforms can reduce call-centre costs considrably by reducing the number of simple queries, allowing users to access account information and complete simple tasks themselves online. Some housing providers have conducted cost/benefit analyses to inform their digital developments. For example, GreenSquare calculated that 'traditional' contact channels, such as telephone and post, cost around £10 per transaction while digital alternatives cost around 10p per transaction. Another housing provider found that each face-to-face transaction cost approximately £14 compared with around 30p for the same transaction with the same outcome via self-service.

The same end-to-end platforms which make self-service possible also have an important role to play in streamlining internal processes, improving speed and accuracy through the automation of common tasks.

The right digital infrastructure can also improve the efficiency of working processes across your business, speeding up decision-making by allowing faster access to data, and ensuring that all employees are working from a single centralised 'point of truth'. Digital transformation can also help to increase productivity and engagement within the workforce by enabling remote working and empowering team members to make better decisions.

Improve customer service

Digitising customer relationships is also a key driver for increased customer satisfaction. The ability for customers to self-serve using digital platforms can reduce the time they spend waiting and enable them to access services at the times that suit their own lives and working patterns. Effective digital infrastructure can also improve offline experiences for customers – if customer service agents have easy access to the right data and the ability to make changes quickly, they'll be better placed to solve customer problems and deliver a good experience.

Alongside the carrot of better customer service, there's also the stick of worsening customer satisfaction for organisations who are not yet offering digital services as they suffer from comparisons with other brands.

The concept of 'digital parity' is key here – from the millennial generation downwards, there's a clear expectation that customers should be able to access the same quality and range of services online as they can offline. Brands are not judged against competitors but against the ubiquitous digital experiences that customers use every day – they see no reason why every brand shouldn't offer an equivalent quality experience to the likes of Google, Amazon and Facebook.

While the move to fully digital services must be handled carefully to ensure that older or more vulnerable tenants are not excluded, for younger and digitally able tenants digital access is non-negotiable.

Prioritise resources

While the drive to cut costs and encourage users to self-serve can seem at odds with the desire to improve outcomes for vulnerable tenants, digital transformation can also significantly increase the ability of housing providers to support those with higher levels of need. While there's often a fear among employees that a move to digital can signal job losses, for housing associations there's in fact a far greater opportunity to instead use their workforce's time more effectively to deliver better support where it's most needed.

Reducing the strain on call centres means less pressure on agents to get customers off the phone quickly. While the objective for simple queries is to fulfil customer needs as quickly as possible, this is likely to change as self-service increases and calls regarding basic queries reduce. As call centres shift from servicing repetitive queries to instead handling a smaller volume of more complex enquiries, selfservice can give call-centre teams the vital breathing room they need to spend more time on calls which require more investigation or a greater level of expertise.

Digital transformation in housing

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Make strategic decisions

Digital transformation can have a profound impact not just on day-to-day operations, but on the ability to make board-level decisions for the future as well. Data is the new battleground for competitive advantage, with organisations who can leverage their data being more able to identify trends, discover opportunities and solve issues before they start.

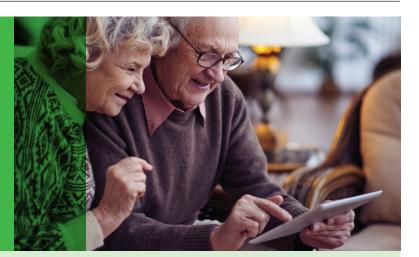
Machine learning can deliver powerful insights and model multiple 'what if'

scenarios, predicting the impact of business decisions on both financial and social factors. By using data effectively, boardroom discussions can be transformed with a consistent and flexible method of understanding the potential outcomes of different decisions.

Data analysis methods can be applied against everything from maintenance scheduling to void predictions and fraud detection. It also has significant potential to help both housing organisations and their tenants manage the potential impact of universal credit, identifying at-risk tenants and allowing for the provision of targeted support to prevent arrears and improve outcomes.

Graham Hopson is a product manager for Orchard Information Systems.

Caledonia's Appello digital telecare



Caledonia Housing has bought Appello's digital telecare software to support its digital inclusion strategy for older people. Aiming to promote social inclusion and combat loneliness, the housing provider is introducing Appello's Smart Living Solutions (SLS) in one of its retirement housing developments in Monifieth.

Replacing an old analogue call system, Appello's digital platform gives tenants all of the modern benefits of apartmentto-apartment and resident-to-manager video calls, video door-entry and wi-fi in communal areas. It also reduces the connection time to Appello's monitoring centre from minutes to just a few seconds.

The integration of Appello SLS with Caledonia's self-service portal and app gives tenants greater independence and the ability to report issues, view bills, pay rent, schedule repairs and keep their details up to date from a tablet.

Andy Dorrat, team leader for older people's housing services, Caledonia Housing says, "We wanted to move on from the oldfashioned 'big red button' and looked for a solution with better functionality, improved security and faster connection times.

"The Appello system ticked a lot of our boxes for modernising our current system especially with the speed of Appello's digital connection. The integration with our self-service portal and app supports our digital inclusion strategy, empowering tenants to take control of their own requests and remain as independent as possible. Furthermore, many of our tenants don't have smartphones so the larger screen on the Appello LivingHub device is perfect for them."

Linda Nairn, the scheme manager at Caledonia's Monifieth development,



said, "The quick response time from the Appello monitoring centre has been impressive; it's given me peace of mind that if I'm away or helping another resident, any calls will go straight to the help they need in seconds.

"Appello's SLS is so easy to use, giving me instant visibility across the development. The tenants are delighted with the wristbands which have replaced the cumbersome pendants, which most of them never wore anyway. Importantly, the tenants are delighted at being able to contact one another socially via video calls and they're reassured by the extra security the cameras give via the video door-entry."

Reaching out to tenants with technology

Jeremy Payne, International VP of Marketing, Enghouse Interactive

The introduction of universal credit and welfare reform has put pressure on housing providers' finances and those of their tenants. That has placed a premium on efficient communication between the two groups; one approach housing providers can take is broadening the range of communications they offer.

Housing providers should be encouraging their tenants to self-serve through everything from intelligent voice-based services to online forums. Another costeffective way housing providers can keep tenants happy is by delivering two-way outbound notifications. These effectively create simple actionable SMS and email messages which can help alert tenants to engineers' visits or the need to settle rent arrears.

More chatbots

We also expect to see housing providers making greater use of chatbots to drive enhanced engagement with tenants.

Firstly, bots will be used for direct interaction with tenants and in particular for handling the more common, routine enquiries. Housing providers will retain the option of escalation to a live agent but this should only be necessary if the call becomes technically complex or emotionally charged.

Secondly, chatbots can be used in the background of a call to support the agent by ensuring they have the right information at their fingertips during a live chat. We believe that this will later evolve to include real-time monitoring of a voice call. The chatbot's role will be to capture the essence of the conversation and use this to prompt the agent with relevant information in real time.

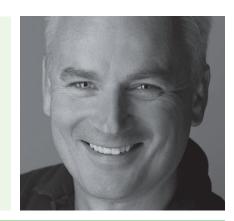
Tenant choice

But any discussion about the use of chatbots and indeed self-service in general within contact centres must be tempered by a note of caution. The government has been pushing the 'digital by default' message for several years now and universal credit is arguably its first fully digital by default service. However, recent figures indicate that over a million adults who live in UK social housing have never been online.

Given these challenges, it's clear that housing providers need to offer tenants a choice of interaction methods. They need to encourage tech-savvy tenants to communicate online and through selfservice but also maintain resources behind traditional voice-based communications for those people who are more familiar and more comfortable with phone calls.

To make sure they can deliver all this, housing providers need to have the right technology and communications infrastructure. That means they need to give contact centre agents a single, consistent user interface that's able to handle all aspects of omni-channel communications while ensuring they have visibility of every interaction.

Having these tools available on a single desktop means that agents can manage all tenant interactions as if they were the same. However, this kind of approach also needs to connect to back-office systems to make sure that queries are resolved efficiently. Housing providers should provide one contact centre number, with the ability to triage seamlessly to subject matter experts when needed. For example, the 'presence' capabilities of tools such as Skype for Business and Cisco Unified Communications Manager can be critical here in enabling these cross-organisation connections to bring in expert resources on demand.



Focus on quality

However efficient and effective the solutions implemented, though, housing providers can't deliver the customer interaction required without closely monitoring their agents' performance.

Part of this is about collecting relevant information and turning it into intelligence to inform future engagement. Delivering quality must, however, also be about measuring agent performance both in terms of ensuring compliance with industry regulations but also for tracking and maintaining the performance levels agents display when interacting with tenants.

Historically, most analysis has been done after the fact. The introduction of realtime speech analytics has changed this and brought specific benefits for housing providers, enabling them to deliver instant feedback to agents and immediately improve the quality of the experience for tenants.

Implementing the above solutions can significantly benefit housing providers but they are increasingly seeing a benefit from moving to a more cloud-focused approach. It's typically more cost-effective but also gives providers the opportunity to scale as their business needs fluctuate, not least to support the kind of 24/7 service that customers increasingly demand.

Bright prospects

Housing providers are under pressure to drive operational efficiencies while maintaining high levels of tenant satisfaction. It's a difficult task. However, technology can help deliver a bestpractice approach, enabling housing providers to overcome the challenges, build more positive relations with tenants and face the future with confidence.

Jeremy Payne is international vicepresident of marketing at Enghouse Interactive.

Brighter Thinking for Housing

Great user experience

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WE GET HOW TO REDUCE COMPLEXITY WITH THE CLOUD.

CDW BUILDS A PLATFORM FOR INNOVATION AT ESTUARY HOUSING ASSOCIATION.

The introduction of CDW's hosted cloud platform, ServiceWorks, has eliminated Estuary Housing Association's challenges and enabled the IT team to focus on future innovation. Improvements in reliability, efficiency and productivity have all been reported as outcomes of the migration.

Estuary Housing Association manages over 4,500 properties across Essex, three outer boroughs of East London and the Suffolk Coastal District, with over 300 staff providing care and support services to meet local needs. The foundation of IT services at Estuary was built on ageing on-site hardware which had not received significant investment for almost four years, but demand for IT services had increased rapidly as the organisation grew in size.

An integrated technology solution was developed by CDW using its own cloud platform, ServiceWorks. By moving to this platform, Estuary could move services directly from its old infrastructure, without incurring the cost and complexity of reshaping apps and services from a full public cloud migration. It provided them with on-demand capacity, enabling them to scale as needed, and will allow quick deployment of new apps or services in the future.

The migration to ServiceWorks has seen a clear ROI; the solution allowed Estuary to deliver a rapid transformation of its infrastructure within a matter of months without needing any additional internal resources, with improvements in user experience being reported across the organisation.

The project has also underlined the business value of the IT function, which is now working on increasing remote working capabilities for employees and creating new apps to provide residents with easier access to information about their living arrangements and care plans.

CDW is now working with Estuary on even more innovations to transform the way its users work.



in @UK-CDW



#CDWGetsHousing





"CDW is a huge organisation but we never for a moment felt any less important than any of its blue-chip customers. The pre-sales team were fantastic in designing a solution that worked for us; they took the time to understand what we needed."



PAUL BRACKEN Director of ICT and Digital Business Transformation Estuary Housing Association



Tenant empowerment starts from within

Chris Proctor, CEO, Oneserve

What does it mean to empower tenants today? This is one of the key questions raised by industry reports such as the Hackitt report and the Social Housing Green Paper. Those reports highlight how tenants have little power around the quality and safety of their own homes; their voices aren't heard when it comes to issues such as maintenance work or choosing the housing management services which they receive.

Involving tenants in the conversation The Green Paper is explicit that social housing tenants "do not have the same level of choice" on their housing management services as consumers in other markets. Discussions with residents revealed the difficulty experienced by many in being involved with ongoing maintenance and improvements decisions, with some being denied the option to cancel paid-for services such as cleaning.

In addition, Oneserve's survey of customer experience in social housing found that over 50 per cent of the tenants surveyed had received bad customer service from their provider. Undeniably, this poor customer experience shouldn't continue.

The housing sector is beginning to recognise the problem and is looking at ways to engage residents, but true change has yet to take effect. For social housing as a whole to transform and empower residents with greater choice, it must look inwardly and ask, why are tenants being left out of the conversation? Consideration of the obstacles preventing tenants' involvement must be the first step before looking at ways to improve engagement and this will allow for a paradigm shift in engagement with tenants.

This root change is a challenge because many housing providers believe they are listening to tenants and have their best interests at heart. While some are successfully seeking customer feedback and responding accordingly, many are not truly listening or aren't transferring their findings into active changes.

Internal benchmarking is preventing change

This tendency to ignore the tenant's voice is rarely intentional; certainly, most housing providers want to improve their engagement with customers and thereby provide better services. Rather, the issue of tenant empowerment is rooted in a deeper problem within the sector and a lack of recognition that residents, that is to say 'consumers', have fundamentally changed.

Putting the residents' needs first has been problematic partly because until now, housing providers have only compared their standards and services with those of fellow providers. When they benchmark against their peers, whose tenant experiences are much the same as theirs, how can the sector perceive when tenants are denied a choice? How can long-lasting changes be made which allow residents to be heard?

Today, many organisations base their entire operations around their consumers and the service they provide. Customercentricity is key and it seems that housing has fallen behind this trend. Perhaps now is the time for the housing sector to reference their services against customerorientated brands from other markets to establish best practices for their residents?

Harnessing customer insights

Amazon's success is the result of its deeprooted focus on customer experience and continued analysis of customer feedback and behaviours. This data insight creates richer knowledge of their customers' buying habits which Amazon then uses to make better products and experiences.

Every business needs to gather insight from their customers to understand and surpass their expectations; the same is true for housing providers.

Giving tenants a voice is only possible if providers have the frameworks in place which enable customers to easily share their views/issues and the right customer-centric frame of reference. There are various ways to engage customer feedback, from regular surveys to audits and discussion groups, via traditional or digital channels. Ensuring that engagement opportunities are accessible for all tenants and viewing information through the lens of a resident is crucial.

If a resident says that maintenance work is too slow or that an operative's customer service is lacking, then organisations must respond to and act on such feedback; putting them and their satisfaction at the centre of the task and building out from there. For true tenant empowerment, providers should harness the views of their customers to ensure their needs become integral to the running and management of their own homes.

Putting the residents' interests first

Making customer-led changes will ensure that social housing not only improves but it will also demonstrate to tenants that their opinions are valued. If residents can see the outcomes of their involvement, it will encourage more individuals to share their views.

Recently the Regulator of Social Housing launched a consultation on rents which aims to ensure fairer prices for "protecting the interests of social housing tenants". Such a step indicates the sector's awareness that its services must be better aligned with the needs of tenants, but that

Tenant empowerment starts from within *Continued from previous page*

alignment is only possible once the whole sector begins listening to and involving tenants in the conversation around change.

Industry-wide reassessment of customer experience

Empowering residents doesn't need to be complicated, indeed their expectations are simple; they want safe and comfortable homes which offer value for money. Providers should give residents the confidence and comfort of knowing that the operatives carrying out jobs in their homes are qualified and competent. Simple changes such as giving operatives a mobile tool which enables them to carry out on-the-job surveys, complete forms and share necessary information with tenants will greatly improve their customer experience while making time efficiencies for operatives. This empowers field workers to easily share job updates and tenant responses in real-time with their back-office teams who can then use the data to make improvements.

Tenant empowerment for today and tomorrow

Once housing providers start to look

inwards and then compare their practices with service providers outside housing, considerations around tenants' needs and expectations can become ingrained. It is time for organisations to start benchmarking their customer experience against other sectors to understand how they can harness tenant feedback and make customer-centric changes.

Chris Proctor is the CEO of Oneserve.



Midland Heart moves to low code with OutSystems

Midland Heart is now using OutSystems' low-code platform to deliver a fast-tracked, two-year IT transformation strategy and rapidly develop applications for revamped interactions with its 70,000 tenants.

Kathryn Downs, director of technology and transformation, Midland Heart, said, "We want to create an easy, frictionless digital experience supporting everything from paying rent to reporting repairs. We knew we couldn't achieve this vision with traditional ERP systems so we turned to low-code to give us the speed and agility we need.

"The housing sector tends to operate in a traditional way, with customer communications happening by telephone or face-to-face. We saw an opportunity to provide a better service to customers who prefer to do their transactions online.

"A great example of this is that we used to receive a lot of calls from customers who wanted to find out how much rent they owed, and this took up a lot of our customer service team's time. It was clear that providing an instant way for customers to check their balance would reduce calls to our customer hub and free up our operatives to spend time on more complex issues."

After some successful initial sessions with OutSystems, Midland Heart ran a sixmonth trial where they developed three applications: a customer app to enable them to manage their own rent statements and make payments; an app for Midland Heart's field workers to report any property issues; and a CRM platform to capture all customer contact information so that issues can be properly tracked and resolved. Downs said, "It was really valuable to have access to OutSystems' resources through its 'customer success' programme; in effect, this gave me an extra two virtual team members that we could access when needed."



Kathryn Downs, Director of Technology & Transformation, Midland Heart

The build process for the customer app took just 12 weeks, with the full build, testing and launch being completed in five months. Midland Heart's next OutSystemsbased app is due out this month, covering its end-to-end lettings service.

GIS & spatial analytics in housing



Housing Technology interviewed experts in GIS and spatial analytics on why housing providers should be considering these technologies, how to use them and what to look out for...

How to start

Cross Keys Homes' GIS analyst, David Beswick said, "GIS software, spatiallyenabled data and the appropriate technical skills are all vital, but the most important elements are executive buy-in and a clear vision to drive forward with GIS.

"We started with our grounds' maintenance function and the digitisation of our paper-based register of maintenance contracts. We bought large-scale mapping datasets from Ordnance Survey (OS) and title-deed polygons from HM Land Registry – these were uploaded to a web-based, hosted GIS, along with the freshly-captured grounds' maintenance layer."



"Using GIS. housing providers can gain a deeper understanding of their tenancies and housing stock than would be possible from manipulating spreadsheets or leafing through paper files and maintenance records."

Trevor Hampton, Director of Housing Solutions, Northgate Public Services

Northgate Public Services' director of housing solutions, Trevor Hampton, said, "If you want to use GIS, the first step is to geo-code all of your housing stock, either with latitude/longitude or x/y co-ordinates; this is key to enabling each asset or property to be individually identified.

"For housing providers within local government, OS provides mapping data at no cost but housing providers need to buy mapping data and the cost is calculated per tile, so if your housing is concentrated in a specific area, it could be fairly economical but if your properties are widely dispersed, it's prudent to factor mapping costs into your budget. You can geo-code your properties in-house but if you have more than, say, 5,000 properties, turnkey mapping services are likely to be cheaper. You'll then need mapping software, either bought off the shelf from companies such as Cadcorp or Esri or free (up to certain levels) from Google Maps and other open-source alternatives."

GIS benefits

Cadcorp's business development manager for housing, Fergus Craig, said, "GIS gives housing providers insights into their assets, responsibilities and tenants by enabling location information alongside other data. This is an additional level of information about their portfolio of properties that other systems can't provide. For example, a GIS can show a housing provider's land ownership and identify development opportunities."

Northgate's Hampton said, "Using GIS, housing providers can gain a deeper understanding of their tenancies and housing stock than would be possible from manipulating spreadsheets or leafing through paper files and maintenance records. For example, with a few swipes of a screen, housing staff can identify which properties generate high numbers of responsive repairs and what their associated rent arrears are, and analysis of, say, anti-social behaviour and tenancy overoccupancy can help housing providers understand the root causes and possible resolutions to tricky community issues.

"GIS can help tenants too – by overlaying additional data from agencies such as

health authorities, community programmes can be defined and implemented. With accurate and timely information on the issues affecting an area, housing teams can work with other agencies to tackle them and better protect their tenants and assets."

Watch out for pitfalls

HouseMark's research analyst, Emma Holgate, said, "Like most digital solutions, GIS works best when applied to a specific business problem so it's important to be clear about what you want to achieve before diving into a complete GIS."

Cadcorp's Craig said, "In the past, GIS was implemented independently of other data sources and systems so it would quickly be running on outdated data. We strongly recommend that GIS implementations always include integration with asset, housing, CRM and other relevant systems to ensure that the GIS is always using current, dynamic data."



'GIS relies on high-quality data and often this is the biggest challenge for housing providers, particularly those still relying on non-digital processes." Emma Holgate, Research Analyst, HouseMark

Cross Keys Homes' Beswick said, "Cost is an obvious potential pitfall – we were relatively conservative by procuring annual data licences for OS data and choosing hosted software and while this kept our start-up costs relatively low, it did lead to future restrictions. The copyright and use of OS or other third-party data needs to be fully understood because there are limitations and data ownership implications with their usage. The task of cleansing and spatially-enabling your data also shouldn't be underestimated. We spent a lot of time and effort digitising our assets and address-matching tenancy and property records to minimise the impact of this.



A GIS shouldn't replicate other data sources; it should simply connect to what already exists within the organisation." Fergus Craig, Business Development Manager for Housing, Cadcorp

"Overall, we formed the view that GIS is a corporate asset that transcends individual departments. Taking this approach allowed us to spread the burden of implementation across the whole business and eliminated issues with data sharing and 'siloed' thinking."



GIS is a corporate asset hat transcends individual departments; taking this approach allowed us o spread the burden of implementation and eliminated issues with data sharing and siloed thinking." David Beswick, GIS Analyst, Cross Keys Homes

Augmenting your GIS

Cadcorp's Craig said, "A GIS shouldn't replicate other data sources; it should simply connect to what already exists within the organisation. These data sources can then be overlaid with externally-sourced data from organisations such as OS for detailed map data and HM Land Registry for land titles."

Cross Keys Homes' Beswick said, "In housing, everything happens somewhere: a tenant in arrears lives at an address, flytipping can be assigned to a location, and repairs and maintenance can be attributed to a property. This data is invariably held in a plethora of disparate systems throughout the business. The key to maximising the benefit of GIS and gain invaluable insights is to be able to map these instances in a single view where the relationships between them can be visualised."

Integration with existing systems

HouseMark's Holgate said, "GIS relies on high-quality data and often this is the

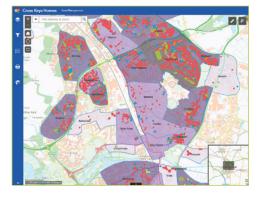


biggest challenge for housing providers, particularly those still relying on non-digital processes. One of the main benefits of implementing a full GIS with a specialist provider is that they'll have the technical skills and knowledge to guide you through any issues. Using your internal applications and data with GIS is still possible without that technical support but it's likely to be a longer and more manual process." Northgate's Hampton said, "Integrating GIS into a housing provider's existing systems isn't complicated – GIS is inherently designed to be used in conjunction with different data sources and systems and most solutions provide APIs and a simple set-up wizard for getting started."

Grounds' maintenance example

Cross Keys Homes's Beswick said, "The creation of our grounds' maintenance maps, which illustrate properties as more than just points on a map, has led to a considerable improvement of the accuracy of our grounds' maintenance contracts.

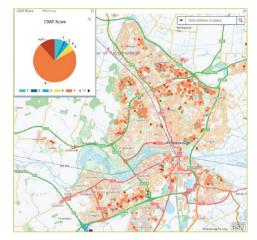
"This image shows how we've mapped tenant satisfaction data. By mapping this data, we can understand whether there are any specific pockets of tenant dissatisfaction which need to be addressed.



"We have created a number of other maps to support service delivery. This includes mapping to illustrate how our neighbourhood managers are working across their patches, and mapping to show tenants' arrears by area using disparate data sets from our housing and asset management systems."

Hiring GIS staff

Cadcorp's Craig said, "You don't need GIS-specific staff but it does help. We have many housing customers and about half of them have GIS-specific staff; those with a GIS manager have made wider and better use of the application, generating a larger return on their investment."

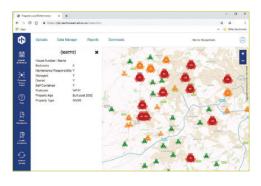


Cross Keys Homes' Beswick said, "While GIS suppliers can provide solutions which include technical and strategic consultancy around GIS, Cross Key Homes decided that they needed a dedicated GIS resource and champion to own and drive the solution forward.

"That said, hiring GIS-specific staff isn't a necessity. With a clear scope and definable objectives, the use of GIS services from the supplier would fast-track its implementation but there does need to be someone in the organisation to own and take responsibility for managing the maintenance and ongoing development of the GIS or else it risks stagnating."

The future of GIS

HouseMark's Holgate said, "GIS has percolated into almost every aspect of our daily lives, yet fewer than 200 housing providers currently use it. Given the important link between housing and location, we expect GIS to become more and more embedded not only in asset management and development appraisals, but in every step of the performance monitoring and decision-making processes." GIS & spatial analytics in housing Continued from previous page



Northgate's Hampton said, "GIS is definitely on the up; we are seeing a trend around GIS and spatial analytics becoming more deeply embedded in the planning and delivery of housing services. Advances in technology mean that GIS software is increasingly device agnostic and tools such as heat maps and 3D satellite views are more detailed than ever, making GIS and spatial analytics an important part of housing providers' technology infrastructure." Housing Technology would like to thank Fergus Craig (Cadcorp), David Beswick (Cross Keys Homes), Emma Holgate (HouseMark) and Trevor Hampton (Northgate Public Services) for their editorial contributions to this article.

GIS & SPATIAL ANALYTICS



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Peabody's GIS in the cloud

Nathan Carr, Geospatial Analyst, Peabody

After just a couple of years of using GIS, it has become an indispensable part of Peabody's planning and redevelopment capabilities.

Peabody's environmental services department maintains over 1.5 million square meters of public space in the Thamesmead area, including lakes, canals, bridges, concrete walkways, tarmac areas, car parks, shrub bedding, horse-grazing paddocks, 35 playgrounds and five large parks – quite a portfolio!

When we came to choose a GIS to develop our diverse range of services and maintain those areas, we opted for Astun Technology's iShare, a cloud-based GIS platform. Since its implementation in 2016, iShare has become a vital tool for many of our departments to visualise our complex land-ownership data.

It has also been integrated with our Confirm asset management software, with scheduled daily workflow tasks to export and import data into iShare's spatial-data warehouse. In the other direction, we



have configured WMS layers which are consumed back within the Confirm host system and remote ConfirmConnect mobile devices.

For example, there are currently several landscaping redevelopments happening within Thamesmead, and we can use iShare to undertake cross-working between different sections, stakeholders and consultants.

The redevelopments have allowed us to look at reworking the typologies of the public-realm features, such as using our QGIS desktop system to create new green infrastructure like 'swales', 'raingardens' and 'ornamental mixed beds' and new hard surfaces like block paving, decking and wet-pour rubber surfaces.

We have also been using the new iShare FeatureBuilder tool that enables simple



feature creation and editing using OS MasterMap TOID polygons from the underlying base maps. This is allowing non-GIS grounds supervisors to create new map features, thereby taking ownership of their data. For example, floating reed-bed points, Peabody-owned drainage gullies, road/path sweeping route lines and housing block polygons.

To conclude, our iShare platform has revolutionised our GIS capabilities, our spatial data warehouse has become the primary location for all our geographic data, and GIS has become standard rather than just a specialist tool.

Nathan Carr is a geospatial analyst at Peabody.

Pictures of meaning

Justin Fisher, Product Manager for Housing, Capita One

On 24 June 1812, Napoleon Bonaparte crossed the River Neman into Russia, with Moscow in his sights. Starting with an army of nearly half a million men, marching 700 miles through forests, across dirt roads and uneven, unfriendly ground, the French invaders arrived in Moscow on 14 September 1812.

Moscow was empty and denuded of all useful supplies. Out of options, Napoleon and his army began a treacherous withdrawal through the bleak Russian winter, amid temperatures of 40 degrees below freezing. Defeated and without food, the French army retreated, beset by sickness, defection and suicides, inexorably pursued by Russian troops. By 22 December, the invaders had been totally removed from Russia. Fewer than 15,000 soldiers survived.

What does this history lesson have to do with a piece on geographic information systems (GIS)? The answer: everything. In 1869, Charles Joseph Minard, a French engineer, presented the story of this catastrophic campaign in a chart (above), described as possibly 'the best statistical graphic ever drawn'.

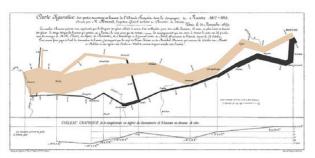
The ability of this chart to capture every exquisite detail of Napoleon's ill-fated

campaign in a 'one pager' is beyond compare. The map shows each town that the French trudged through, with the band representing the size of the army at each location. The brown part signifies the march on Moscow, with the black showing the imperilled retreat. Temperature and time scales are provided at the bottom of the chart. This is visualisation and communication expressed as art – it tells the story. We should demand this of our modern business software.

GIS and spatial analytics software are there to help both operationally and strategically, having it baked into applications, benefits, communications and decisionmaking. New conventions, such as 'what3words' which can define any 3x3m square on Earth simply by 3 words, have become essential tools for our emergency services to respond to ambiguous locations with accuracy, literally saving lives. Providing users with features to 'draw a search' directly on a map to retrieve locations within a defined area builds a picture greater than traditional address searches. Being able to view the position of field operatives in real-time aids in the planning and execution of day-to-day

repairs, saving time and money. And using smart algorithms, such as 'Graham-scan', help to conclude unknown boundaries when balancing stock viability with socialpurpose indicators.

Simple, elegant and intuitive; mapping helps tell the story like no other medium. The godfather of IoT and ubiquitous computing, Mark Weiser, said, "The most profound technologies are those that disappear. They weave themselves into



the fabric of everyday life until they are indistinguishable from it." Geographic information features should be as customary in our business lives as our use of sat-navs in our everyday car journeys.

Justin Fisher is the product manager for housing at Capita One.

M-Files partners with Cadcorp for housing GIS

Intelligent information management provider M-Files has partnered with Cadcorp, a leading provider of GIS and spatial analytics software, to offer housing providers better insights into their assets and property portfolios. Using Cadcorp's web mapping software, SIS WebMap, integrated with M-Files' information management platform, housing providers can now aggregate data from their existing siloed information sources in order to see all of their data in one place. M-Files' partnership with Cadcorp provides an automated, seamless link between disparate data repositories so that all relevant information and data can be brought into the SIS WebMap interface.

With M-Files enabling unstructured content and documentation to be layered on top of assets displayed in SIS WebMap, housing providers can gain greater insight into their portfolios and operations. For example, housing providers can visualise on a map where they have obligations to land maintenance, such as grass cutting. M-Files can also link this spatial data to other areas of housing providers' operations, such as invoices from contractors who have done work in those areas.

Grahame Wilkinson, UK sales manager, M-Files, said, "With our capability to bring together data from all over a network and different siloes, and Cadcorp's approach to displaying that data geospatially, we can move beyond the days of staff poring over spreadsheets by giving them all the information they need in one place in a format that gives them greater insight, accessible from anywhere through our mobile functionality."





Hybrid cloud – The best of both worlds?

Jason Birchall, Founder & Managing Director, A4S Cloud Solutions

Public cloud is gaining traction with more housing-sector deployments each year, but potential cloud customers have the difficulty of justifying the costs and risks of moving from their existing on-premise infrastructures.

Private-cloud IT infrastructure takes significant time, risk and cost to deliver, and over time will have received many upgrades through software and hardware improvements so service owners are loathe to discard an entire IT asset that still provides value and would require significant migration effort to replicate in the cloud.

A 'big bang' replacement approach will inevitably result in less than optimal outcomes; replacing equipment with remaining serviceable life is not just financially wasteful but may also cause more disruption than necessary, particularly where any change also equals risk to a critical IT service.

If a carefully-planned approach to deciding which solutions require replacement is carried out and other factors, such as warranties, supportability, performance capabilities and capacity, downstream impacts of failures and the ability to recover from them, are all considered then a more selective approach to maintaining and augmenting on-premise solutions can be applied. The careful integration into a publiccloud solution such as Microsoft Azure can be used to create a hybrid cloud to mitigate constraints while avoiding the need for broader and more indiscriminate transformation activities.

The term 'hybrid cloud' often includes public-cloud infrastructure, on-premise or hosted private cloud and some form of WAN, all of which can be established with minimal changes to the existing on-premise environment. While WAN connectivity can be expensive, in reality the cost is greatly impacted by performance and reliability, so with careful planning, the first services to leverage public cloud can be tolerant of the occasional WAN performance issue. The public-cloud setup is also relatively inexpensive and fast if your supplier is using good practice such as 'infrastructure as code' to ensure its deliveries are repeatable, reliable, secure and fast.

Now the question is how and what to begin consuming from the public side of your hybrid cloud, and this is where many people stumble. The answer lies in the challenges faced by your on-premise environments and the new capabilities best aligned to the business demands on your IT services.

Before we go any further, let's point out that cloud unleashes a vast amount of capability that's on tap and ready for consumption at any time. However, it's very important to still apply your IT service principals of strategy, service design, service transition and operations because if left unchecked, IT administrators can unwittingly open up huge security holes through the wrong placement of a unprotected public IP address, the incorrect granting access of rights through, say, Azure Active Directory, or poor planning and implementation of network security.

Our recommended starting point is to build on the three components of a hybrid cloud (public cloud, on-premise hosted private cloud and WAN) by starting with a thorough design for your hybrid cloud, with a strong governance and security theme.

We can briefly consider some typical demands that could be easy wins and useful ways of dipping your corporate toe into an initially tepid-seeming pool of public cloud.

Test and development environments are a great example of 'low risk with high benefit'. They might be in your on-premise Hypervisor and storage environments now; instead consider using public-cloud development and testing environments as and when needed, with lower SLAs and typically 50 per cent cheaper.

DR is usually a delicate topic in IT departments – there are burdensome processes such as routine rehearsals, scripting of failovers and impacts on operational systems to consider, yet all of these can be addressed using public cloud-based DR and replication.

Operational costs can be forecasted with incredible accuracy and in great detail, allowing you to set multi-year budgets and charge services back to departmental budgets. Plan carefully the use of pay as you go and 'reserved instance' pricing some workloads are particularly suited to pay as you go if you use automation to deallocate and shrink according to varying demand. However public-cloud providers like commitment and reward customers with prices that can be around 70 per cent cheaper, so think about workloads that are always running and carefully plan what size virtual machine is needed to meet the necessary demand then reserve the instance. That said, virtual machines are often the most expensive option and there are usually non-server-based alternatives such as web applications, load balancers and Office 365-based solutions.

The setup complexity and cost for your hybrid cloud can be commensurate with your early levels of demand and commitment. As your business and IT departments become more familiar, assured and organised to consume more public-cloud services then they can be configured as and when needed to facilitate this greater level of adoption. Setup and operational costs can be accurately forecasted and controlled, and security and resilience can also be granularly applied on a system-by-system basis.

Hybrid cloud is the best of both worlds, combining the powers of both onpremise/private cloud and public-cloud services, with the ability to move services between environments depending on where the need is best served. In short, hybrid cloud enables businesses to deliver incredible services to their customers while greatly improving flexibility and reducing risk.

Jason Birchall is the founder and managing director of A4S Cloud Solutions.





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Is EDRM your best corporate insurance policy?

James Massey, Chief Operating Officer, Castleton Technology

Having worked in the housing sector for over 20 years, it's safe to say that housing providers are no longer questioning the business case for business transformation but have moved onto the more pertinent question of 'how do we do it?'.

Whatever stage of this transformation journey you are on, your records and their security, availability and effective management throughout your organisation are key to driving real business change and compliance.

So, what do we say to our customers who are thinking about record management solutions? It starts with four simple questions: where are your records, how secure are they, can you handle subjectaccess requests and are you GDPR compliant? To which the answers are commonly:

- a) All over the place;
- b) We're not sure;
- c) Yes, but it's time-consuming;
- d) Not as much as we'd like to be.

I'm proud to say that we've worked with around 160 housing providers who've faced these questions and we have come out the other end knowing what 'good' looks like.

What does a good EDRM system look like?

When taking steps to review an EDRM solution, it's much more than just scanning documents to the cloud and shredding the originals. It's about content. Your EDRM system needs to cope with any type of content, from physical data, emails, text messages, media files, electronic forms and unified communications, to data that is captured in the field via your engineers or other staff working remotely in your communities and neighbourhoods. A true EDRM system should capture any interaction with anyone, anytime and anywhere, and ideally from any device.

On the other side of capture and storage is the fast and efficient on-demand retrieval of customer records. This is where your organisation begins to see true productivity gains because your staff are no longer spending ages looking through filing cabinets for a single record. The average record retrieval time within EDRM systems should be seconds. This same speed and ease of access to information applies to your customers too. With selfservice applications on the rise, your customers can access vital documentation such as rent statements, newsletters, reminder letters and gas certificates.

So here comes the Castleton plug... all good EDRM systems should do the above, however Castleton Technology's EDRM is designed from the ground up, uniquely with and for the social housing sector. Our user interface, folder structures, document tagging, subject-access requests, record security and document redaction functions are purpose-built for social housing providers. Because we are sector-focused, we've built up an intimate knowledge of tasks that need to be performed on a daily basis and how housing providers want to interact with the system to get the most from their investment.

GDPR-friendly document retention policies and the automation of rules can be set against data retention guidance from the National Housing Federation. Furthermore, our OCR capability means users can search and find specific records quickly, as well as automatically storing documents such as invoices on receipt with no manual intervention required.

Fundamental to our suite of software is its open API architecture, allowing all of

our solutions to integrate with other backoffice systems in the housing sector and EDRM is no different. Thanks to this ease of integration with third-party software, we partner with other solutions providers such as Aareon, Capita and Orchard on EDRM projects and we continue to develop new and emerging partnerships thanks to the flexibility of our platform.

Workforce mobilisation is a must and probably at the forefront of your business transformation strategy. If you use our Agile solution or an alternative field-based management system, you can seamlessly access EDRM through your Staff Agile app by instantly saving forms and images taken in your tenants' homes. Through our own EDRM solution, all your tenants can access and view their records using portals such as our Castleton .Digital solution.

What's stopping you?

Embracing new technology and new ways of working is no easy task, even if the new ways of working seem pretty obvious. People can be the biggest barrier here and you may have already experienced this in other areas of your business transformation project.

Organisations obviously need to carefully manage this cultural shift towards digitalisation, but I can understand the resistance. Buying into the security of electronic records when you can't physically see them can be difficult if you are used to having your records in an on-premise filing system under lock and key. But in the event of a fire, there is no insurance policy or possible retrieval of fire-damaged records.

Over simplified? Yes, but the message is clear; EDRM solutions offer secure storage and high availability of your records to designated users on demand. Wrapped within a cloud-based environment, there's no better insurance policy to protect your records and mitigate the risk of data breaches or losses. You need to consider

Is EDRM your best corporate insurance policy? Continued from previous page

all back-office systems you already have when reviewing an EDRM system, and whether it can become your one central system for record storage and retrieval, without the need for duplication or the double-storage of records elsewhere. These days, EDRM is essential. If you don't yet have an enterprise-wide EDRM solution, don't drop any further behind. One final plug... our team is happy to help with any demonstrations and put you in touch with customers who have gone

through the process and are seeing real business change.

James Massey is the chief operating officer of Castleton Technology.

iOpt smart devices to combat fuel poverty



iOpt, a Glasgow-based technology start-up, has developed an IoT-based platform and associated smart devices which enable managers of large property portfolios to monitor the environment of their assets remotely.

Dane Ralston, founder and managing director, iOpt, said, "Our IoT platform and sensors can help housing providers pre-empt fuel poverty problems for their tenants. Our product is designed for any organisation that owns or manages over 500 properties.

"One of the key benefits of our product is that we are helping property owners to protect the health of their tenants. Our technology will enable us, along with property owners, to make a significant difference around fuel poverty and tenant health, alongside initiatives such as the Scottish Fuel Poverty Bill."

iOpt wins Places for People's start-up challenge

iOpt was the only Scottish company to win a recent global competition by Places for People to find companies with innovative housing-related technologies.

Approximately 160 companies from around the world entered the competition to join the housing provider's Innovation Lab programme, the aim of which is to transform the performance of Places for People's property portfolio. Glasgow-based iOpt was among just seven companies globally to be selected. Norma Dove-Edwin, group chief data and information officer, Places for People, said, "With 195,000 homes and assets of over £3 billion, we have a substantial interest in technologies that can support us in delivering a best-in-class customer experience, transform the performance of our properties and improve the way in which we manage them.

"Through our Innovation Lab programme, we have found the best technology talent from around the world, and we are delighted to be working with iOpt during the 10-week lab stage of the programme."



Devon councils save £1.4m with 'always on' VPN from ANSecurity

ANSecurity, a specialist in advanced network and data security, has completed the deployment of a secure-access platform for South Hams District and West Devon Borough councils, saving £1.4 million per year in reduced staff costs resulting from improved business processes.

After approaching ANSecurity, the councils opted for an 'always on' Pulse Secure VPN. The councils' new VPN uses a device's ID to authenticate the user to the councils' network, thereby circumventing any manual sign-in processes and providing a streamlined authentication process for users. From there, the process of logging in at home or the office is almost identical, and by needing to deploy fewer two-factor token devices, the councils made further savings. Mike Ward, head of IT, South Hams District Council & West Devon Borough Council, said, "Security like this is an enabler to the way we work - we couldn't do it without a VPN."

The councils' staff can now work from wherever they want, with 100-150 people using the Pulse Secure VPN to log into the office network every day.



Is bad data affecting your performance?

Malka Townsend, COO & Founding Partner, Sagacity Solutions

Imagine living in a house without solid foundations – you wouldn't consider it, would you? Yet that's exactly what you're doing when you are managing your tenants with poor quality data.

Good quality data is the foundation to success

A recent data health check for a midsized housing provider, undertaken by Sagacity Solutions in partnership with Castleton Technology, illustrated just how widespread data problems can be, revealing that a staggering 40 per cent of tenant data across 800 properties was inaccurate. The health check showed that none of the address records fully matched the format and content of current address reference data due to data input errors, a lack of upfront validation and failures to comply with postal address formats. In addition, only 40 per cent coverage was found against tenant email addresses (compared with Ofcom research showing that 79 per cent of UK adults have an email address).

Up-to-date and accurate information is key to successful tenant management and can dramatically improve a wide range of operational processes. It can also address the many challenges within social housing including the identification of illegal subletting, lack of tenant availability, GDPR compliance and effective tenant services.

Cleaner data can help you to better understand who your tenants are by improving unknown or incorrect characteristics such as names, email addresses and telephone numbers. With the addition of extra details and updated information, you can provide improved support for your tenants.

The use of technology to deliver clean data is the most efficient and cost-effective

way to verify a property's tenant, identify who is living at a property and pinpoint additional or alternative tenants. Currently, around 50,000 properties in the UK are unlawfully occupied but with improved visibility over who your tenants are or should be, housing providers can better identify instances of illegal subletting and act to improve housing availability and reduce waiting lists.

Accurate tenant data also supports compliance efforts surrounding GDPR and meeting DPA responsibilities around 'knowing your tenant' through the use of clean and verified personal data so you know who your tenants are, where they are and how to contact them.

Tenant support can also be improved because correct contact details enable housing providers to deliver more effective communications, leading to a better tenant experience. Simple things such as communicating with the correct email address and addressing letters to the correctly-named tenant are sure-fire ways to improve efficiencies.

And finally, improving the tenant experience also contributes to significant cost savings because there is less wasted postage thanks to improved accuracy of contact information. An additional reduction in returned mail and greatly improved invoicing and collections processes ensure that operational efficiency goes up and associated costs go down.

What if you want to upgrade your systems?

Well, the problem is further exacerbated. If you invest in great new software without ensuring the quality of your data is sound beforehand, no matter how good the software, you will never truly realise the full business benefit. At best, you will need to build in a series of work-arounds, deal with ongoing customer issues and experience increased operational costs. At worst, you will have made a significant business investment, failed to realise your business benefits and be left with a solution that still doesn't meet your business needs.

Sagacity Solutions' CEO, Anita Dougall, said, "Data integrity is particularly relevant when migrating data onto new software platforms; ensuring data accuracy delivers a quick win towards achieving increased efficiency and improving your competitive edge."

What's the answer?

The answer is clear – ensuring your data is clean and accurate will pay dividends; remember the adage 'rubbish in, rubbish out'.

But don't just take our word for it. Connect Housing has recently engaged Castleton and Sagacity's data service partnership to help it improve its data quality in advance of the implementation of its new housing management system (HMS).

In addition to the various data solutions from Castleton, Connect's migration of data from one platform to another will be processed through Sagacity's 'health check, cleanse and append' services to identify and fix incorrect or missing tenant information and will ensure all data is accurate and up-to-date before the migration. This means that its new housing platform will contain only the latest and most accurate information, allowing it to better support its tenants and realise the business benefits of its new HMS.

Richard Baggott, customer experience manager, Connect Housing, said, "Moving to a new integrated platform represents a major investment in our future. Ensuring that our data is as accurate as possible before we make the move is a 'no brainer'!"

Is bad data affecting your performance? Continued from previous page

Clean data means good performance

Whether you want to improve your operational efficiency, increase customer satisfaction, improve regulatory compliance or migrate to a different software platform, the quality of your tenant data is fundamental. A data health check is just one of the many ways you can help achieve cleaner, more accurate tenant information. The more accurate the data, the more you know about your tenants, leading to better performance... after all, you wouldn't live in

a house without solid foundations so why manage your housing stock without them?

Malka Townsend, COO & Founding Partner, Sagacity Solutions

Alertacall launches IoT sensors

Alertacall has developed an IoT-based device to monitor temperature and humidity in individual properties, giving housing providers automated early alerts to signs of fuel poverty and unhealthy living conditions.



Running on five-year batteries and operating without the need for a mains connection or wi-fi, Alertacall's Envosense device records data every hour and uploads it to a cloud-based service. The Envosense device is the size of a pack of playing cards and the only installation required is to stick the sensor to a wall with a self-adhesive pad.

Bromford and Torus housing groups are both scheduled to go live with the devices this September.

James Batchelor, CEO, Alertacall, said, "It's crucial for housing providers to use prevention to stop properties falling into substandard condition. Envosense gives them the chance to use IoT technology to improve outcomes for tenants and to protect their housing portfolios. "With the average cost of repairing a property affected by damp currently running into thousands of pounds, there is a significant benefit in the early identification of properties that might need repairs or maintenance work. The benefit for tenants is that Envosense will alert housing providers to problems that could be fixed with a simple repair, or support and signposting towards help for those living in fuel poverty."

Alertacall has created an earlyinterventions team to investigate abnormal readings, establish what actions are needed and to report to the housing provider as necessary. Housing providers can also access the sensor data themselves.

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Homes England appoints chief digital officer

Homes England, the government's national housing agency, has made an appointment to its newly-created role of chief digital and technology officer.

Brian McIntyre joins Homes England from the Atkins design and engineering consultancy where he has held several leadership and strategic roles over the last nine years, including head of digital advisory and chief technologist for a major government department.

As chief digital officer, McIntyre will be responsible for designing and delivering Homes England's digital strategy, making sure that digital becomes ingrained in the business and building sustainable digital capacity across the agency. Nick Walkley, chief executive, Homes England, said, "Appointing a chief digital officer to lead our digital transformation demonstrates our commitment to creating a 21st-century agency fit to tackle our housing challenges."

Brian McIntyre said, "Housing under-supply is a previously intractable problem that Homes England is addressing with fresh thinking, deep insight and dynamism. A transformed suite of digital tools for customers, partners and our workforce will allow digital transformation to be a catalyst for the wider disruption of the housing market."

The (delayed) rise of the machines

Andrew Webb, CEO, Alysium Consulting

At a recent lunch with senior executives from housing providers, the conversation started with all the excitement around the potential of AI, including automated translation for tenants not confident in English, the identification of stress or emotion in conversations to prompt interventions, predictive *maintenance, energy efficiency* and the value of identifying and acting on what our data might tell us about the health and well-being of tenants. However, I certainly felt a consensus emerged from the discussion: that the economic case for investment in complex AI or machine-learning systems has yet to be convincingly made.

Given the proliferation of AI-related headlines, can this really be the case, and can the social housing sector really ignore these technologies? And while true AI remains expensive, will rapid changes in cost and availability shift the balance in the near future?

AI developments

Looking at the first area that caused a buzz, the potential of applying translation algorithms to speech-recognition technology is very real and techniques are improving, although the accuracy of speech recognition is hovering around 75 per cent due to the varieties of accents and pronunciations in the real world. Similarly, research to detect the impact on our voice patterns when we are stressed or experiencing emotion are now being implemented in commercial systems. While insurance companies are reportedly interested in the relationship between emotion-driven voice patterns and the incidence of fraud, in the housing sector the ability to prioritise calls or contact from vulnerable or distressed members of the community offers real benefits to housing providers and our partners in other social and blue-light services.

Factories and complex machinery are increasingly making use of sensors to allow predictive maintenance, with realtime flows of data allowing AI models to determine how and when intervention is most efficient. A number of housing groups, including Coastline (with the University of Exeter and their Smartline project) and York City Council (with Pinacl Solutions), have been running trials where sensors are placed in homes and data on a range of parameters, including temperature, moisture levels and carbon dioxide, captured and analysed to develop models for damp prevention, insulation improvements and boiler maintenance. The interim results, with the current costs of sensor purchase, installation and monitoring in addition to the cost of strengthening the infrastructure for increased data access, don't yet appear to demonstrate a compelling economic case based solely on house and equipment maintenance. However, the sensor data are throwing up interesting insights into living conditions which will inform debates around the roles of housing organisations, social services, health and blue light services, and around data privacy and the ways in which data could be shared across partnerships.

Letting and estate agents are making increased use of imaging technology to provide prospective occupiers with virtual walk-throughs, with AI tools analysing preferences to suggest new viewings and undertaking a lot of the transactional side of the lettings process on mobile devices without the need to come into an office. These applications are directly applicable to choice-based lettings but perhaps more innovative would be risk or repair insights identified by AI algorithms from videos or images made during visits to homes for repairs or void turnarounds, although of course the considerations around the protection of personal data become extremely important in imaging applications. Companies such as Fujitsu and Hitachi have been working on a variety of industrial projects which harness imaging and AI to deliver impressive and sometimes unexpected outcomes.

Machine learning & predictive models

Al advocates make great claims for the benefits flowing from machine learningbased predictive models based on the processing of data 'lakes' – i.e. all the data held by the enterprise. In housing, these might include income collection by predicting the ability for tenants to pay rent and putting support in place, translating behavioural patterns which signal risk into earlier interventions and improving customer satisfaction through pro-active human contact following indications of stress during contact centre communications etc. However, businesses can achieve significant benefits ahead of any application of machine learning through the process of cleaning up their data, structuring it correctly and using applications like Power BI to interrogate and present the analysis to inform business planning. Making greater use of existing data, alongside more real-time monitoring of vulnerability and financial inclusion flags are the current focus of many housing providers. Once the value released by these activities has been demonstrated then greater use of predictive models could be considered. but in our experience the incremental benefit of AI cannot be assessed until this has been achieved.

The development of an enterprisewide AI system can't yet be achieved by procuring a set of tried-and-tested software applications that neatly integrate. Instead, organisations are identifying and



The (delayed) rise of the machines Continued from previous page

implementing discrete projects where a use-case can be identified and where scale and benefits justify automation. The hoped-for larger benefits can often only be accessed when several discrete elements can be combined with connected technologies. Companies such Converse₃₆₀, the CX and communications specialist which has been focusing on AI products, have been working with housing groups, software suppliers and providers of contact centre services to develop AI offerings in the housing sector in more holistic ways and have some interesting development trials underway. It seems likely that these will develop into addon modules within existing commercial housing packages.

A coherent digital strategy

The fragmented landscape of AI possibilities and potential benefits continues to evolve rapidly and can be bewildering. While the claims of suppliers, the apparent success of peers and the

advertised 'standalone' nature of an AI project can be tempting, we believe that organisations are better served by identifying and prioritising projects in the context of a coherent digital strategy. The strategy can (and should) allow pilot projects to be created at relatively low cost to provide proof-of-concept and to test Rol and customer take-up. However, just as with other IT development projects, housing groups need to consider all of the implications of the future deployment and support of AI projects, including how risks around mission criticality will be managed when moving from trial to production, staffing needs (perhaps including the recruitment and retention of data engineers and scientists), data privacy and security, and infrastructure needs (including the potential impact of large data flows on existing infrastructure usage, even if cloud-based).

Of course, the automation of customer interactions and the back-end business

processes discussed in this article are enabled by passive AI and pattern recognition. Active AI - robots that interact with us and each other and learn by trial and error rather than operating under prescriptive rules - are coming. They will serve us coffee. They will transform manufacturing. And they will undoubtedly be in our homes. Just as with self-driving cars, the possibility of human error will be removed from tasks such as inspecting critical safety systems, like gas meters today (although presumably our homes will have migrated from hydrocarbons to other sources of energy by the time robots are ready for widescale deployment in our communities). But, despite the extensive R&D and jaw-dropping investment, home robots will not arrive for some time to come and can certainly wait for a future issue of Housing Technology.

Andrew Webb is the CEO of Alysium Consulting.

Gas Tag joins Liverpool's Local Growth Hub

Gas Tag has joined Liverpool's Local Growth Hub in order to expand its connections and gain credibility for its self-styled 'disruptive' gas compliance technology.



Gas Tag's technology comprises an NFC tag that is scanned to evidence that work has taken place at a property, the Gas Tag app that verifies engineer credentials and provides a bestpractice workflow and an online portal detailing all Gas Tag-verified works conducted. Information collected on each job is presented via the portal to provide councils, housing providers and letting agents with the peace of mind that their properties are regulatory compliant. Only qualified gas engineers can sign up to use the Gas Tag app; engineers simply scan the tag with a smartphone and follow the steps to ensure a fully compliant process.

Gas Tag was founded in 2015 with the aim of changing an industry that had not adapted to using technology to make homes safer. It raised seed money from early investors and then raised private equity funding in 2018 to expand the business. However, as a disruptive technology business, Gas Tag initially struggled to gain credibility in the market. Paul Durose, founder and chief executive, Gas Tag, said, "The challenge we had before working with the Local Growth Hub was that we didn't have a massive network of connections with other businesses based in the city and lacked credibility as a new business. Having the Local Growth Hub behind us has opened a lot of doors and helped to make vital connections to the knowledge and experience here in Liverpool when it comes to technology, innovation and business growth."

Janice Mears, head of business growth, Liverpool City Region Local Enterprise Partnership (LEP), said, "Gas Tag is a real success story for our local business community and the company's founders have first-hand experience of the challenges innovative new companies face when trying to get their ideas off the ground initially. By seeking the support of the Local Growth Hub, Gas Tag has been able to access a vast network of experts to set their company on the road to growth."

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Net-zero or zero-net?

Adam Rigg, Futurologist, Red Kite Community Housing

Net-zero greenhouse gases by 2050? To my mind, that sounds like a very reasonable and important target and it seems like the government is actually taking action for once.

Most of us would probably agree that we should do whatever it takes to ensure our planet is a healthy and pleasant place to live. It's kind of a no-brainer; we don't really want our grandchildren to live on a dying planet, like some post-apocalyptic film where everyone wears breathing apparatus and hides from the sun (disclaimer: this is not exactly what it will be like... well, probably not).

As I watch the news of the government's recent CO2 emissions target, I turn the volume up on my smart TV, pop my mobile back on charge and do lots of other tech-related things that use the seemingly invisible power we get from our magical plug sockets.

Unwillingness to change

Like everybody else, I want the world to change but I don't want to change myself. I want the planet to be green and healthy and be a clean, pleasant environment for everyone... but I do quite like my 2.4 litre diesel engine and the convenience of all my power-hungry tech devices.

It's not hard to notice how people have changed a lot in recent times, including how we have become less social, or at least less social in the real world. We seem happy with our eyes glued to screens, living in a virtual reality for 90 per cent of our waking life. An important question to pose is: could we ever give that up? Could we ever revert to a non-smartphone era? What if the planet depended on it? What if human nature depended on it?

We know there are cleaner, more ecofriendly ways of powering our tech



addictions. And it's essential we welcome these and accept there will be financial growing pains as well as inconvenience.

Connected homes

Homes are becoming more and more entrenched with connected technologies, security, heating, lighting and, of course, little vacuum-cleaning robots (which are essential). All these things are brilliant and very handy, but what happens if we have to revert back to non-tech living? Ask yourself: how much tech could I live without to save the planet? If the answer is "all of it", then why aren't you doing that?

Would it be so bad to write someone a letter and wait for a response? (the answer is yes, it would be rubbish), would it be so bad to cycle to work or use an electric car? (that sounds okay, I suppose). Would it be so bad to not have a smartphone at all? It sounds crazy to even contemplate life without these magical little things that control our lives, but it wasn't so long ago we did just fine without them, and some would argue we enjoyed a better quality of life.

As a futurologist, I naturally consider the future rather often. It's easiest to think of the future as being shiny, new and automated; it's not so much fun to think of the future being less efficient for the sake of the environment or for the sake of society/our sanity.

The tech tipping point

Technology should be used to improve our lives but maybe there is a line or tipping point after which it becomes more harmful than not. Or perhaps there is no tipping point and we just need to push on over the tech horizon until we are so advanced that we somehow just work out the whole global warming thing.

The average person's annual carbon footprint in the UK is nine tonnes of CO2. That's about four average-sized elephants. Around a fifth of that comes from the energy we use at home (including charging and using all our lovely tech devices); the next time you leave a light on when you're not in the room, just imagine those massive electric elephants smashing our planet to bits with their big iPhoneshaped feet.

It's not all gloom and doom and a future without cool technology, though. Like most things in life, there is a balance to be found. To some extent, we're lucky that at least we live in a country where the government accepts that there is a real climate-change problem and that we need to take drastic action before it's too late, if it isn't already too late. Cutting our CO2 emissions to net-zero by 2050 may seem hard and a bit of an effort, but in fact it's our responsibility to do what we can to achieve this target. Technology use in our homes is a major factor in this.

Resetting priorities

Technology is a drug and society is unlikely to be able to go 'cold turkey' given how deeply the drug has taken hold. A gradual withdrawal from the addiction would allow us to readjust our priorities – hitting the reset button and thinking about what's important to us and to our planet.

Software developers have a part to play in all this; the 'gamification' of many of the most popular apps and social media platforms is addicting our minds and removing us from real life. Sure, social networks can be fun, and it feels great when you receive likes and comments on a post, but if we start to value this disposable praise above real interactions and relationships then we are edging closer to losing the very things that make us human.

I do have faith that our government will do the right thing and push us into respecting

Net-zero or zero-net? *Continued from previous page*

our planet, despite that a lot of us will go kicking and screaming, holding onto our diesel engines as if they were our first-born child. Incremental changes to our lives such as electric cars and renewable power will help greatly, providing we also play our part as individuals. Think about the tech you use, what you need to use and what long-term impact using that tech will have on you.

Zero-net use may be unrealistic but maybe we can reach net-zero.

Adam Rigg is a futurologist at Red Kite Community Housing.

Flagship software engineer's Microsoft award

A software engineer from Flagship Group has won one of Microsoft's exclusive 'most valuable professional' (MVP) awards for developer technologies in recognition of his exceptional technical community leadership.

Flagship's Chris Sainty won the award based on his work on Microsoft's Blazor product. He became interested in the product when it was a prototype and has been blogging about it for the last 18 months.

The MVP award is given by Microsoft to "technology experts who passionately share their knowledge with the community". The scheme has been around for 20 years and is extremely exclusive; there are only around 2,500 MVPs worldwide, with just 153 in the UK.

Sainty said, "I'm delighted to have won this award, although I still can't quite believe it; it's akin to signing for a football team like Real Madrid in the software world. From a professional perspective at Flagship, I hope having an MVP will help us attract more like-minded people who are passionate about technology and inspire others to work towards the award."

As well as blogging, Sainty has also created several software libraries for use with Blazor and acts as a community expert for software engineers who are getting started by providing support in chat rooms (incl. StackOverflow) and



Chris Sainty, Software Engineer, Flagship Housing

on social media. Just recently, he was also asked to give a podcast and talk at a software development event in Cambridge.

Matt Brazier, director of IT, Flagship Group, said, "We're thrilled to see Chris getting this recognition from Microsoft. Having such expertise in-house is a major benefit to Flagship and winning this award is a huge endorsement for Chris – we are very proud of everything that he has achieved."

Swift work at Yorkshire Housing

As a small diversion from Housing Technology's usual coverage, Yorkshire Housing has been doing its bit to help with the survival of the swift, an enigmatic bird that spends most of its life in the air, feeding, drinking, bathing and even sleeping on the wing, only landing to nest.

The species has always relied on openings in older buildings to find a place to make their nests, often returning to the same site every year, making Yorkshire Housing's older properties ideal for nesting. However, with many of these buildings' roof spaces being repaired or replaced, the swift faces something of a crisis. According to the RSPB, swifts have declined by 38 per cent over the past 25 years, putting them on the 'amber' list of conservation concern. Yorkshire Housing decided to work with local group Helmsley Swifts. Whenever Yorkshire Housing has repaired and changed roof spaces, local group Helmsley Swifts has then gone in to fit a swift-friendly bird box. Over the past few months, a number of new nest boxes have been put up on Yorkshire Housing properties in Helmsley to encourage swifts to make a home there ahead of their breeding season.

Glen Cranfield, investment project surveyor, Yorkshire Housing, said, "When we became aware that the upgrading of our roof spaces was taking away the nesting space for the swifts, Yorkshire Housing got in touch with Helmsley Swifts. We agreed on a plan of them installing bird boxes in the same location to prevent this problem."

Jonathan Pomroy from Helmsley Swifts and author of 'On Crescent Wings' said,



(L-R) lain Sampson (Baas Construction), lan Kibble (Helmsley Swifts) & Glen Cranfield (Yorkshire Housing)

"Many nests in Helmsley are located under pan tiles in the loft space and consist of material such as feathers, bud cases and pieces of grass. So when Yorkshire Housing was repairing the roof space, that meant that the swifts would lose their nesting spaces. Anything that people can do to make buildings more swift-friendly is welcome; we would like to thank Yorkshire Housing for helping this very special bird."

Take back control of your information

Simon Godfrey, Senior Account Executive, M-Files

Alongside their main task of providing thousands of affordable homes to tenants across the country, housing providers also have responsibility for maintaining the safety and habitability of each property in their portfolio.

Every single property managed needs a valid gas and electricity certificate, as well as risk assessments and other safety documentation. The information is by no means static; certificates expire, new documents are issued, and maintenance work is requested or completed. All this information needs to be kept up to date and communicated with tenants.

Tenant safety is the priority, so invalid certificates or missed risk assessments could lead to serious repercussions such as heavy fines or even jail time for those culpable.

With so much at stake and so much information to manage and process, how are housing providers taking on this mammoth task and meeting the needs of residents? Quite well, actually.

More automation

Moving away from the manual, cumbersome approaches often associated with managing safety certificates, housing providers are investing in technology, enabling them to automate manual processes and making accessing and collating information much easier. The benefits mean staff are no longer forced to spend hours searching across numerous folders and siloed systems to locate the necessary information needed to ensure compliance.

Some organisations are going a step further by investing in intelligent information management (IIM) systems. This enables the creation of automated workflows, so that staff can keep track of approvals, control permissions and access to information, and send reminders to make sure tasks are completed. Setting up workflows for gas or safety checks, for example, means housing providers are now creating assignments 30, 60 or 90 days before they're due to expire. This gives staff a much more holistic view over safety certificate renewal dates across all their properties. This reduces the risk of financial penalties (and more importantly, the risk against tenant safety) because staff can collate information instantly, satisfying regulators, freeing them to add further value and support for tenants.

'Citizen consumers'

Not only are housing providers using technology to support regulatory compliance, they are also using it to satisfy the 'citizen consumer' who expects high levels of information transparency and flexibility.

The safety of social housing has been under increased oversight in recent years



and tenants are becoming more proactive in understanding and wanting to see information relating to the safety of their property, such as gas, electricity and fire safety certificates. This also extends to information about previous refurbishments carried out in the property or access to their tenancy agreement.

An intuitive approach

Intelligent information management platforms enable organisations to describe 'what' a piece of information is rather than having to decide 'where' to store it. This more intuitive approach to storing and managing information makes it faster and easier to source any information requested by a tenant or other party. For staff, greater time savings, improved efficiency and heightened productivity are readily seen but this ease-of-access to information also transcends to tenants; information is shared quicker and processing times are reduced.

When you consider the challenges facing housing providers, such as needing to maintain compliance for a multitude of regulations, but also responding to reduced government funding as well as changing demographic needs, you can't help but be impressed. As a sector it continues to innovate in its ability to automate manual processes, providing tenants with enhanced customer experience and ensuring their safety.

Simon Godfrey is a senior account executive at M-Files.

Intechnology joins government innovation programme

Intechnology has won a place on the government's Spark programme, set up to enable the widespread adoption of innovative and emerging technologies to transform UK public services.

Spark is an initiative from the government's Crown Commercial Service, which supports the public sector to achieve maximum commercial value when procuring common goods and services.

Intechnology joined Spark after implementing one of the UK's first city-wide IoT networks in Coventry. It is working in partnership with the city's council to pilot high-tech public services to boost air quality, pest control, waste management and street lighting.

Intechnology's 'smart city' platform enables readings taken from a variety of city-wide IoT sensors to be analysed and processed for better insights around working practices and local decision-making.

Natalie Duffield, chief executive, InTechnology, said, "In Coventry, which is the UK's next City of Culture, we are helping the council to develop new models of real-time civic engagement. We are delighted to join Spark and look forward to working with ambitious housing providers and local authorities to adopt and scale our proven technologies."

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ORM & Microsoft hackathon inspires housing innovation

ORM hosted its first Pitch (people innovating to change housing) hackathon at Microsoft's UK offices earlier this summer, aimed at housing providers looking for fast, collaborative ways to innovate on digital initiatives.

Mark Rogers, director of business transformation, Moat, said, "We'd seen similar events that ORM had been part of and thought this was something that could really help the housing sector. After working with ORM on our own digital transformation project, we knew how agilely they could work and thought that they were the right partner to run a hackathon for housing providers."

The Pitch hackathon comprised 30 people from six housing providers working together for one day on pre-selected challenges set by housing experts. The participants came from Saxon Weald, Guinness Partnership, Worthing Homes, Paradigm Housing, Home Group and Moat. prototype was for an app that will enable

Peter Paterson, director of client engagement, ORM, said, "Hackathons

are perfect for housing because it allows the sector to work together on common issues within a short, proscribed amount of time. By taking a range of skilled people, from subject-matter experts to developers, designers and strategists, out of their everyday roles, the teams produced prototypes that solved actual sector problems in just eight hours - that just wouldn't happen in their normal environments."

On the day, after eight hours of hacking, the four teams presented their business case and prototypes to the panel of judges from Saxon Weald, The Guinness Partnership, Moat and ORM. The winning tenants to report on different grounds maintenance issues.

The other ideas developed included an app for vulnerable tenants to pre-order weekly meals from a quarterly menu, a chatbot that uses image-recognition AI and GPS tracking to better diagnose repairs, and an online portal for housing providers to communicate with their tenants via a series of status-tracking messages relating to the housing services they provide, such as repairs.

Lizzie Lawson, senior strategist, ORM, said, "I was a bit apprehensive because I really didn't think one day would be enough to create anything tangible. Yet, the enthusiasm and determination of my teammates was great, and it clearly shows how limited time and the pressure of a hackathon environment provides a focus for creativity and innovation."

Changing chairs at Bath Group

Radian Group's assistant director of technology and innovation, Sheila Starr. has taken over the chair of the Bath Group from Longhurst Group's director of IT, Darren Ryland.

The Bath Group (Business and Technology in Housing) was set up six years ago with the aim of providing a way for larger housing providers (those with 10,000+ properties) to benchmark their IT expenditure, skills, staffing and systems via an annual survey. Since its inception, the group has created a quarterly forum for senior IT professionals to discuss technology trends and strategy insights. However, the group now intends to open its membership to housing providers of all sizes.



Sheila Starr, Assistant Director of Technology & Innovation, Radian Group

The group's next meeting is on 03 October; please contact sheila.starr@ radian.co.uk for membership enquiries and details of the forthcoming meeting.

Epping Forest Council appoints Itica for its ICT strategy

IT consultancy Itica has secured several new projects with Epping Forest District Council including a comprehensive review of the council's corporate technology strategy and the procurement of software to support its housing, asset management and repairs functions. The consultancy is also advising on the development of a new networking and telecoms strategy.





Analyse

Housing Technology returned for the tenth consecutive year to the incredible BT Tower in central London at the beginning of September to host 'Connected Communities 2019', with the generous support of Aareon, BT, Castleton Technology and Itica.

HOUSING[®] TECHNOLOGY

With its core themes of 'analyse, predict & inform', the background to the event was how housing providers can streamline their internal operations and tenant engagement through innovations in selfservice, CRM, data management, process automation, AI, analytics and business intelligence.

The event opened with BT's legendary breakfast followed by a quick-fire series of talks from Aareon, BT (including one of their famed 'futurologists'), Itica and Wales & West Housing. After a very good lunch in the slowly revolving restaurant at the top of the BT Tower, with views over the whole of London, the afternoon presentations featured excellent talks from Castleton Technology, Connect Housing, Housing Solutions and Sovereign Housing.

Key points & common themes

CONNECTED COMMUNITIES 2019

The nine presentations covered a very wide area, but for the 90 guests, the key points and common themes were to move fast and nimbly with new projects (with a frequent emphasis on minimum viable products), embrace CCS frameworks (usually cheaper and faster), concentrate on getting your underlying data accurate and consistent (particularly for digital transformation), create project teams comprising diverse staff (for more innovation and better results), and examine the culture of how, when and where your staff want to work (millennials really do have the same aspirations and expectations as older generations).









Northgate's housing support for Brighton & Hove residents



Northgate Public Services is set to modernise housing services for Brighton & Hove City Council.

The council has selected Northgate's housing management system to offer more self-service options to residents and enable flexible working for staff. The solution will enable residents and staff to access any housing-related information they need from any webenabled mobile device.

Mo Lawless, programme manager, Brighton & Hove City Council, said, "We wanted to make it easier for residents to manage their rental payments, service charges and repairs in a way that best suits them and to enable our staff to have more time to support the people who need a more dedicated service."

Northgate Housing will enable Brighton & Hove's residents to log repairs, pay rent and service charges from a phone, tablet or PC and access the latest status of any enquiries or repairs.

Authorised council staff will have instant access to residents' records and will be able to add notes or update information while they are out in the community, saving time and helping to ensure the latest details are available across the housing service.





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