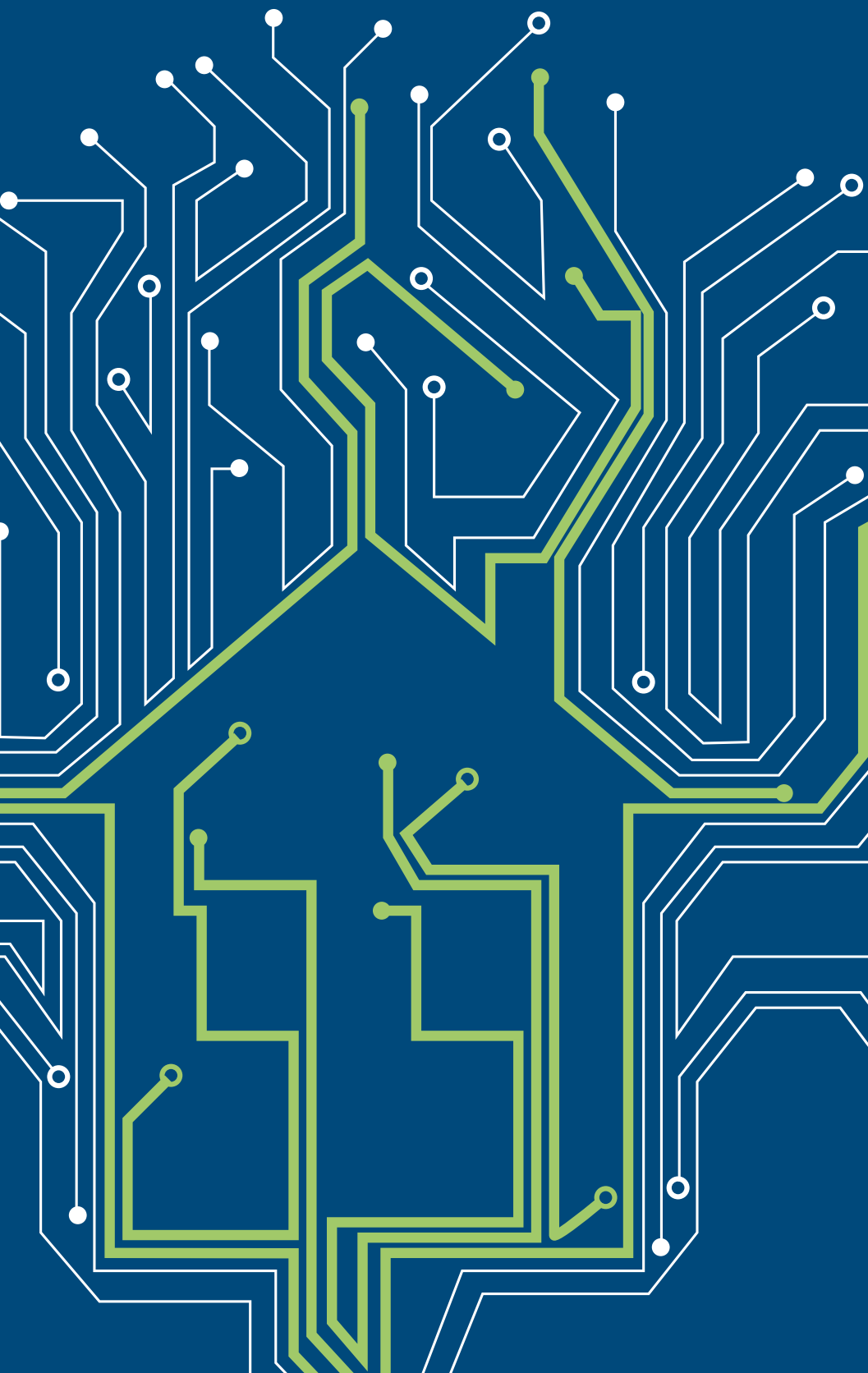# Using technology to **improve housing services** in the age of austerity

Universal Credit has been referred to as the biggest change to the welfare system of our generation; and its implementation is set to have a huge impact on housing associations. The shift from a range of social benefits to Universal Credit means that housing associations will inevitably communicate with tenants more frequently and attentively; and manage an increasing number of rent payments directly. These sweeping changes to the welfare system, combined with cuts in government grants, demonstrate that housing associations are being pressed to take on an increasing workload and demonstrate a greater return on investment for every pound spent.

Housing associations
are pressed to achieve more with less funding

Introduction

Housing associations are at the cutting edge when it comes to government austerity. Housing association tenants and employees are the most likely to be affected by challenging budgets and legislation changes , such as the introduction of universal credits, the welfare reform and work bill, and pay-to-stay rent pricing.

The housing sector is on a trajectory of rapid change. With central funding frozen, and benefit payments to clients similarly capped, housing associations must create operational efficiencies to cover any financial shortfalls.

Advances in technology offer opportunities to create these efficiencies, *and* improve the services provided to its tenants and partners alike. Digital transformation programs use these advances to fundamentally change the way a housing association works, using smart technology investments to streamline and refocus the services offered. These efficiencies will directly translate into operational cost savings, and when deployed correctly, increase customer satisfaction. Housing associations are also utilising advances in mobility and remote working technology to support the changes in modern working practices, this even applies to traditional 'HQ' activities like call centre functions

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Many of the reforms promised by the government at the start of this parliament have now come into force. Plans to implement the new pay-to-stay rent pricing scheme may have been cancelled[1], but there are other issues that housing associations need to address immediately.

The Welfare Reform and Work Act 2016 will be the most pressing of all issues now, and for at least another four years. Under Section 23 of the new legislation, registered providers of social housing are required to reduce rent by 1% every year, starting in 2016[2]. By 2019 rents must have fallen to 4% below the rate being charged on 31st March 2016.

With no signs of an imminent central funding increase, and no possibility of raising rents, all cost savings need to be made by the association themselves

The current housing landscape - Technology provisions

According to Focal Research, there are at least 1174 housing associations operating in the United Kingdom[3], each at a different stage in their digital maturity. As a result, many are still fully reliant on legacy systems that are inefficient by design.

Larger housing associations will have systems in place for tracking their stock and associated information. But these will often be accompanied by a range of other systems and processes, that need to collect, report and analyse data.

Problems occur when "bad" data is entered into the association's main system. Experian QAS estimate that poor data quality is wasting £1 in every £6 spent from the average UK departmental budget[4].

The disconnect becomes even more apparent when assessing the performance of workers in the field. Mobile employees will struggle to keep multiple systems and spreadsheets up-to-date. Even with remote access provisions, many will instead choose to return to the office to input notes, reports and assessments. This delay in data capture is another common source of inaccuracies as data is transcribed from handwritten notes or, worse still, from memory.

If current provisions are time consuming and prone to error, they will never be able to support associations that have experienced four consecutive years of decreasing rent revenue.

With 1% reduction in rents, how do **housing associations compensate?**

The reality is that a 4% compound reduction in rental income will have a serious impact on operations. Many services will need to be pared – or the processes behind them improved to make up the shortfall. Clearly inefficient IT systems will only serve to hamper these dual goals.

So how have housing associations begun their digital transformation programmes, and what do they tend to look like?

Investment in IT

One of those paradoxes that continues to ring true, is that investment is *essential* for creating cost savings. housing associations need to simplify and consolidate IT systems to create a reliable foundation and platform on which to build.

It is important at this point to note that the main objective of a digital transformation project is to improve the experience of the service for users, *not* simply to cut costs. So new IT investments need to be considered in light of how they will benefit service recipients.

Failing to invest is not an option however.

Outsourcing IT functions

IT is essential to *support* housing association business processes, but they do not typically or historically *drive* the organisations. As a result, outsourcing day-to-day IT operations may be a sensible strategic choice.

Paying someone else, such as a reputable and trusted third party service provider, releases housing associations from the responsibility and cost for "keeping the lights on" for their ICT systems. They are then free to reduce headcount, or to divert internal IT staff to work on strategic programs designed to help the organisation in its wider goals of becoming more commercial and agile.

Outsourcing the provision and management of some ICT services can generate immediate savings that can be reinvested in driving digital transformation forward. Working with an external partner to deliver these services, commonly leads to a change from a capital expenditure to operating expenditure model which enables housing associations to directly apportion a predictable monthly cost to the service.

Enhanced compliance and security

It may be that existing systems can be "unified" to simplify data capture and analysis. However, the complexity of such a project may not produce the required results, particularly if costs exceed those of a new best-of-breed systems.

Using multiple systems, no matter how well linked, increases the risk of a compliance breach, as data falls through the gaps between the systems. Another layer of complexity is introduced with so many internal data interfaces that access public sector purchasing frameworks, which further increases the cost of building a compliant system. Finding a trusted and reputable supplier who is accredited across the various frameworks and can provide most if, not all of the services in scope is the most desirable outcome.

Digital transformation will see systems streamlined and simplified – often by replacing the various applications already in place. Ideally, a new system will increase automation to enhance compliance at every stage and prevent manual errors being introduced.

Systems hosted in the Cloud, whatever its flavour be it private, public or hybrid Cloud also benefit from enhanced security; every application resides behind an enterprise grade security perimeter to prevent data loss/theft. Under the control of a service provider, all costs for resourcing and maintaining the security provisions are included in the fee and as mentioned previously there is commonly a move from a capex to opex financing model. Helping to further reduce IT capital spend – and avoiding the IT skills gap that threatens many on-site digital transformation programmes, 46% of IT pros say cybersecurity skills in their organisation are already coming up short[5].

Improved service delivery

Efficiency and speed are closely related – the quicker services such as maintenance repairs, are delivered to tenants, the greater the efficiency required in the supporting processes. In the age of on-demand, instant gratification services, tenants expect the same immediacy from their housing association.

The supporting infrastructure also needs to be accelerated wherever possible. Software defined networking (SDN) offers the potential to improve distributed, WAN IT services for instance. Linking geographically dispersed offices is greatly simplified – as is the provision of mobile working facilities. SDN services can be **'turned on'** and are operational much faster than traditional fixed line telecommunications services, giving it a fundamental advantage.

SDN also provides far greater control of network resources, guaranteeing critical services have the bandwidth needed for an uninterrupted operation. Mission-critical applications both in-house and in the Cloud are prioritised to improve information availability.

Predictive, proactive service delivery

In order to cut costs and improve customer satisfaction, associations will need to apply technology to increase the level of self-service that is available to their tenants. Allowing tenants to book online repairs themselves which is far more convenient for both parties –removing the need to wait for call centre opening hours before reporting an incident.

Digital transformation is an ongoing process but associations need to build a platform that evolves as technology does. For instance, the Internet of Things (IoT), uses smart sensors to detect various environmental factors automatically. Deploying IoT throughout an association's properties allows for monitoring of heating, lighting, water supply and security. Analysis of the data generated can be used to identify the tenants most likely to run into rent arrear problems *in advance*.

This level of foresight facilitates better planning and delivery of maintenance services, allowing expenditure to be allocated more accurately and reduce overspend. It also ensures that clients get the service they need at exactly the right moment – sometimes before they even realise there is a problem.
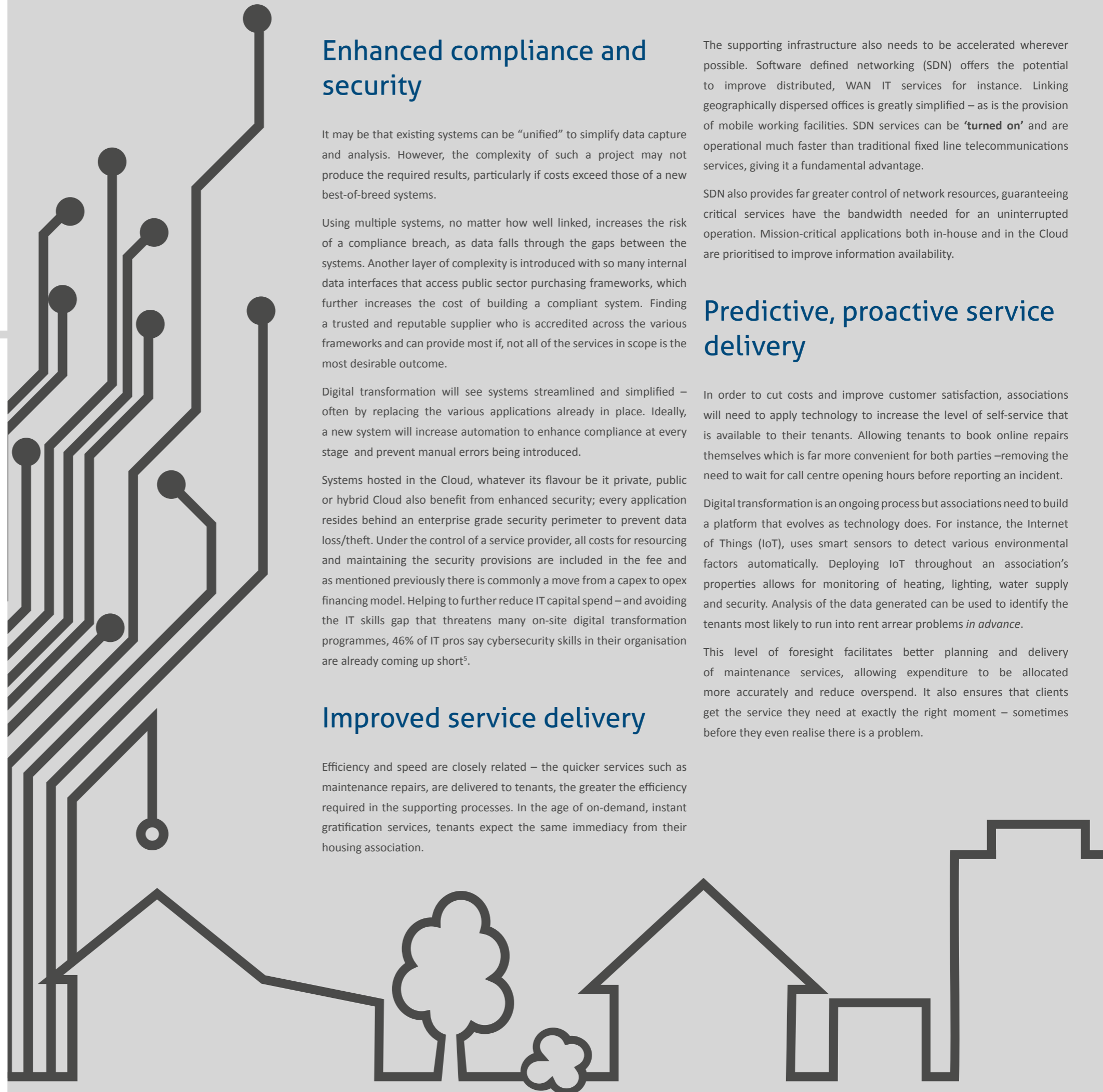
The Benefits of **Digital Transformation**

For any housing association determined to achieve the desirable Customer Service Excellence (CSE) standard, digital transformation is an important sign of commitment to that goal. But more than simply another tick in the checklist towards a Cabinet Office approval rating, digital transformation will provide the framework needed to realise a cost saving to cater for the annual 1% rent reduction but also to fund the growth and continued success of the organisation.

Significant employment savings

Outsourcing both IT infrastructure and support and maintenance services opens up new ways of working. Adding online self-service facilities to existing communications channels will help to improve the service offered, and to increase efficiency. As online channels become more popular, it will be possible to downsize the customer support department without compromising the quality of service offered.

Every call centre operative replaced by self-service technology represents a saving of approximately £16,500 per year[6] – plus all the additional employment costs like National Insurance contributions, pension and other benefits. Importantly, self-service will not completely replace traditional communications channels – according to the Government Digital Inclusion Strategy, around 10% of UK residents are unlikely to *ever* get online[7].

Improved client interactions

Centralising and consolidating information will make sure all housing associations employees have the data they need, when they need it. This means that they will be well placed to answer customer queries, arrange maintenance visits and process applications more quickly.

Although customer service ratings have been rising, local public services remain one of the UK's lowest performing sectors. With a satisfaction rating of 73.9[8], the public sector is actually the third worst, so housing associations must formulate a response quickly.

It is also extremely important to build customer communication channels according to their preferences. Interactive voice response (IVR) phone systems may be popular with providers because of the reduced running costs, but clients prefer to speak to a real person. If that is not an option, they can prioritise communication via the company website and live chat before IVR-based support[9].

It may be that simply making more contextual data available to front-line staff enables them to resolve queries more quickly, freeing them to deal with more issues and reducing the overall cost per "manned" call. According to figures quoted in the Digital by Default 2016 report from Housing Technology magazine, processing customer support queries online (90p) are more than 15x cheaper than a face-to-face appointment (£15)[10]. So organisations should encourage customers towards self-service channels wherever (and whenever) possible to reduce operating costs and achieve economies of scale within their provisions.

Increased productivity and output

Outsourcing the management of key applications helps to reduce the costs of running an on-site data centre, and supports new ways of working. Equipping field maintenance and other employees working outside the confines of one of the organisations offices becomes much simpler. So long as they have an internet connection, the field team can access key systems and data.

With well-designed mobile apps, housing associations can accelerate BYOD programs, should they wish to implement such a programme. With cloud-based systems employees in the field can use their own devices to access the information they need for site visits and tenant interactions.

> *"Without a stipend, direct costs of user-owned tablets are 64% lower. When organizations have several users who want a tablet as a device of convenience, offering a BYOD option is the best alternative to limit cost and broaden access."*
>
> **Federica Troni,** research director at Gartner[11]

Employees are empowered to use systems and tools they are already familiar with, boosting productivity from day one. Being able to access key data in the field will also cut down on secondary expenses, like mileage and even office space as mobile workers are able to complete virtually every task in real time, on the road.

Deploying automation will help to streamline repetitive tasks, freeing up manpower for other tasks. Reporting, analysis and general feedback can all be set to run automatically, making important data available and reducing the time required to make strategic decisions. Over time, intelligent systems will be able to act autonomously on that information, providing the option to further reduce headcount where appropriate.

Monetising digital data

Digital transformation is driven by data, which is why housing associations will need to store and process more data each year. Adding Internet of Things sensors into the mix will only serve to increase these data volumes – which is why many associations will have to move to hosted 'intelligent' data services in order to acquire the capacity they need and to contain their costs.

Although they have access to an unprecedented level of personal information about their clients, housing associations cannot monetise that information in the same way as private sector companies looking to do. Instead that data needs to be used to proactively plan workloads, projects and purchasing in such a way that spend is reduced at every opportunity.

Big Data analytics allow decision makers to access the context and data to make *accurate* forecasts based on previous observations. Those insights can predict peaks in demand for maintenance services, or even the upcoming failure of in-property units like boilers based on IoT sensor data. Which then supports just-in-time purchasing and service delivery, preventing the overspend associated with "just in case" buying.

Conclusion

It cannot be emphasised enough – digital transformation is about *improving the service offered to clients*. But there are benefits available to housing associations who are just beginning the journey of digital transformation.

Because there is a second truth to the data-driven revolution – making information more readily available quickly uncovers new ways of working. And it is here that the much-needed savings will be made.

Successful digital transformation relies on targeted investment in centralising and unifying data, replacing existing systems where there are inherent inefficiencies. Eradicating inefficiencies will help to reduce running costs, increase data accuracy – and raise the standard of service offered to tenants and the community.

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