

MOBILE WORKING 2.0



Housing Technology interviewed mobile working experts from 1st Touch, Incom Business Systems, Intercity Telecom and Waterstons on the new wave of mobile working practices, their predictions for the future and merits of the different technology platforms.

It is safe to say that the use of mobile devices such as smartphones and tablets, is now well established across most of the UK's social housing sector. In the past five years or so, the most obvious changes have been a combination of the ubiquity of mobile devices and the functionality of the software running on them, with a much greater blurring of the distinction between historically office-based applications and mobile applications (and apps, in many cases).

With many housing providers on their second or even third generation of mobile technology, what are the latest developments as we move towards mobile working 2.0?

1st Touch's CEO, Robert Dent, said, "The first main development is the higher number of what were traditionally office-based staff who are now spending more time in the field. The second is that the role of the traditional field worker has become less siloed; specialist skills are still needed, but an engineer will be expected to report if a tenant is vulnerable and a neighbourhood officer will be expected to arrange repairs."



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Robert Dent, CEO, 1st Touch

As recently as around 2010, many field-based workers needed a panoply of separate devices, perhaps comprising a PDA, mobile phone, laptop and lone-worker device, whereas now in most instances they only need one. As James Hayward, Incom Business Systems' corporate sales manager, explained, "Cloud-based collaborative apps and network-neutral unified communications

mean that workers only need a single device for the majority of work tasks. As a result, they can be more productive and housing providers gain more from expensive assets such as people, buildings, vehicles and IT infrastructure."

However, data access and security can sometimes be overlooked in the rush to enable mobile working. Waterstons' executive transformation consultant, James Alderson, said, "Recently, there have been significant advances in access to data and data security, with mobile application management providing secure data access and storage on any device; this allows many devices to be pushed out without ever having to worry about what is on them. Furthermore it offers a secure method of data access for those employees wanting to use their own smartphone or tablet (BYOD), providing a device-neutral approach to mobile working."

Mobile in five years' time

Peering into our contributors' crystal balls, in five years' time, not only will even more housing staff be using mobile devices for a greater part of their work, but data connectivity and coverage will be massively improved so that it will be possible to carry out more complex processes out in the field. Furthermore, 'wearable tech' and the Internet of Things will both contribute towards dramatic and often-unimaginable changes.

Waterston's Alderson said, "Looking ahead, we're going to see super-high speed, wide-area coverage for data connectivity; this will enable better access to mobile video, collaborative services and the cloud so that teams can work on large, complex documents wherever they are. And as more data and services move into the cloud, machine learning will push data to context-aware devices, giving you the information you need when you need it.

"Furthermore, using cloud-based services frees users from being reliant on any particular device, resulting in a combination of either having all information available on every device or, as computational power continues to increase, users will have 'one device that does it all' in their pocket but which also

wirelessly connects to interface devices and screens in the office when needed."



"Cloud-based collaborative apps and network-neutral unified communications mean that workers will only need a single device for the majority of tasks."

James Hayward, Corporate Sales Manager, Incom Business Systems

Dent from 1st Touch said, "In future, an even wider range of users will be using mobile devices for their day jobs. Just as desktops have largely given way to laptops, laptops will give way to tablets and smartphones. Also, mobile working will be linked to a wider range of devices and data metrics so that tasks will become more automated and booked to pre-empt issues before they arise. For example, a gas engineer will receive a notification that a boiler in a nearby property is not running efficiently and that the tenant is currently in. This means that the engineer can then go and service the boiler, without any intervention from back-office staff."

New areas for mobile working

The growth of mobile working in housing began in the obvious area of housing providers' field-based staff and in particular their repairs and maintenance teams. As technology has improved and become more pervasive, it has spread inwards from the field and is being used for a much more diverse range of roles.

Nayer Sultana, Intercity Telecom's housing communications specialist, said, "Technologies that enable 'presence' will continue to evolve onto mobile and wearable tech and that could lead to field workers being able to engage with more information than is possible today. For example, rather than calling for urgent assistance and having to wait for an expert to arrive, a first-line support worker could video conference the expert via a mobile device to diagnose any issues remotely and guide the people on the ground to resolve issues rather than having to travel there themselves.

"And with the introduction of universal credit and the likely need to collect rent



payments via a wider range of channels, the ability to turn a mobile device into a mobile POS will become more widespread."

From the point of view of tenants and mobile services, Waterstons' Alderson said, "Housing providers should look at creating a channel shift with their tenants, moving away from the traditional inbound-only call centre model to a more interactive service where tenants can self-serve and engage with their housing provider on their terms via mobile apps or the internet. In addition, freeing housing officers from their desks and empowering them to make decisions is also key to enabling this; this shifts the emphasis from just delivering access to information remotely to providing context-aware information on multiple devices."

1st Touch's Dent added, "The next generation of mobile working will provide access to information and processes to people on the move as well as to traditional field workers. Users such as supervisors will be able to have access to real-time information pertaining to their teams and even department heads and directors will use mobile technology to view the KPIs and information relating to their areas."



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James Alderson, Executive Transformation Consultant, Waterstons

Choosing the right platform

Windows, iOS or Android; which is the right platform for mobile working? While iOS has its typical Apple devotees, Android tends to be seen as more open and has a larger number of apps available from Google Play Store and Android Market.

Hayward from Incom Business Systems said, "Currently, Android is a more open operating system than iOS and Windows from a developer's viewpoint. Android allows developers to maximise the flexibility designed into mobile devices.



"Technologies that enable 'presence' will continue to evolve onto mobile and wearable tech, leading to field workers being able to engage with more information than is possible today."

Nayer Sultana, Housing Communications Specialist, Intercity Telecom

This is both a good and bad thing, because while it provides flexibility, it also makes Android more vulnerable to mobile malware. A big change from Windows and Android vendors has been the introduction of mobile security platforms for managing enterprise mobility, such as Samsung Knox."

Intercity Telecom's Sultana added, "The key is to have additional solutions to secure the devices such as mobile device management (MDM) software. In my experience of working in the housing sector, I see housing providers using all of the operating systems and there is no one preferred system. However, there has been an increased demand for MDM software as more and more organisations realise the importance of securing their data."

And in terms of particular platform-specific applications, 1st Touch cited a few interesting examples relevant to the housing sector. Google's Project Tango is a new Android development that makes a mobile device accurately aware of the size and shape of its surroundings and where the device is within it. This could streamline stock condition survey and voids or allow lone workers to accurately report not just GPS locations but also which floor, flat and room they are in.

Dent said, "Apple Pay has become phenomenally popular in the US, and when it launches in the UK, it could revolutionise the way that rent is collected. And while Apple usually keeps its cards close to its chest when it comes to development, the launch of the Apple Watch could very well jump-start the wearable technology market.

"Microsoft's approach is the unification of Windows across all of the hardware platforms. For example, with Windows 10, a user will be able to start one process on

their laptop, check updates on the process on their smartphone, and continue with the process on a Windows tablet."

Leap-frogging to mobile 2.0

According to 1st Touch, mobile 1.0 was very much about moving tasks and processes away from paper and onto devices, whereas mobile 2.0 is about providing a wider, more holistic view to mobile workers, anticipating and prompting actions and providing a full mobile workspace. With that in mind, can housing providers 'leap-frog' over mobile 1.0 and go straight to the new world of mobile 2.0, or do they need the basic infrastructure first?

Incom Business Systems' Hayward said, "No, housing providers don't need a platform right now. In fact, not having a mobile platform means the housing provider isn't constrained by existing processes. Housing providers need to identify a strategy based on an understanding of the long-term needs within their service model. The key is to identify the primary drivers for the mobilisation of staff and processes and not to try to do too much at once."

Alderson from Waterstons added, "Mobile technologies are becoming much cheaper and therefore accessible to all, and as further services move into the cloud, which inherently supports mobility, the need for particular devices and specialist technologies is diminished.

"It is much more about having an integrated information at the backend which allows the right information to be served to the end user on any device. Integrating data from different cloud providers, or from on-premise legacy systems is a significant challenge and should be given special consideration by any organisation looking at mobile working."

Housing Technology would like to thank Robert Dent (1st Touch), James Hayward (Incom Business Systems), Nayer Sultana (Intercity Telecom) and James Alderson (Waterstons) for their editorial contributions to this article.