



Remote working

Cloud software solutions and the post-COVID workplace

A white paper by

Mike Hartney

Chief Technical Officer
Integrator Housing Solutions

July 2020

Executive summary

The COVID-19 lockdown appears to have greatly accelerated the previous gradual trend for more people to work away from centralised workplaces.

Cloud-based solutions and widespread fast broadband connectivity enabled millions of office-based jobs to be rapidly dispersed. Without this new infrastructure – which we might call “The Worknet” – many businesses would have been unable to function at all in lockdown. It would have caused irreparable damage to them and to the economy.

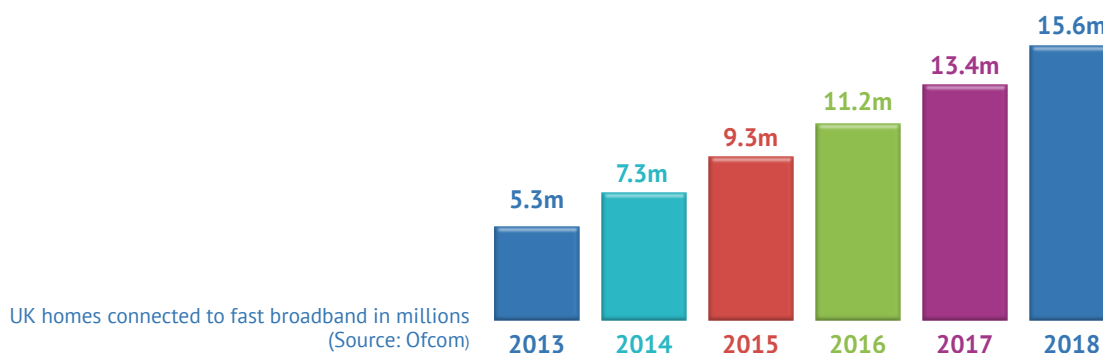
Pre-COVID it was already clear that employees increasingly want to be allowed to work remotely at least some of the time. Now, in the light of their lockdown experience, many businesses are

reconsidering what their future workplace arrangements will look like.

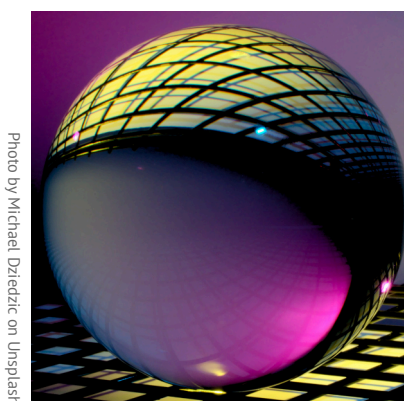
This white paper does not enter the debate around the pros and cons of “working from home”, partly because home is by no means the only option for remote working.

Rather, it charts the relationship between work and technology, and its influence on where people are most productive.

It finds that today the answer for many tasks and people, the answer can be “almost anywhere” especially when they work with tools designed to take full competitive advantage of the Worknet.



Cloud Services and the “Worknet”



The first Cloud computer was built in 1963. Only three users could access it at the same time, but its descendants grew into the staggeringly large and powerful Universal Access Multimedia Data Network we now simply call The Cloud.

Cloud services are critical to enabling more flexible working and better IT solutions. Defined as any service made available to users on demand via the Internet, as opposed to being provided from a company's own on-premises servers, they provide easy, scalable access from anywhere to resources and applications such as those offered by Integrator Housing Solutions.

We probably already need a new word for it; perhaps “the Worknet”.

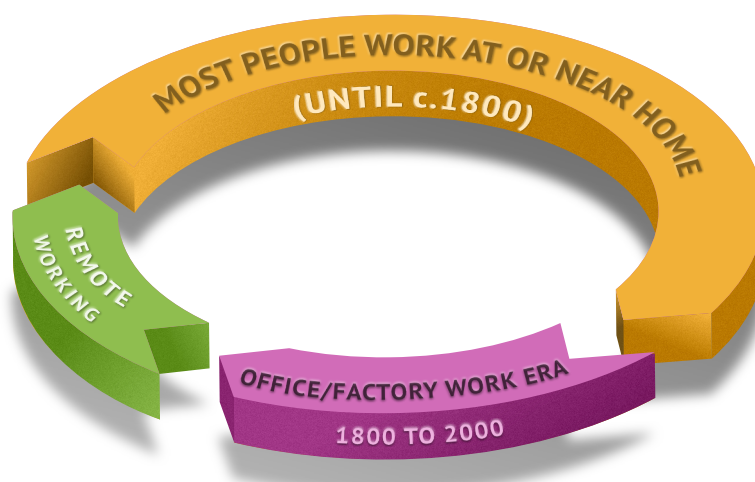
Part One: Technology and where we work

It is a paradox of modern life that, while the average UK home contains hundreds of thousands of times more portable computing power than existed in the entire world in 1980, and a 2020 car contains more lines of code than a Boeing 787 Dreamliner, the home's owner probably still mainly uses their car to go to work on a computer in an office or other workplace, typically situated nearly an hour away.

Even more paradoxically, this adherence to a strict separation between home and a defined workplace strongly persists despite immeasurable increases in the speed, availability and scope of mobile digital information. These offer huge potential for organisations to increase people's productivity and to plan and manage assets more cost effectively.

A brief history of work

If we look at the way our current working patterns evolved since the 1800s and the role played by industrial technologies, it seems possible – likely even – that Cloud computing was on the verge of triggering a profound change even before COVID-19 came on the scene



Until the late 18th century there was little separation between work and home life. Weaving, manufacturing and food production were performed at home in cottage industries.

Large-scale mechanisation during the 19th century rapidly shifted work away from the home and into waged occupations in factories and offices. In the 20th century, cheap public transport networks extended housing to the suburbs and satellite towns, while post-war policies encouraging car ownership as a key driver of economic growth sustained the travel-to-work culture.

Although the majority of businesses continue to keep their, data systems, businesses management tools and most of their staff under one roof in the 21st century, growing concerns about the health and environmental costs of commuting and rapid changes in information technology are driving a shift to more flexible working patterns.

200 years of remote technology

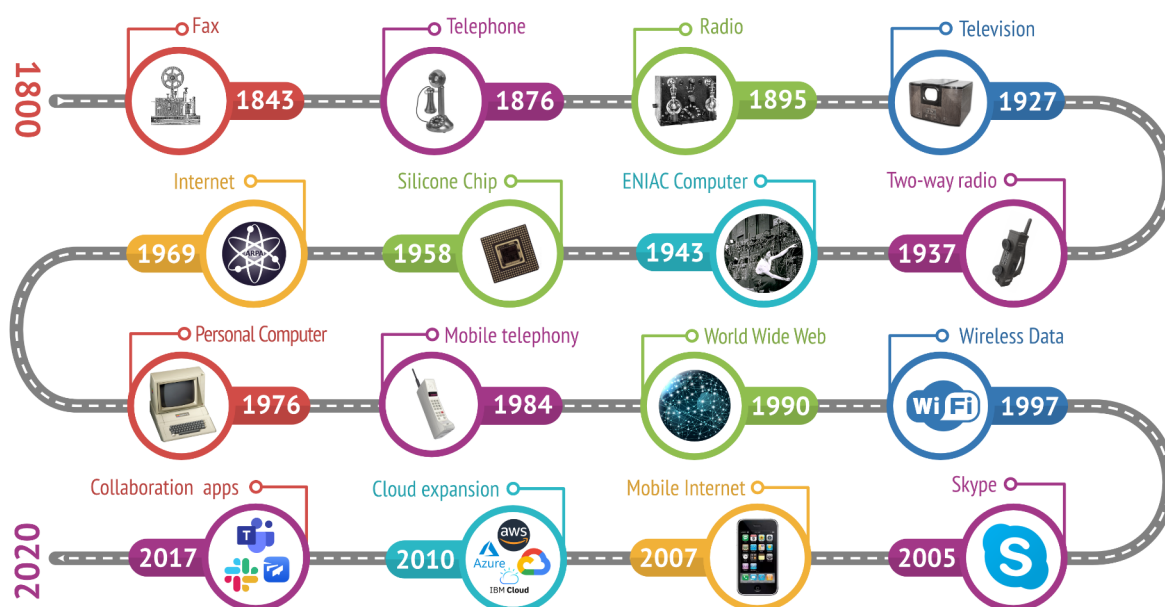


Not yet made for working from home: a computer delivery in New York in 1956

After taking almost a century to progress from the electric telegraph and fax in 1837 and 1843 to the invention of television in 1927, communications technologies developed incredibly rapidly from the 1940s onwards. Computing and semiconductors were developed in the 1950s. The foundations of the Internet and the Cloud were laid in the 1960s and 70s.

Today's work systems centre on the World Wide Web (launched 1990). They run on protocols and devices commercialised in the last 20 years: WiFi, high speed broadband, 3/4/5G smart devices and, above all, Cloud computing.

Start-ups began to commercialise the Cloud's potential to support decentralised business models around 15 years ago, leading to the growth of remote teamwork products such as Basecamp (launched 2004), Slack (2013) and Microsoft Teams (2017) as well as Cloud-hosted business solutions such as Xero accounting competing strongly with traditional installed software products.



Summary

Technologies in the 19th and 20th centuries concentrated work into factories and offices because that was where machines and information were located. IT initially did little to change this, as hardware and data remained accessible to employees only within the office. Cloud computing and high-speed broadband changed this picture.

Millions of office jobs can now be performed almost anywhere. More than 95 per cent of UK homes could

connect to fast broadband and 80 per cent have done so. The majority of employees who need a fast connection to work remotely already have one¹.

The long-term implications are summed up by Microsoft's decision, announced in April 2020, to drop the word 'Office' from its 30-year-old suite of business applications. The company says the move reflects its future focus on enabling users to collaborate "on anything from anywhere".

Part Two: Where next for the workplace?

Every essential technological precondition for significant take-up of remote working – i.e. the Cloud, wide access to broadband, online collaboration tools and more (let's call it "the Worknet") – was in place by the mid-2010s.

But although surveys repeatedly reported that a majority of employees said they were happier and more productive when allowed to work remotely all or some of the time², the numbers of workers and businesses taking advantage of the trend grew very slowly.

That all changed during the coronavirus pandemic. Government-imposed lockdown measures meant millions of office workers would have to work remotely or not at all.

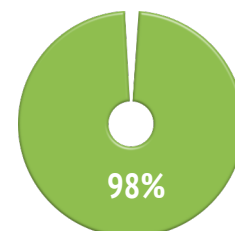
Under the pressure of the international emergency, hundreds of thousands of employers had to put the Cloud-based alternative working infrastructure to the test.

Astonishingly robust

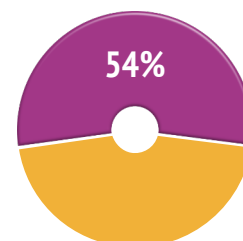
While not perfect, it proved astonishingly robust. Managers and IT staff at Leeds City Council, for example, were able to switch 10,000 employees to remote working over a single weekend³. Apps like Zoom and Microsoft Teams scaled up remarkably rapidly in the face of the sudden increase in demand. Teams grew from 32 million active users in March 2020 to 75 million in April⁴.

In fact, if the Worknet had not been ready to go when the pandemic hit, then lockdown might not have been an option at all. Businesses would have shut down completely when their offices closed, bringing much of the economy to an almost total halt.

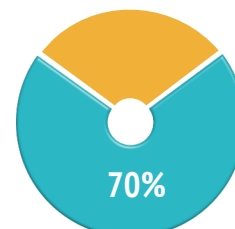
At the time of writing, July 2020, UK distancing guidelines are still preventing many workplaces returning to pre-COVID staffing levels. The question is whether all or even most of them will return to previous levels. Or will what we learned during the pandemic be a catalyst for a lasting change in how people work and the kind of products and solutions they use?



Office workers who say they would like to work remotely, at least some of the time, for the rest of their career (Buffer.com, 2020)



Office workers who say they would leave their job for one that offers more flexible time (Gallup)



Leaders who say working from home is the same or better for their team's performance (Global Workplace Analytics)

"Remote Working" vs. "Working from Home"

This paper discusses work that would normally be performed on company premises, but which is done off-site instead. We use the term "Remote Working" for such activity, rather than "Working from home" (WFH), for two reasons:

First, much remote work can be and is performed virtually anywhere, including coworking spaces,

cafes, public spaces and at other companies' premises. Home is, of course, the most common location for remote working.

Second, the term "working from home" covers many activities that do not use the "Worknet" such as piecework and various kinds of multi-level marketing.

2. Is Working Remotely Effective? Gallup Research Says Yes - Gallup.com

3. Coronavirus: 'We got 10,000 staff remote working from home in one weekend' - zdNet

4. Microsoft Teams now has 75 million daily active users - Business Insider

The post-COVID office

“There will be a long-term adjustment in how we think about our location strategy ... the notion of putting 7,000 people in a building may be a thing of the past.”

Jes Staley, CEO of Barclays

“We are looking for efficiencies as it relates to our ways of working since the crisis has showed that we can work in different ways and maybe we don't need all the offices that we currently have around the world.”

Dirk Van de Put, CEO of Mondelez

When 317 CFOs and Finance leaders were surveyed in March 2020, 74% said they will move at least 5% of their previously on-site workforce to permanently remote positions post-COVID 19. Nearly a quarter said they will move at least 20% of their on-site employees to permanent remote positions.

Gartner Inc.

There can be little doubt that the proportion of UK office employees who work remotely all the time will rise significantly from its pre-COVID level of around five per cent. Millions more, who previously only worked away from the office occasionally will do so more frequently. Nearly half of respondents to an ICM/YouGov survey in May 2020, for example, expect they will work from home between one and three days per week after COVID-19⁵.

Having no option but to close their offices during lockdown appears to have greatly reduced corporate resistance to the idea of more-flexible working. According to the US consultancy Global Workplace Analytics, companies' experience during lockdown has:

- Alleviated the fears of managers and executives
- Increased desire for disaster preparedness
- Heightened awareness of cost-saving opportunities
- Improved understanding of the potential impact on sustainability, e.g. emissions and employee stress due to commuting
- Reduced the perceived need for business travel

That is not to say that the enforced introduction of remote working was not challenging for many workers and organisations, particularly those whose systems and products were not suited to flexible access.

Cloud vs. Legacy systems in a crisis

General Practitioners were one example of a group that found their legacy systems an obstacle to remote working. While their personal laptops were often superior to their NHS ones for video consultations with patients, security restrictions prevented them from accessing the NHS Electronic Patient Record system on personal equipment⁶.

Fortunately, an NHS supplier that already offered a text messaging solution integrated with patient records quickly responded with Cloud-based video app. The app allows doctors to initiate consultations with two clicks, while patients don't need to download an app or create an account. GPs don't need a webcam or headset and they can securely use their smartphone to deliver the call without their mobile number being shared⁷. Within weeks the app was being used by more than 80 per cent of GP practices.

Secure, device-independent, easy-to-access solutions such as this will be key to achieving potential productivity gains in decentralised post COVID-19 workplaces, whether the task is seeing patients or managing housing assets.

5. The Flexible Future of Work – O2 Business

6. Covid-19: how coronavirus will change the face of general practice forever – British Medical Journal

7. Video consultation for NHS Trusts – accuRx.com

Conclusion

Coronavirus has dramatically accelerated the adoption of flexible working policies. Research has repeatedly shown that a majority of employees strongly desire more flexibility, and that they are happier, healthier and more productive if allowed to work remotely some or all of the time.

But as many companies have found, making remote working work is much more than simply a question of setting up VPNs and using collaboration tools like Slack and Zoom. Many of the core products and systems that businesses need for their day-to-day operations predate the Cloud and were designed in expectation that users would travel to an office to use them.

Contrastingly, being device- and location-independent makes Cloud computing solutions far

better suited to the future of mixed remote and office-based working. There are no installations or downloads. Users log in online at any time, from wherever they are, and on whatever Windows, Mac, iOS or Android device they use. Updates and upgrades are done automatically.

That is why we design our new solutions for the housing asset management sector, such as **Integrator Plus**, as web-based solutions. To give our clients control of their data anytime, anywhere.

Remote working is just one key trend that has been accelerated by COVID-19. Going hand in hand with it is faster migration away from legacy software solutions to Cloud-based products and services that deliver better value wherever employees work.

About the author

Mike Hartney is the CTO of Integrator Housing Solutions and has been managing and motivating software development and support teams for more than 10 years. For the last five years, this has been exclusively via remote working.

About Integrator Housing Solutions

Integrator Housing Solutions is a leading provider of comprehensive asset management software systems for social and private housing. Thirty major housing associations, local authorities and contractors have been using our solutions for over 20 years. Everyone in the IHS team works remotely.



Integrator Plus offers the next generation of web-based asset management software. It is streamlined, automated and understands all of your asset information from one powerful application.

To find out more visit www.integrator.solutions or call 0808 133 4567