The new real

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Mark Smith and David Savage report on research that reveals how smart buildings can offer new revenue streams and competitive advantage

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There are considerable gains to be made from digital advances in commercial real estate, going far beyond those of energy efficiency and sustainability. The smart built environment can open new revenue streams, enhance employee productivity and wellbeing, and cut costs significantly. Smart buildings are becoming critical to competitive advantage.

Charles Russell Speechlys has undertaken research with 5 key stakeholder groups ? owners, occupiers, developers and contractors, investors and funders, and technology and service providers ? and applied our legal thinking to identify potential pressure points. It involved in-depth interviews with 30 leading industry figures and a survey of 300 senior individuals from UK commercial real-estate and construction.

The research found that, while 62% of respondents are either taking no action or still weighing up how to respond, 38% are exploiting the opportunities presented by smart buildings. We identified 10 trends that are reshaping routes to growth:

- smart buildings enable gains beyond sustainability;
- connecting with smart networks in the built environment opens new revenue streams;
- owners and occupiers will change the way they value commercial property to make smart gains;
- smart gains will require new partnerships and networks;
- larger occupiers will adjust the mixture of core and flexible space they use;
- occupiers will push owners to rethink commercial lease terms;
- futureproofing means building in flexibility;
- overcoming obsolescence is pivotal in securing returns;
- construction innovations will be crucial in encouraging future adaptability;
- smart buildings and the Internet of Things are opening a Pandora?s box of legal risks in relation to data protection and cyber security.

A sizeable minority of businesses are taking the lead and developing new capabilities to benefit from smart buildings. But there are significant hurdles to overcome, including new legal, security and competitive risks. The effect of smart buildings on 4 of the key stakeholder groups is considered below.

Owners

Gains on offer

Smarter buildings will become an increasingly important part of landlords? offer to tenants. Those offering digital capability, sustainability and wellbeing will become more attractive, increasing the likelihood of securing occupiers from high-growth sectors such as technology

where greater value is attached to a digitally enabled environment.

Buildings that are adaptable to tenants? changing technology needs and space requirements will extend their profitable life for owners, while avoiding the high cost and carbon footprint associated with knocking them down and rebuilding them.

By quantifying the cost savings and other business gains from smart buildings, landlords will be able to justify higher rents. Introducing more flexible use of buildings ? such as promoting sharing by multiple tenants ? could make returns less predictable for owners but may conversely offer a more immediate, market-tracking return on rental growth than a traditional 5-year review model.

Enabling gains

Landlords will need to work more closely with their tenants to help them to exploit the potential of data that is recorded by the built environment.

Decision-makers for corporate occupiers want data-driven evidence if they are going to pay higher rents. Owners want to support the value of their smart buildings with such evidence to build and maintain asset values. As occupiers seek new ways of working thanks to technology, landlords may need to think about providing different types of workspace, being flexible and making it easier for tenants to fit out buildings to their own preferences in terms of technology and layout.

More flexibility will also need to be built into lease agreements. Landlords that offer flexibility on alterations, reinstatement, and shared space, for instance, will prove more appealing to future tenants.

For those office buildings that are not yet smart, moving from copper to fibre cabling and embedding sensors will be a priority if they are to meet tenants? future needs. Securing leading energy supplies and telecoms provision should be top of owners? priorities.

Landlords of listed buildings face a tougher challenge. Their properties cannot easily be adapted, but will cease to be competitive if they cannot adapt.

Key areas for gains over the next five years

- **New revenue:** 56% of respondents to the Charles Russell Speechlys survey see opportunities for smart buildings to enable new revenue growth.
- **Workforce gains:** 59% say benefits to productivity and employee wellbeing represent a big opportunity.
- **Efficiency savings:** 62% foresee opportunities for reducing energy costs through smart building management.
- **Greater flexibility:** 57% say more adaptable real-estate developments offer opportunities for their business.

Legal pressure points

Lease models may be forced to adapt as demand from occupiers for flexible space increases. Owners will look to use industry standard agreements to speed up wayleave agreements and licences to alter; the City of London wayleave toolkit (see p.9) is a welcome development.

Tenant demands to share space could create risks for owners, in terms of unknown occupiers acquiring security of tenure, property damage and difficulties with future redevelopment plans.

Security of tenure for commercial leases looks increasingly obsolete, and the statutory regime under the Landlord and Tenant Act 1954 needs revisiting, perhaps with the creation of exemptions for entire buildings.

The need for flexible space in the smart era will create tensions between occupiers and owners as the latter continue to seek long-term security of income.

Occupiers

Gains on offer

Businesses that occupy office buildings or retail centres consider them not only as functional spaces in convenient locations but also crucial in securing competitive advantage.

With sensor technology improving, along with increased adoption of mobile devices and rapidly evolving artificial intelligence and analytics software, the value of smart buildings to occupiers is growing exponentially.

As the urban environment becomes embedded with sensors, the data recorded can be contextualised and processed for commercial insights and, in some cases, monetised. For instance, retail centres with embedded sensors can collect valuable data about consumers as well as sound, energy and light levels.

Savvy business leaders are also paying more attention to how smarter buildings can improve employee health. According to the World Green Building Council , typical building operating costs break down as 1% on energy, 9% on rent and 90% on staff salaries and benefits. While sustainability has been key to businesses? adoption of smart building management systems, the potential for productivity gains from temperature, air quality and lighting data may prove even more valuable.

Smart building energy management systems can adapt consumption to the needs of occupiers to eliminate waste and cut costs. Numerous studies of large corporations that have adopted smart systems and analytics software demonstrate energy savings of 10?30% on deployment.

Enabling gains

Few occupiers have all the skills to monetise data from smart buildings, or even to extract valuable business insights from it, so they may need to partner with software and data analytics specialists. Closer co-operation between landlords and tenants will be needed as well, especially in the retail sector. Introducing more collaborative spaces and enabling more

mobile working will help improve businesses? agility, and will help cut costs by reducing the office space they use.

Legal pressure points

Occupiers should specify early on in discussions with a potential landlord the flexibility they require, and establish whether the owner is able to meet their needs. In a tight lettings market, all but the most powerful occupiers may need to compromise and in the longer term, tenants may need to lobby owners? representatives to encourage change.

How long before we see the emergence of digital performance certificates alongside the tightened energy requirements for commercial buildings from 1 April 2018?

The smart environment will create many opportunities to harness and use data generated by occupiers, both in individual buildings and across wider corporate estates. Data sharing between organisations and with public authorities and regulators will require a careful review of network and IT capabilities, as well as a rethink of what is collected from whom, and who needs access to what for which purpose.

Where data is collected from multiple sources, the prospect of incompatibility will need to be addressed. As well as managing confidentiality, it will be essential to think ahead about the purposes for which data may be needed, as new automated intelligence tools will greatly increase the value of data; assuming restrictions do not require the data to be deleted or prevent use.

Developers and contractors

Gains on offer

The first challenge is to understand the scale of the paradigm shift that is occurring. There will be tough calls on how to reposition traditional businesses in the smart era, who should partner with you and how to respond to new entrants or business models.

The research has identified many of the key trends in smart building, but good strategy for developers and contractors will depend on the business?s judgement calls, most notably on product development and process, positioning and investment.

For example, UK contractors should be investing more in technological research and development, not least to mitigate the sector?s relatively high level of inefficiency and waste. But in the low-margin business of UK contracting, which areas of investment will provide the best return?

Enabling gains

The adoption of building information modelling (BIM) Level 3 in due course will be fundamentally inconsistent with the silo-based, adversarial culture that persists in some areas. There will be commensurate challenges for contract drafters, and construction insurers, as they seek to better document issues around collaborative working, BIM process, BIM model ownership and other intellectual property rights issues.

Different models can be adopted to improve constructors? capabilities in areas such as

off-site fabrication, modular design and manufacturing. Laing O?Rourke has created an advanced manufacturing facility that will enable highly automated and rapid production of homes. It is also leading a consortium of 22 partners as part of its Advanced Manufacturing Supply Chain Initiative, facilitating research into modular design and manufacturing, and training related to digital engineering, the manufacturing process and installation.

Developing products to meet the needs and expectations of the tenant and investor community will be a priority for commercial developers. But regulatory change will also influence the agenda. Wired certification programmes are already emerging, designed to collect information about the internet connectivity and infrastructure of commercial buildings that will be made publicly available to businesses of all sizes looking for office space. How long before we see the emergence of digital performance certificates alongside the tightened energy performance certificate requirements for commercial buildings due from 1 April 2018?

Investors and funders

Investors and lenders who see the new, fluid, occupier model as an opportunity not a threat can exploit the potential gains. More lease and rent events such as new tenancies and renewals can ? in an attractive, connected, competitive building ? offer quicker rental and residual value growth than in a building on a conventional 5-yearly review lease.

Taking new revenue opportunities ? be they help for occupiers to maximise the efficient use of their space, sale of hospitality services, or more sophisticated turnover rent models that record all the online revenue streams occupiers are exploiting, for example restaurants? additional revenue from Deliveroo sales ? could supplement and even outstrip pure rental income streams.

The threat for investors and lenders is that the tech giants and well-funded start-ups look on this as a business area that they can disrupt, using a different business model to that of the traditional property investor. How long before a tech giant starts offering space to occupiers at below market rents, to attract talent and ideas and enable it to sell its services? A similar evolutionary process is starting to be seen in the UK hotel and student accommodation markets, where Far Eastern investors are pricing according to revenue models informed by expectations in their domestic markets.

Conclusion

In the new reality for the digital built environment, we could be looking at a very different sector, in which:

- the 1954 Act no longer remains fit for purpose;
- planning law may need to change to reflect more fluid, multi-use requirements for space;
- contractors will need to become more efficient, taking up digital technologies and more collaborative contracting structures;
- the broader property industry must fully understand data management and cyber security;
- technology and brand may become more important sales features than specification or rental levels bb digital capabilities and resilience are key contributors to commercial real-estate value.

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Further information

- Download a copy of the research or request a hard copy
- Follow us on social media by searching for #thenewreal
- Related competencies include: Data management , Development/project briefs , Landlord and tenant , Planning , Property management
- This feature is taken from the RICS *Land journal* (December 2016/January 2017)