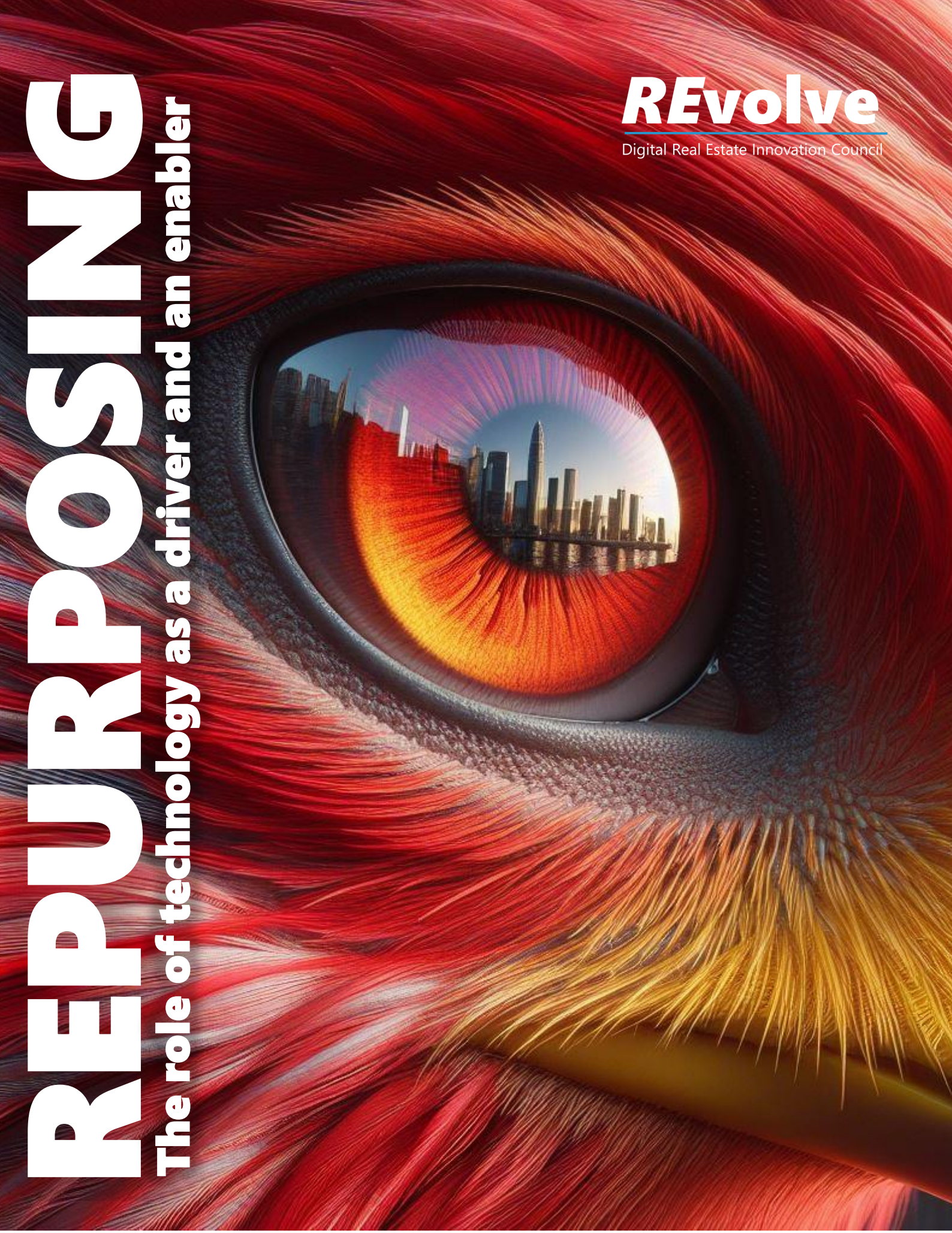
REPURPOSING

The role of technology as a driver and an enabler



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Introduction

The world is evolving and buildings must reflect this to appeal to end users who are more connected, more eco-friendly and more socially aware than ever before. Forward thinking landlords are reimagining how their properties can appeal to prospective tenants or customers and managing them with these people in mind. This often requires significant refurbishment, to raise the quality of the building and upgrade systems and operations to improve performance and meet the growing user needs. But these upgrades require capital expenditure which means the business case, at times, fails.

There is also an imbalance today in the supply and demand of buildings, driven by an evolving and technology enabled society. Broadly speaking there is an oversupply of office space and undersupply of space for many other uses such as residential, life sciences, logistics, and data centres. In the past, underperforming buildings were often demolished and rebuilt to meet market need, but this practice is increasingly discouraged by Government[1] and campaigners due to its negative impact on the environment. An alternative solution for owners can be to repurpose their existing property to another use. However, this adds a new layer of complexity, with several barriers to a successful outcome.

This paper explores the impact of technology on the evolving demand and supply dynamics within the real estate market, the challenges associated with repurposing and how technology can help propel the sector towards a more resilient and responsive market for the future.

[1] https://www.bbc.co.uk/news/science-environment-61580979

Section 1

The impact of technology

The real estate sector has transformed in recent years, in part driven or enabled by technology, reshaping the demand for properties and the way that they are used.

Office evolution

The office market has seen an evolution in its role that has been accelerated since the Covid-19 pandemic. Whilst the future is bright for many offices, the widespread adoption of remote work due to technological advancements has significantly impacted demand. New hardware such as the use of smartphones, the growing acceptance of virtual conferencing tools such as Microsoft Teams or Zoom and the adoption of software to increase automation, all mean a reduction in administrative work and an ability to work from anywhere.

According to the ONS[2], 44% of workers reported working from home or hybrid working in the last seven days (September 2022 to January 2023).

In line with these new ways of working, occupier requirements have changed leading to reduced need for large office spaces that are poorly connected, inefficient, or do not support a hybrid workforce or face to face collaboration.

The buildings themselves are also evolving because of technology; the introduction of smart sensors to measure energy usage and air quality has helped occupiers choose offices that perform well in these areas over those that do not.

Impact: As technology drives change in office use and increased data allows more transparency, there is a downward pressure on rents and increased vacancy rates for buildings that do not meet market needs. This presents potential opportunities for repurposing.

E-Commerce and logistics

The surge in online shopping has fuelled demand for warehouses, distribution centres and last-mile delivery hubs.

Traditional retail spaces are adapting by integrating online and offline experiences such as click and collect, but this has led to the closure of many retail stores, particularly on high streets where *vacancy rates remained at 13.8% in the first quarter of 2023[3].*

Impact: Retailers are increasingly needing to combine the real and virtual worlds to meet customer requirements. As demand for some retail spaces reduces, empty shops and shopping centres can be seen as potential sites for alternative uses, although this is balanced by a concern that once repurposed, there may be a negative impact on the wider 'place' or community.

Data Centres and Cloud Infrastructure

The exponential growth in data collection, processing, and storage has created the need for more data centres to house servers, networking equipment and cloud infrastructure.

The volume of data collected and stored will continue to grow exponentially especially with the growing adoption of AI tools. There is likely to be a growing appetite for both small and large data centres, located near and far as we move into the future.

[2] Characteristics of homeworkers, Great Britain: September 2022 to January 2023 (Data from the Opinions on Lifestyle survey (ONS)

[3] Retail Insight Network: UK retail vacancy stagnates at 13.8% in Q1 2023

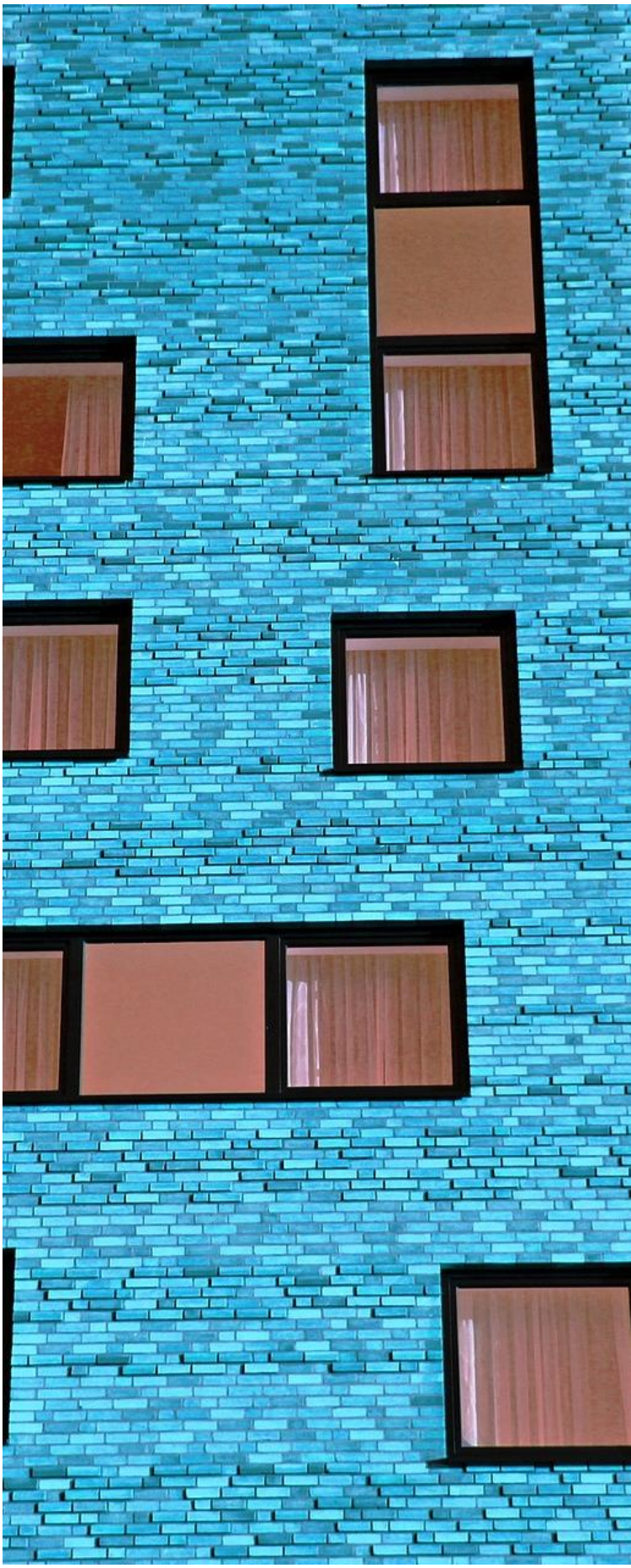
Impact: Empty buildings such as offices or high street locations in attractive locations are potential sites for conversion into data centres, assuming the relevant structural requirements can be met.

The global data centre market is projected to reach 235 billion euros by 2026 with a projected Compound Annual Growth Rate of 4.5%.[4]

Autonomous Vehicles

We are still some distance from fully autonomous vehicles becoming main stream, however many believe this will happen within the life of a typical building. As we do move into a world of fully autonomous vehicles, we will see a significant impact on certain asset classes. For example, the need for car parks is likely to be significantly reduced and the location of warehouses, often influenced by the ease and access to drivers and transport routes, will become much more flexible. As we also see a growing adoption of robots, warehouse location will no longer need to be so closely related to labour availability. Whilst the overall need for warehousing is likely to increase, the location demand may change as the link between warehousing and the staff needed to run them is reduced.

Impact: In time we can expect to see a growing need to convert car parks as demand falls for parking spaces and a repurposing of assets as the geographical demand for warehouses evolves.



[4] Clifford Chance: Data Centre Trades 2023

CLIFFORD
CHANCE

We have seen lots of interest in repurposing assets, but depending on the nature of the asset, the ownership structure, financing arrangements and planning constraints, they can be challenging to make work. With good advisers, it is possible to address these challenges, but the repurposed asset must make a compelling financial case, and as ever that often comes down to location - being in key centres, having access to transport and the right amenities.

In our experience developers and investors having the most success with comprehensive "brown to green" office projects, are those significantly redeveloping existing assets to improve their environmental credentials and increase their attractiveness to occupiers. This is more than a classic “cut and carve” process, but rather a major shift away from demolition and new build to “deconstruct” and “retrofit plus”. These themes are explored in our Construction Onsites vlog.

We have significant experience advising on market-leading examples, including 100 New Bridge Street, 30 Finsbury Square, Sackville House and 65 Gresham Street.

Although a major construction project, “brown to green” redevelopments can be made to work environmentally in several ways, including use of repurposed or recycled materials and considering the carbon impact across the building's life cycle, including operation, and planning for further re-use at end-of-life. This theme of decarbonisation, reducing waste and the circular economy is at the top of occupiers, developers and investors' concerns and one that RICS president, Tina Paillet, is focusing on during her presidency.

The construction industry has responded to this emphasis on environmental performance with various tools including new green focused provisions in the upcoming JCT 2024 suite of building contracts, the RIBA Plan of Work focusing increasingly on refurbishment and the RICS whole life carbon assessment.

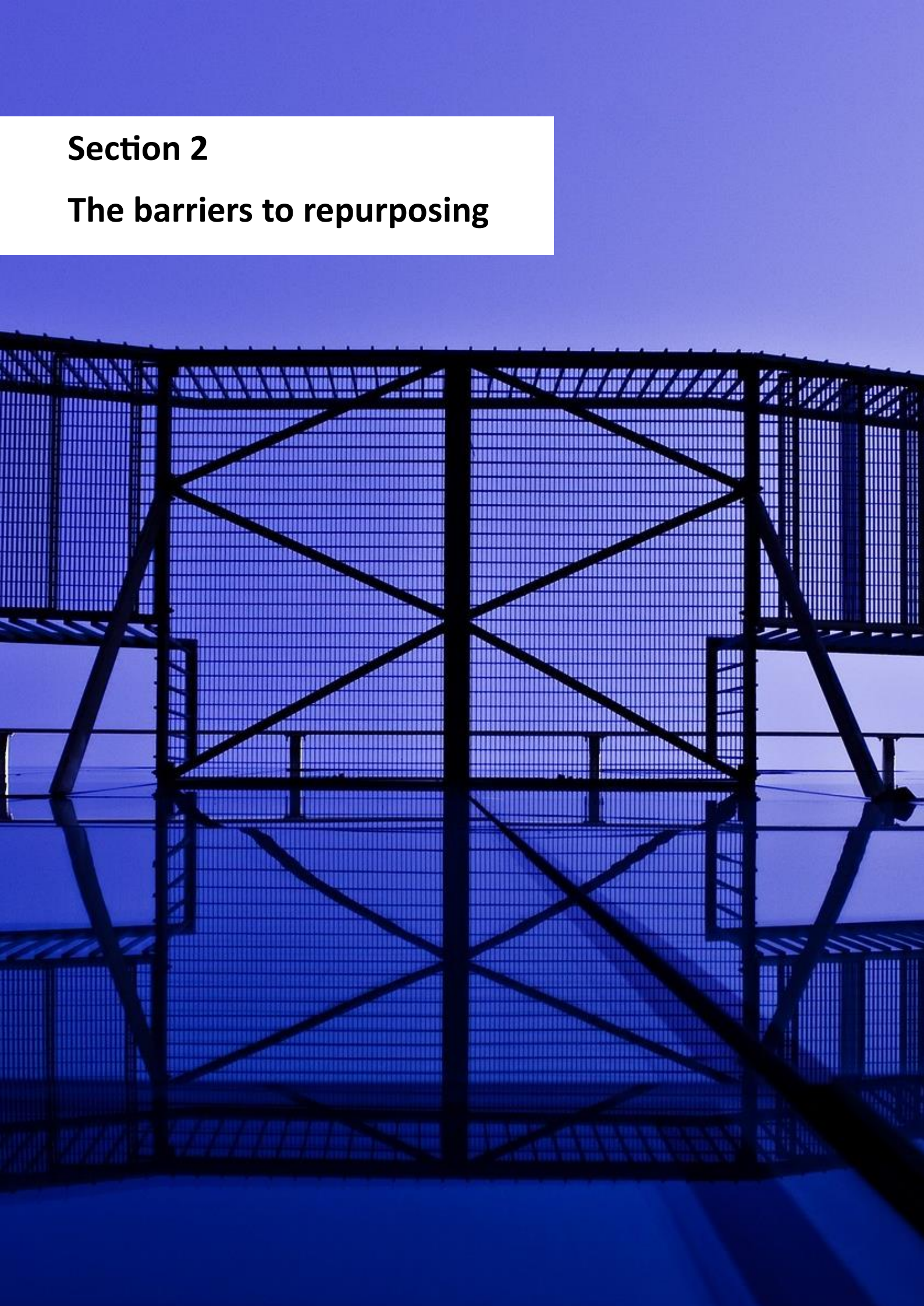
“Brown to green” projects place increased risk on the construction team due to the interface between the old and new structures and the frequent need to “wrap” retained elements of the existing building. This can be challenging in a market under pressure from inflation, labour shortages, supply chain disruption, and increased contractor insolvency. We help developers and investors navigate these risks by producing a well drafted suite of construction contracts with appropriate liability caps and, importantly, a distinction between “delivery” and “performance” risk. We are also having discussions with latent defects insurers to plug any gaps and we predict this will be important on larger schemes to satisfy defect recourse requirements of major occupiers.

Brown to green projects can also have considerable impact on local communities. By giving familiar buildings a new lease of life, they can help regenerate areas whilst addressing concerns from communities worried about rapid change to their townscape.

Repurposing and “brown to green” is not just about the building itself but also about the benefit to society and the planet.

Section 2

The barriers to repurposing



Whilst the changing supply and demand for space leads to significant opportunities for repurposing buildings, there are also several substantial barriers that need to be overcome.

Valuation and property value

Reviving an underperforming asset by converting it to something new can add significant value to a building and can be a lifeline to investors. However, there are times where the valuation process as it stands hinders repurposing. Owners might jump at the idea of converting a low grade, unoccupied office block into a state-of-the-art life science lab but if the valuation process does not reflect the new value, or shows it as being less valuable, then the plans may fall flat.

There are a number of hurdles that need to be overcome with the current valuation process which are exasperated when it comes to repurposing assets:

- A growing number of factors drive value and property decisions, and these need to be included in the valuation process. For example, RICS recently published guidance on the inclusion of ESG in valuations[5]. However, this is problematic as some of these new data sets are difficult to access at a market level. Where they are accessible, they are often not consistently standardised. With valuations needing to be evidence based, inclusion of these factors is not always possible. This means that a repurposed building may be theoretically more valuable, but this may not be reflected in its valuation.
- There are a number of different approaches (e.g. Market approach, Income Approach or Cost approach) and methods (e.g. Comparable transaction, Discount Cash Flow, Replacement cost, Reproduction cost or Summation) to valuations. As assets are repurposed, different approaches and methods may be more suitable so the same building may be valued differently once converted. This can lead to a significant change in the reported value of the property, which in certain cases makes an otherwise logical business case difficult to justify.
- Valuers are required to *"…bring the required levels of independence and objectivity to bear on individual assignments, applying professional scepticism to information and data where it is to be relied on as evidence…."*[6] However, as more factors are considered within a valuation such as ESG, multiple different scenarios and uses are considered and different methods are used, the volume of data that a valuer must use is growing exponentially. Valuers are being tasked with both using more data and also understanding the credibility and suitability of that data. In time, it will become impossible to achieve both and force valuers to either use data that is not robustly scrutinised or to not use data within a valuation that provides the insights required for accurate valuation.
- As building valuations move closer to business valuations, the data infrastructure and assets that exist will become part of the building's value. This is not yet systematically built into valuations, however, different buildings need very different types of operational data and so the value of the data may vary as buildings are repurposed.

5 https://www.rics.org/content/dam/ricsglobal/documents/latest-news/WBEF-ESG-and-valuation-2024.pdf

6 https://www.rics.org/content/dam/ricsglobal/documents/standards/2021_11_25_rics_valuation_global_standards_effective_2022.pdf

Planning and feasibility

Assuming that an owner is happy with the potential value of their converted building, they must then navigate the planning system which can be complex, expensive and time consuming. Feasibility studies can take months and are costly, especially when a change of use class is involved.

Changes in Permitted Development Rights (PDR) have helped by encouraging the revival of redundant or low-grade buildings. In 2020, the introduction of a new use class E (commercial, business and service)[7], grouped together a number of use classes which made it easier to convert offices or retail units into life sciences labs, light industrial units or residential homes without full planning permission. In March 2024, the PDR rules were eased further when the restrictions around floor space thresholds and vacancy requirements were scrapped, opening up the potential for far more commercial spaces to be converted[8]. Whilst this might help government add to the housing stock, permitted development residential schemes have their downsides.

Some are concerned that the lack of stringent planning procedures creates lower quality homes. In 2020, a government backed report found that just *22.1% of homes created through PDR met national space standards, compared with 73.4% delivered through full planning permission*[9]. Permitted development is also exempt from affordable housing contribution rules and does not always qualify for a Community Infrastructure Levy (CIL). All of this reduces the appeal of Permitted Development to Local Authorities and can hinder the argument for repurposing.

"…a total of 73,575 new houses have been converted from offices under permitted development rights since 2015.

More than 18,000 affordable houses have been lost as a result of office-to-residential conversions under permitted development [10]"

CASE STUDY

Repurpose or redevelop: Marks & Spencer's Orchard House

The proposed redevelopment of Marks & Spencer's (M&S) flagship store on Oxford Street, Orchard House, has hit the news, viewed by some as an unofficial test case for embodied carbon versus long-term operational carbon. It involves a legal battle with the Secretary of State over planning and it showcases how complex it can be to repurpose or redevelop a building that is no longer considered fit for use.

M&S applied for permission to demolish Orchard House and replace it with a nine-storey multi-use building which would reportedly 'deliver a net positive contribution to the environment from 11 years onwards'. The local planning Inspector granted permission but that decision was overruled by the Secretary of State on environmental grounds. In March 2023, the High Court ruled that Secretary of States's decision to block the redevelopment was unlawful.

This illustrates how difficult it can be to bring new life to a building when there are multiple, conflicting views on its future.

Source: Marks & Spencer, The Guardian

[7] https://www.townplanning.info/what-is-class-e-planning-use/

[8] https://www.theconstructionindex.co.uk/news/view/permitted-development-rights-relaxed

[9] Inside Housing

[10] https://www.local.gov.uk/about/news/over-18000-affordable-houses-lost-office-residential-conversions

The recent loosening of Permitted Development Rights (PDR) for Class E commercial use premises (including retail, office and light industrial) to convert to C3 Residential Use opens up significantly more opportunities. The key considerations are the removal of the need to demonstrate the property is currently vacant and the removal of the floorspace threshold which previously stood at 1,500sqm. This relaxation brings many more buildings into consideration for conversion to residential via the shorthand Prior Approval route rather than a full planning application. Planning Authorities may still seek to restrict such PDR by introducing an Article 4 Direction to remove Permitted Development Rights within a defined area but it will take at least 12 months to adopt a new Article 4, so there is an opportunity now to move schemes forward relatively unimpeded.

We are seeing a flurry of interest in the new PDR even if it is simply to establish a precedent for residential use but then follow up with a more optimised mixed use or residential scheme which requires full redevelopment. We also continue to see increasingly creative and more carbon conscious proposals to convert and expand existing buildings for new uses be that life science, student accommodation or hotel.

The recent M&S Oxford Street High Court ruling should provide landlords and developers with greater confidence for future redevelopment of unviable assets. The Court ruling quashes the Secretary of State's (SoS) refusal to grant planning permission for this high-profile scheme. The Court ruling confirms that heritage impact and retrofitting options are important considerations but that this does not necessarily outweigh the wider public benefits and long-term viability that a redevelopment might bring. In the M&S case, improved retail and high-quality office provision were key policy objectives in the Development Plan and the Judge found that the SoS had misinterpreted national policies and the weight that should be applied to alternative options in coming to his judgement. Knight Frank believes this landmark case provides a helpful precedent that should help clear the path for further commercial redevelopments where the existing configuration can be demonstrated to be unviable.

Business case and finance

The financing of a building is often agreed with specific objectives or within certain criteria and this can restrict the ability to repurpose a building. For example, loans are often made on the basis of a specific building use case and a lender may not be supportive of a change in that use. Whilst some lenders will just focus on maximising returns or minimising losses, others may be restricted when investments have been made as part of a wider investment strategy. If an office block is funded by an office focused fund, then converting this to residential may make sense financially, but might not align with the wider fund's strategy. Many projects have several sources of funding with partnerships or Joint Ventures involved and in this case all parties' requirements and restrictions need to be aligned to allow an asset to be repurposed.

The best scenario is where there is 'patient' capital, from a flexible funder with a long-term view or where there is a large estate with multi use assets.

Inconsistent data / standards

A theme throughout this paper is the growing importance of data in understanding, improving and tracking the performance of a building. Whilst business cases and valuations need to be evidence based, the data needed for this often does not exist, is not accessible or is not consistently standardised across the sector. In some cases, there are no accepted data or measurement standards, whilst in others there are multiple different standards used that are not interoperable. Repurposing of buildings requires more data to be considered and so this significantly exacerbates the challenge for property professionals.

CASE STUDY

Not just a car park

In Los Angeles a car park attracted attention for being built with future uses in mind. It was built alongside an apartment block to provide one thousand parking spaces for cars. However, the developer, AvalonBay Communities Inc, anticipated that the demand for parking spaces would fall significantly when driverless car services and car-sharing grew in popularity. It therefore designed the car park to be as flexible as possible; with level, rather than inclined floors, and with other structural requirements, so that it could be repurposed into retail or leisure space as soon as the need for parking falls far enough to justify it.

Source: LA Times

Investments with a positive environmental impact have been top billing in recent years and demand is only going to increase. From our work with investors, we've seen that there remains an underlying concern that existing buildings will become obsolete as the demands of the modern workforce evolves. This can be a difficult balancing game to play.

This has an impact on the occupiers too, they're viewing commercial properties with a renewed criteria which buildings must meet. They're no longer looking for just a space to rent, but instead view a building through a wider lens, taking into consideration issues like sustainability, social governance and wellbeing. This presents an opportunity for investors and landlords though, as demand for low-carbon offices remains unmet by 57% in Europe and 75% in the US [1], with this figure only set to grow.

The answer to many of these questions lies in the repurposing of buildings. Repurposing isn't simple, with time and expense being the biggest challenges. It takes time, vision, courage and a clear commitment to do it effectively. When these attributes are aligned with ESG and a people-first mentality, it poses limitless opportunities. We can create buildings which take wider factors like the economy, sustainability and technology into consideration. The repurposed building is no longer just an asset, it presents job opportunities, helps to build greener cities and becomes more sustainable to run.

Bringing technology on board at the early stages and embracing AI may be critical to success. Technology has driven transformation in every major industry and we're only now beginning to realise its full potential in the real estate sector. It's apparent that AI will be the shining beacon of this evolution in the sector, with those who integrate this in their buildings far ahead of the rest, paving the way for green automations, predictive maintenance, low carbon zones, and plenty more. However, there exists a symbiotic relationship between tech integrations and the benefits of using AI. The use of AI will drive the demand to implement technology, however without smart integrations, it can be difficult to deploy these effectively.

Embracing technology and using software in the design stage is key for brown to green sites. This places tech at the core of everyone's thinking, helping systems like Smart Spaces to do the heavy lifting with bringing everyone closer to their goals. When a Smart Building Operating System is considered at the early stages, it can be seen as part of the wider eco-system of that building, improving adoption, connectivity and of course, sustainability.

[1] Global Real Estate Outlook 2024 - JLL

Even where data is standardised and available, a change of use may change the measurement itself creating inconsistent data. The measurement of floor space (using IPMS[11]) or energy use (using EPC Certificates) is different for residential and non-residential buildings meaning that the same building may be a different size or rating depending on building use.

Fabric of the building

For some use classes, a conversion may require significant changes to the structure of the building. Life science labs, for example, tend to need more structural stability than a typical office building, with higher wall to floor heights and more robust piling. Data centres require large batteries at ground level and also need floor to ceiling height around 1.5 times that of offices, meaning two office floors may be needed for one floor of a data centre[12]. Meanwhile, residential units need adequate daylight to pass Building Regulations and might require supplementary land for parking provision.

A building that is well placed to serve a new use on the face of it, may in fact require significant investment, meaning the business case becomes unviable.

Quality of the end product

The quality of the repurposed building will be key to making the change of use financially viable. One common practice is converting offices to residential under Permitted Development. However, there have been examples where the housing produced is lower quality because of the omission of a stringent planning process. If a poor-quality house is built, then the payback to investors is likely to be lower.

Location

Another challenge for repurposing is where the building is located. Will a residential dwelling on a business park out of town and away from shops and leisure facilities appeal to buyers? Is a retail unit away from major transport links going to appeal to a logistics provider? The location of a building will affect its appeal to users and influence its potential for alternative use.

Other stakeholders

Vacant possession is needed to repurpose which can be a challenge when tenants remain in the building. This can mean lease negotiations are required which are not always straightforward, for example where tenants may be protected under the 1954 Landlord and Tenant Act[13].

In conclusion: All these factors mean there are significant challenges to overcome to make repurposing a viable option. Ultimately, this might mean waiting for the value of the asset to fall enough to make the numbers work. This may provide opportunities for investors when property values fall sufficiently to allow robust business cases for repurposing or refurbishing.

[11] https://ipmsc.org/

[12] Source: WSP: Can we reboot office buildings as data centers

[13] https://ericrobinson.co.uk/landlord-tenant-act-1954/

Section 3

Leveraging technology

Whilst we have seen that many challenges exist to the repurposing of assets, data and technology can be a part of overcoming some of these challenges.

Property value

Technology has a significant role to play in both the value and the valuation of a property. Away from the obvious use of technology to increase automation and therefore efficiency, a growing volume and variety of data may be used to provide insight into the value of buildings. In fact, RICS recently published a list of ESG data sources[14] demonstrating the range of data that should be considered within the valuations process. Technology also allows multiple scenarios to be considered at one time. For example, a building could be valued to consider multiple different use cases at the same time using a sophisticated automated valuation model (AVM).

Technology and, in particular, data can also be considered as part of the building value as well. Data is a valuable asset and in time, two otherwise identical buildings, one with a mature data model and management system and one without will be valued differently.

Planning and feasibility

Technology can speed up the planning or feasibility process, provide greater stakeholder engagement and ensure that the implications of proposals are better understood by all involved. As with valuations, it also becomes possible to run millions of scenarios at the same time to identify the best business case and the most likely to be approved.

[14] https://www.rics.org/content/dam/ricsglobal/documents/latest-news/WBEF-ESG-and-valuation-2024-data-list.pdf

OUT WITH THE OLD AND IN WITH THE NEW, OR IS IT?

Remember when tearing down old structures for something shiny and new was the norm? Well, those days are declining, rapidly. The spotlight now shines on repurposing, retrofitting and adaptive reuse, approaches that not only make financial sense but also align with our growing environmental consciousness. With an urgent need to eliminate all associated carbon emissions by 2050, sustainability is reshaping the future of real estate development.

In the past, the irresistible appeal of something brand new often overshadowed the potential of existing structures. However, as sustainability takes centre stage and real estate demands shift – with offices declining in popularity and housing needs soaring – a new paradigm prevails, where sustainability and occupiers hold the future in their hands. This trend is evident globally. For instance, in the USA, the Association of International Real Estate Investors reports that 90% of global real estate investors are contemplating converting offices into residential assets. In the UK, the driver for higher quality, energy-efficient office buildings are signposting significant CAPEX requirements. According to CBRE research, upgrading non-compliant London office stock for leases expiring by 2027 could cost £370 million, covering less than 7% of non-compliant buildings. Extending this to all central London offices, the cost could exceed £5 billion. This makes repurposing even more attractive, especially when considering London's housing shortfall of 90,000 homes over the last decade.

While traditional real estate development has been a notorious emitter of greenhouse gases, repurposing offers greener alternatives, reducing emissions by 40-70% when compared to new builds. By minimising energy consumption and reducing construction materials, sustainability goals are met, and environmental preservation prioritised.

But it's not just about being eco-friendly; it's about creating communities that thrive. Repurposing commercial real estate promotes efficient land use, breathes life into neglected properties, injects vibrancy into neighbourhoods, and preserves green spaces.

Success stories are paving the way for financing opportunities, while landlords are gaining invaluable experience on how to scale these projects. The pool of investors interested is expanding rapidly, driven by a sense of urgency, responsibility and opportunity.

Technology is our ally in this journey. From building automation to real-time monitoring systems, innovations are making it easier to retrofit structures for energy efficiency. The adoption of renewable energy technologies further elevates the sustainability credentials of repurposed assets, paving the way for a cleaner, greener future.

Repurposing historic buildings isn't just about preserving the past; it's about building an inclusive and vibrant future. These areas often serve as incubators for small businesses and affordable housing, positioned perfectly for impact investing.

Of course, challenges exist – legal hurdles, technical complexities – but they shouldn't deter progress. We're witnessing the revitalisation of declining neighbourhoods, the creation of new opportunities, and a transformation that's changing the very fabric of our cities, which will be home to 80% of the global population by 2050.

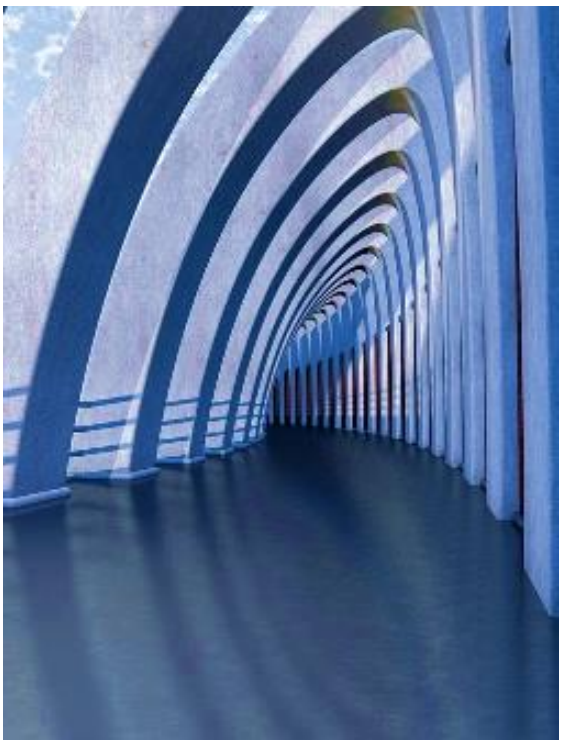
In time, as more data becomes available and analytical models become more accurate, there will be an opportunity to fundamentally change the planning process. It will become easier to assess the financial impact of ESG factors in a future development. Another example is that, as it becomes easier to quantify the impact of a development on other nearby buildings, planning restrictions will become more targeted and payments (such as S106 and CIL) could become building specific.

Business case and finance

To a large degree, the business case builds on the feasibility study. Technology can add to the value of a property and can also lead to reduced construction and operating costs. It can increase income whilst in operation, enable new sources of funding and provide more confidence in plans.

Inconsistent data

As a huge, but highly complex and fragmented sector, the availability of data is limited. However, even where it is available, it is largely inconsistently captured and managed. The data for a typical building is therefore, at best, inconsistent and at worst, unlikely to exist or is inaccessible where it does exist, and is difficult to combine with other data sets when it is accessible. The real estate sector must continue to drive forward the discussion around data, adopt standards, ensure interoperable and veracity of data. This requires collaboration and improvement to skills in this area.

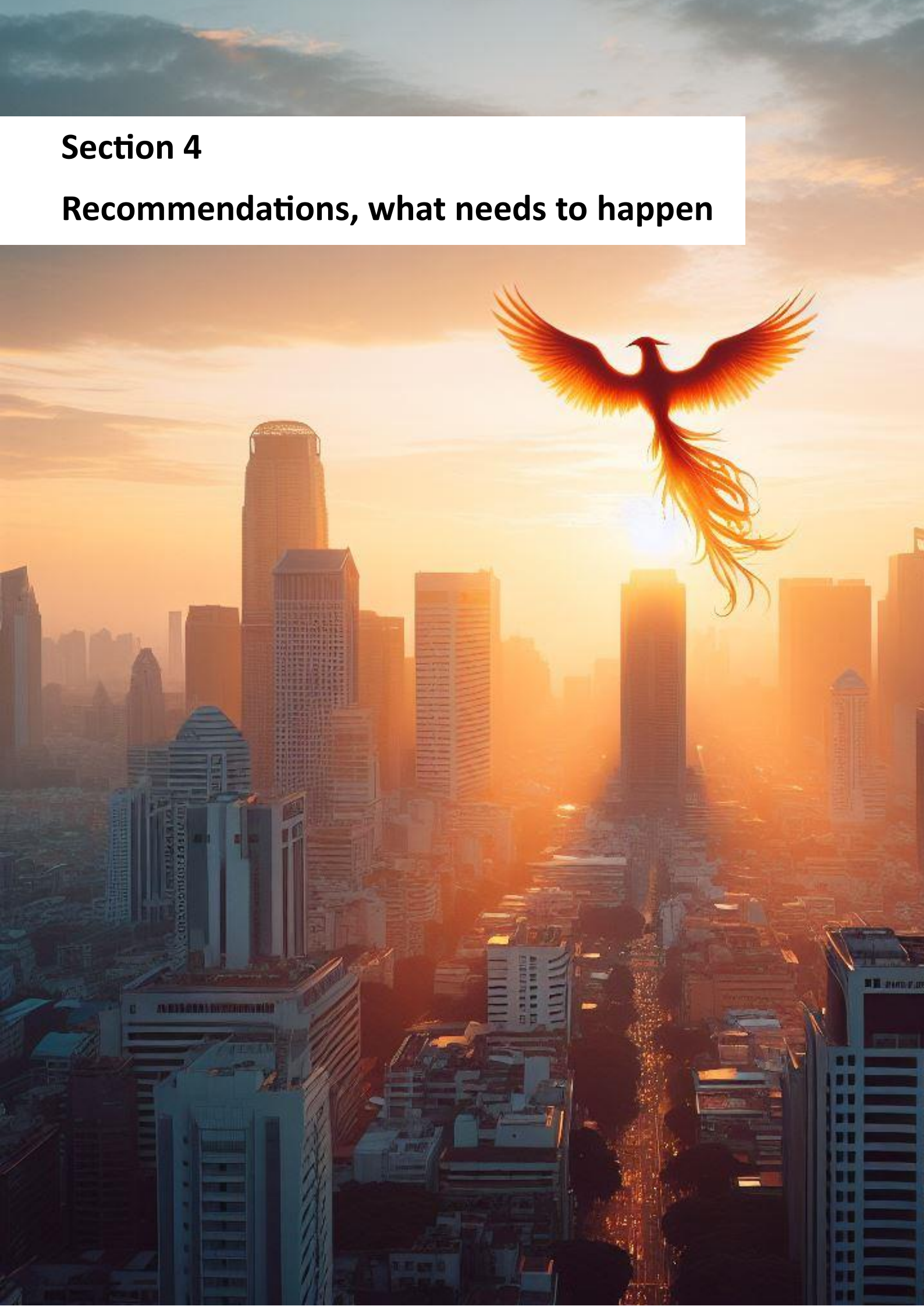


Fabric of the building

Technology can help building owners understand the fabric of their building and make it easier to identify potential new uses for it. Improved management of data and information across the lifecycle of a building adds significantly to the understanding of a building's fabric in operation. As technology evolves, so does the ability to collect new data about a building through IoT sensors, Lidar or drones. As data becomes more widely shared across the sector, the structural requirements for different uses will become better understood at scale and easier to build into the valuation, feasibility and planning decisions. Technology can also help overcome the limitations of a building's structure. For example, moving from wired to wireless connectivity can reduce the need for risers or suspended ceilings and raised floors to accommodate bundles of wires.

Section 4

Recommendations, what needs to happen



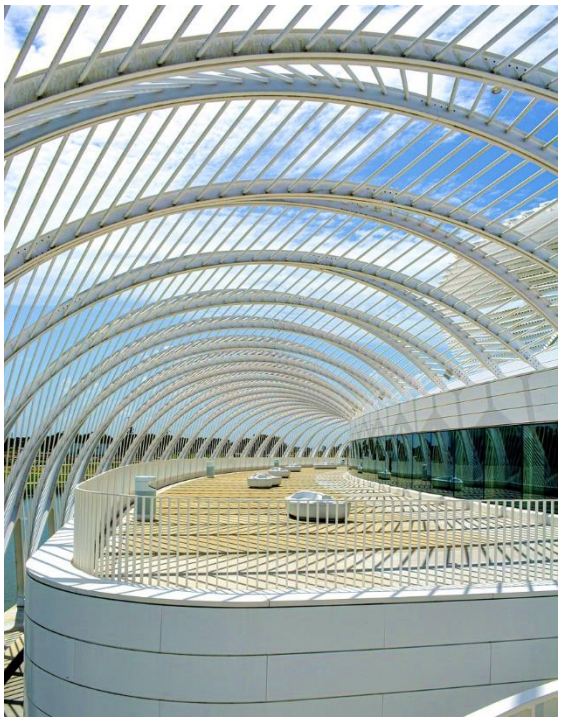
It's inevitable that there will be some challenges with repurposing moving forward, however there are steps that can be taken to improve the market at both a company and a sector level.

1. More flexible buildings

The case for repurposing will be facilitated if real estate can improve the flexibility of buildings in the long term. This will help reduce the numbers of obsolete buildings that are left without a financially viable and sustainable lifeline. This means that individual companies need to build flexibility into the design and operations of their buildings now and in the future. Ideally, this would provide:

- **Lifecycle flexibility** – when buildings can be used for different purposes and for different users throughout their lifecycle and this is built in from the early design phase.
- **Flexible designs for blended use** – where buildings are designed to be used as flexibly as possible on a day-to-day basis to meet a wide and blended range of user needs.
- **Flexible technology –** where technology is built to be as flexible as possible meeting the needs of multiple different users and use cases with multiple data points to provide an improved user experience and building performance.
- **Flexible leases** – when buildings are redeveloped, they will need to be supported by flexible leases, adaptable pricing and flexible legal agreements that support the different requirements of multiple users.

Ultimately, these are individual company actions which would benefit from support around training and thought leadership at a sector level.



2. A joined-up approach to data

Data is the foundation for understanding and managing the effective operation and repurposing of buildings. However, as a sector, we do not have a sufficiently joined up approach to enable us to use data efficiently. There is a lack of clarity about data 'ownership', data standards, data sharing, exactly what needs to be measured and how it is managed at a building level across its life, irrespective of the buildings use. Sector wide collaboration is needed to resolve these issues. Ideally, action would be taken by industry bodies to lead on one joined up approach for:

- **Data standards** – for consistent data, the sector must ensure that both measurement standards and the associated data standards are complete, interoperable and adopted. For some types of data, this is already being addressed by some industry bodies. For example, the Green Building Council will publish its Net Zero Carbon Building standard in 2024 with the aim to 'help the industry prove its built assets are net zero

carbon and in line with the nation's climate targets'[15]. However, there are many other standards in use relating to data and this topic, and so more work is needed to standardise the collection, management and use of data in the built environment. Crucially, the decision about which standards to use cannot be done on an asset-by-asset basis if the data is to be used at a sector level, for example, for exploring the repurposing of buildings scenarios.

- **Data Management –** for the sector to be able to use data in a systematic way, the data needs to be available and there needs to be agreement on how the data is managed and transferred.
- **Data used in valuations** – the sector must collaborate to drive the increased use of data in the valuations process. This means improved management of standardised data, but also ensuring that this is enabled within the professional standards with realistic expectations imposed upon the property professionals who now deal with billions of data points rather than tens.
- **Measurement by building not asset type** – it is important that everyone can access consistent data for buildings irrespective of use. Different types of buildings have different types of data associated with each building. If a building changes from a car park to an office, then to a residential unit, the building data needs to be consistent across its lifecycle.

  It should be noted that we are moving into an increasingly AI driven world which relies on data. The real estate sector will not be able to realise the gains that AI can offer without an improved approach to data.

3. Enabling the business case

Demonstrating the business case for repurposing can be problematic due to the large number of financial, legal and practical barriers involved. It needs to be supported by a strong valuation, it needs to navigate a slow and complex planning system and needs to tick boxes on quality, sustainability and performance. There are a number of ways that the business case could be improved:

- **Improving the Valuation process** – an overhaul of valuations to include more flexible measurement methods and a wider pool of data such as ESG information. This would help fairer reflect the role of high-performance buildings in property valuations to facilitate repurposing projects in the future.

[15] https://ukgbc.org/resources/net-zero-carbon-buildings-framework/

- **Smoothing the planning process** – reducing the time that it takes to get planning for repurposing projects would be a huge step forward. The digitisation of the planning process and the impact of AI could help here but will take time to take effect.
- **Government support** – the Government has signalled that it is in favour of repurposing to help match the supply and demand of property, particularly residential. But to really push ahead it needs to motivate owners and investors, perhaps with favourable tax credits to improve the viability of conversion schemes. Where schemes are blocked by local authorities, intervention from Government would also be beneficial.
- **Alternative finance** – the development of finance products for repurposing could help, particularly as more funds are looking to be 'green funds'. Where green credentials can be demonstrated this might lend itself to some cheaper finance options to improve the viability of projects.
- **Creative minds** – the most forward-thinking real estate owners and investors are reimagining how their properties will work successfully in the future and part of this is reimagining their approach and bringing in people from outside the sector, with different skill sets and creative thinking, to challenge traditional approaches to redevelopment.
- **Blended use not single use culture** – moving from a culture of single use to blended use will support the long-term repurposing of buildings, where the lifecycle of buildings is expected to include multiple uses for multiple customers.

About REvolve

ABOUT REVOLVE

REvolve is an Alpha Property Insight initiative. Members of REvolve consist of leading names in the real estate sector which come together to provide unique perspectives on a particular topic. Membership of REvolve demonstrates the members' thought leadership and willingness to explore some of the most pressing challenges that the real estate sector faces in a collaborative way.

Membership does not imply agreement with or endorsement of all of the views expressed in the report. Members provide their own 'Expert View' on the topic.

Each paper is written by Alpha Property Insight and is based on both extensive desk research and a round table discussion with members.

REVOLVE MEMBERS

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1 Source: L&G Annual Report and Accounts, 31 December 2023. Worldwide total assets under management include LGIM AUM and other group assets not managed by LGIM. The AUM includes the value of securities and derivatives positions.

2 Source: LGIM Real Assets. AUM data as at 31 December 2023.

re:sustain

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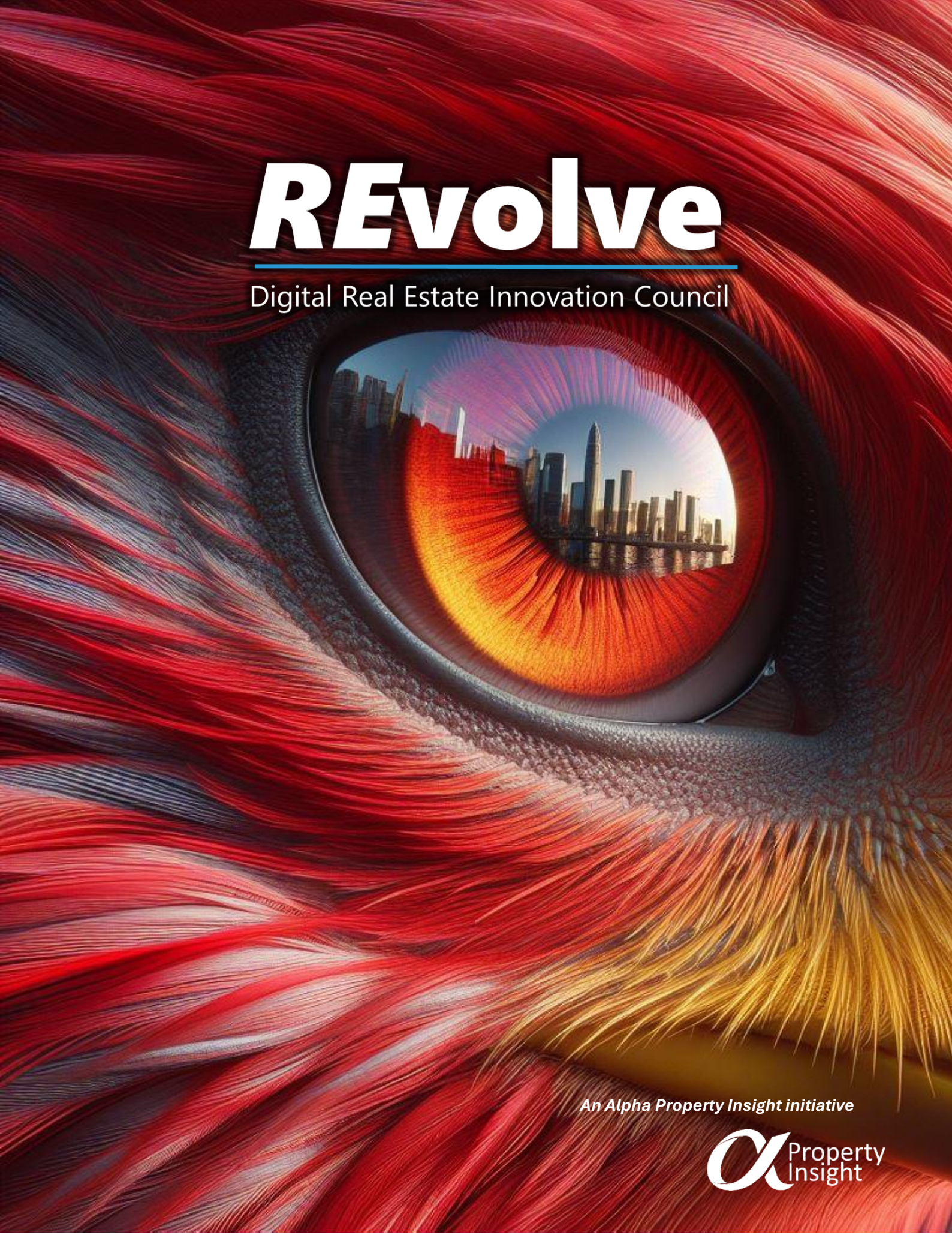

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