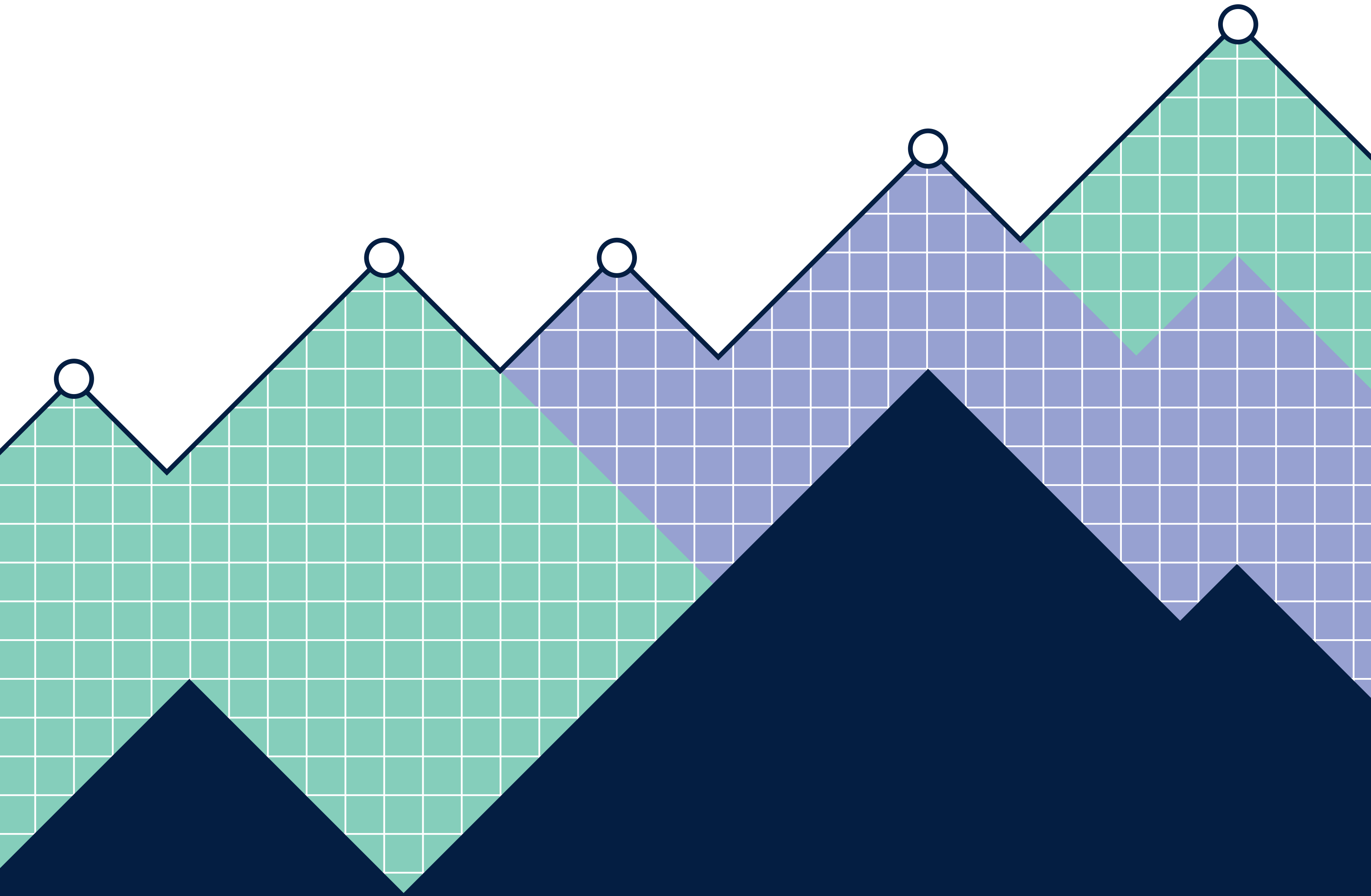
From space-centric to human-centric

EXPLORING NEW VALUATION METRICS FOR THE NEW WORKPLACE



A DISCUSSION PAPER
BY MIRVAC IN PARTNERSHIP
WITH WORKTECH ACADEMY

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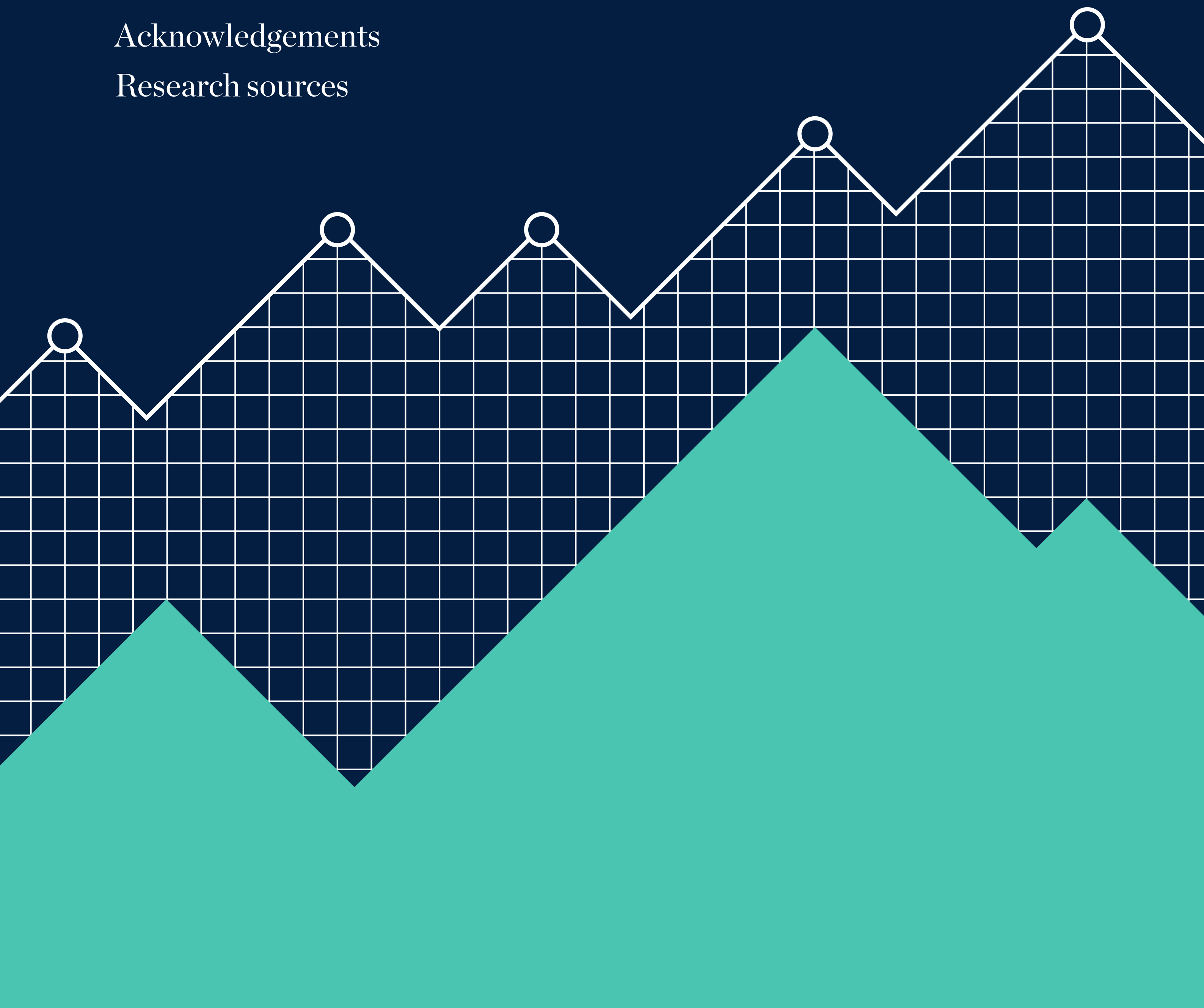


1. Executive Summary

As hybrid working redefines the purpose of the office, this report sets out the opportunity to take a fresh look at how office space is valued and canvasses expert views on developing new metrics for a new era.

This paper has a simple premise. It proposes that the new world of hybrid working will require a new set of metrics for the property sector in order to unlock the true value of the office. However, deciding on those new valuation metrics will be anything but simple. Experts interviewed in the course of researching this report are agreed that it is a complex and multi-faceted subject.

The story of the office is built on metrics from the past – the formula of renting space on the basis of how many people can fit into how many square metres is deeply entrenched in the real estate industry. But while such metrics might reflect who is present in the workplace, they fail to capture what people actually do at work and how they perform – there is no standard measure of how office space contributes to company culture, innovation and productivity.

As the purpose of the office evolves rapidly in the digital era, the mathematical ratios of space occupancy and utilisation as the sole determinants of office value are increasingly being challenged. And as employees finally return to the office in numbers after the global pandemic, there is now a sense of urgency to demonstrate the purpose of the office in a new work ecosystem, reimagining the whole picture from a human-centred perspective.

In section 2 of this report, we talk to a variety of international experts drawn from the fields of academic research, consulting, design practice, real estate development and management about the shortcomings in the current system and the potential for real change. Recent events have only accelerated the quest for new thinking on office valuation metrics – research in this area has been ongoing for two decades. Changing employee expectations, different job roles and team dynamics are all influencing a call for alternative or supplementary measures, along with the rise of the omni-channel worker which is challenging the traditional purpose of the office.

In section 3 of the report, we look at how other industries such as retail, hospitality, exhibitions and air travel measure value – moving away from traditional valuation models and towards a more rounded understanding of value based on an experience or service to the customer. Other sectors make more consistent use of both historical and forecasting data, use more digital endpoints and tools to link up online and offline experiences, and offer higher levels of personalisation and choice. There is much here in how value is captured and measured, especially in a consumption economics model, from which the office sector can learn.

In section 4, we ask our panel of experts what new or additional metrics we might develop for office valuation, and discuss some current attempts to define new indicators. Two options are the most popular: one relates to the ESG (Environmental, Social and Governance) agenda around reducing energy costs and carbon, and the other is centred on employee wellness. There is also support for metrics related to innovation, learning, team performance and social interaction. Generally, there is interest in supplementing space metrics with human ones, effectively expanding the existing system of measurement rather than supplanting it with an entirely new value approach. This is an important finding of the report.

In section 5, we look at how an array of new digital technologies – from workplace apps and sensors to virtual reality – are helping companies to capture and analyse different types of data. More pervasive and sophisticated measurement is described as laying the groundwork for a more encompassing valuation framework for offices.

The report concludes with a review of what needs to change in the real estate sector to introduce broader metrics. There is also a short survey of Mirvac customers to test ideas developed in the course of the research. This survey confirms a general belief among office occupiers that the old office metrics are now out of date. Mirvac customers appear more interested in measuring space flexibility/optionality than developing green or wellbeing metrics; they are becoming more focused on experience; and they are willing to share data and strategy in a partnership model with developers and landlords if that would unlock office value.

This discussion paper advocates a shift from efficiency metrics to experience metrics to reflect the new purpose of the office as a destination of choice in an era of hybrid and remote working. It calls for new skillsets in the real estate industry and more investment in new technologies. We hope it marks the start of a wide-ranging conversation on this topic and we welcome you to join the debate.

2. Why should we rethink current metrics?

Basing office value in the new world of work on the old metric of headcount per square metres of space has led to powerful calls for a new approach that better reflects tenant needs and expectations.

The global pandemic has impacted the future of work in all kinds of unanticipated ways. As organisations have rapidly adopted remote and hybrid working without their businesses breaking down, it has busted myths around place, productivity and people. The office as the only channel for both symmetric and asymmetric work has been challenged by a mixed new approach combining face-to-face interactions with virtual working. The whole picture around the meaning and purpose of office property has shifted.

For investors and developers of office buildings, there are some inescapable truths to face around how offices will be occupied in the future. A hybrid model gives employees more choice in where and how they work. People will come to the office for social interaction and a better experience than they can get in alternative work settings, not just because they need to show their face on a daily basis. There will be a premium on service and amenity – and new notions of value will inevitably come into play. As Paul Edwards, General Manager of Strategy & Customer at Mirvac, explains: 'The office needs to attract employees as part of a wider ecosystem of places both virtual and physical, so adaptable workspaces and curated experiences will be key.'

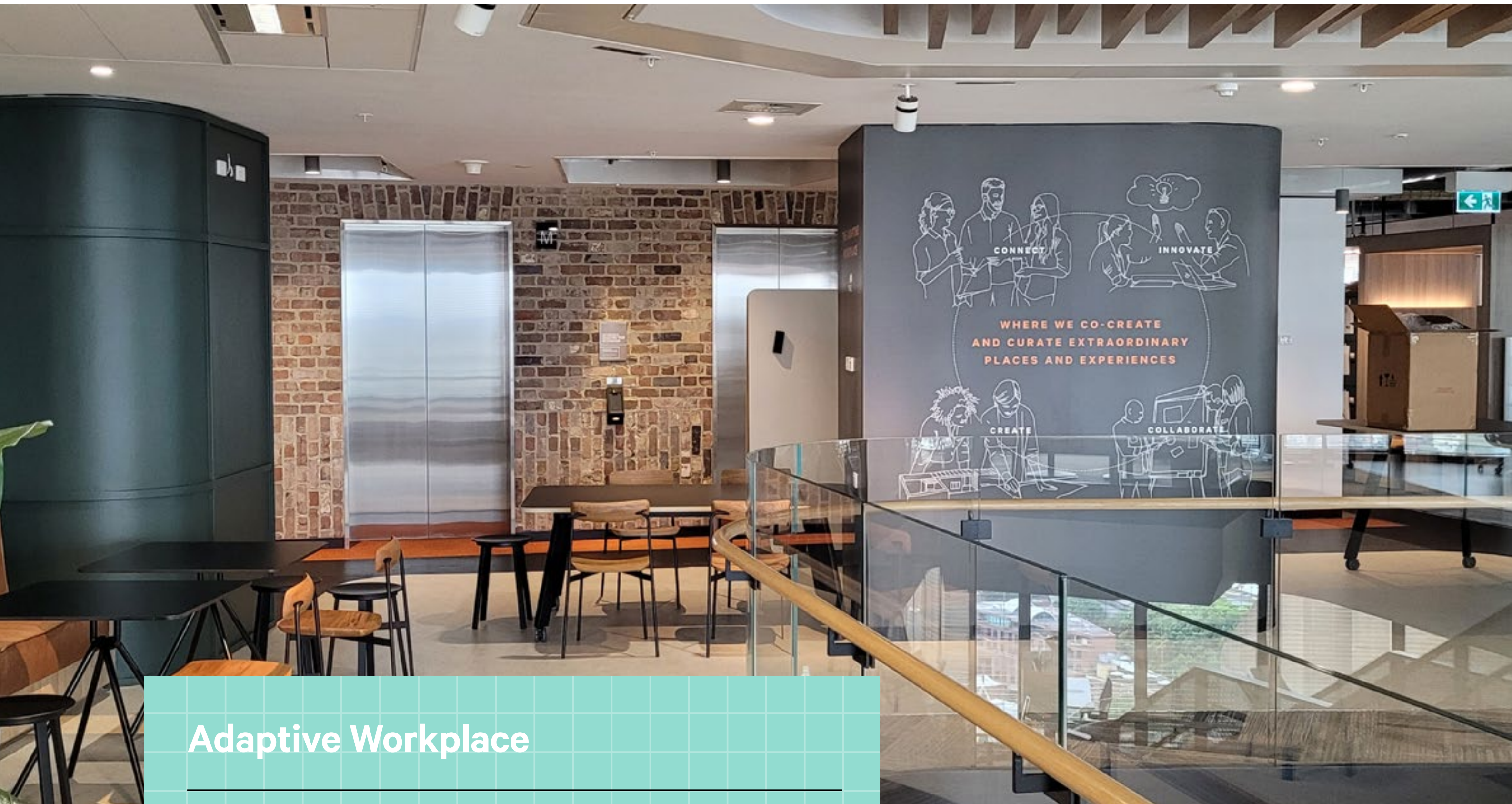
However, the metrics that govern the property sector and the way that office space is valued belong to a pre-pandemic world of work – not the emerging one that we describe. The sector continues to adhere to the long-established formula of renting space on the basis of headcount against square metres. So, as a rule of thumb, if a business has 100 employees, given a ratio of one employee per 10 square metres, the company will require 1,000 square metres.

In recent years, as offices have aimed for higher densities, this ratio has dropped from 20 square metres to 8 square metres, depending on such factors as the industry sector, location of property and work style of occupier. A property company applies a rent to the square metre for the year and, simply put, you have the basis for a property deal. The value of this equation for the company renting the space relates to location, quality and grade of the building, but does not capture any of the value that the office space actually makes to the performance of that business and its people.

2. Why should we rethink current metrics?

So, isn't it time that we looked anew at the metrics for value in order to develop expanded and more nuanced ways of determining the contribution that office space can make to company productivity and employee wellbeing? Many of the experts we spoke to for this report believe that office metrics deserve fresh scrutiny while also acknowledging the complexities involved in rethinking them.

Basing office value on the old metric of headcount per square metres of space in the new world of work has led some occupiers to anticipate cutting office space simply because patterns of workplace use will vary with hybrid working. Essentially the tenant will apply an 'agility ratio' to the number of desks or workstations and, from this, determine if the space will be utilised efficiently. In Australia, this ratio has been set at 1.2 but is expected to move closer to 2. This means one desk or workstation per two people. Using a standard equation, this would mean that a company with 100 employees might need 500 square metres of space instead of 1,000 square metres. However, this calculation misses a key part of the picture – it underplays how people will work in the new office, most likely in social groups and collaborative teams which might require more space, not less, hence a need for new metrics of value.



Adaptive Workplace

In response to changing needs, Mirvac is repurposing, replanning and redesigning the workplace for the future through its flexible workplace pilot. Located at Mirvac's headquarters in 200 George Street, the trial is one of the largest pilot spaces of its kind, delivering dynamic and adaptable places to connect, collaborate and concentrate. A 12-month experiment, the space is designed to test, measure, learn and respond over time to ensure the highest and best use of settings and spaces.

All of this begs the question, is the property sector placing its product in the right light as the purpose of the office is fast being redefined? Melbourne-based James Calder, Global Director of consulting firm ERA-co, told us that 'it's not a digital economy way of measuring space use. The sector is painfully slow to change.'

2. Why should we rethink current metrics?

Different types of value

Rethinking measures to value space in the built environment was on the research agenda long before the global pandemic – recent events have simply accelerated the quest for new thinking. In 2006, the UK's Commission for Architecture and the Built Environment (CABE) published a report which identified six different types of value (see box below), which remain relevant to offices today and suggests themes from which new metrics might be harvested. In the same year, the British Council for Offices (BCO) produced a study looking at the impact of office design on business performance. This argued that companies should look beyond efficiency to effectiveness and expression, essentially supplementing basic ratios of use with measures for productivity outcomes and reputational gain.

Types of value

EXCHANGE VALUE Building as a commodity to be traded, based on the price the market is willing to pay	**USE VALUE** Contribution of building to organisational outcomes – productivity, profitability etc	**IMAGE VALUE** Contribution to corporate identity, prestige, vision and reputation
SOCIAL VALUE Creating and enhancing positive social interactions, reinforcing social identity	**ENVIRONMENTAL VALUE** Added value from concern for environmental impact and ecological footprint	**CULTURAL VALUE** This may include intangible issues like symbolism, aesthetics and inspiration

Source: Commission for Architecture and the Built Environment

2. Why should we rethink current metrics?

Urbanist and DEGW co-founder John Worthington, who worked on the BCO report, today thinks that there should be a fourth dimension – experience. This relates to place-making, mood, ambience and how people feel about an office space. 'The soft infrastructure is the hardest to measure as it's the most intangible,' says Worthington, 'but we need to make that shift.'

Global real estate service firm Cushman & Wakefield is already going down the line from efficiency metrics to experience metrics with a diagnostic tool to measure experience, engagement and wellbeing called Experience Per Square Foot (XSF). It has gathered 4.5 million data points from 100 companies and 140,000 employees around the world. Cushman & Wakefield's EMEA workplace lead Nicola Gillen explains: 'The metrics debate depends on who is asking the questions. If the real estate team reports to the Chief Financial Officer, then the conversation is about saving money. But speak to HR and that automatically broadens the metrics.'

Limitations of system

Leading academics and researchers in the field point out the limitations of the current system. Lynda Gratton, organisational theorist and Professor of Management Practice at London Business School, explains that current headcount metrics treat the workforce as an homogenous mass when people do different tasks and have different roles in office space. She has identified four different types of job activity – related to cooperation, coordination, energy and focus (see box) – that should be reflected in new frameworks for measuring value.

Jobs and Tasks

FOCUS
STRATEGIC PLANNER

Does this space let me work uninterrupted?

COORDINATION
TEAM MANAGER

Does this space help me manage projects?

COOPERATION
PRODUCT INNOVATOR

Does this space stimulate contact with colleagues?

ENERGY
MARKETING MANAGER

Does this space energise me, or make me feel ill?

Source: Professor Lynda Gratton

2. Why should we rethink current metrics?

Jennifer Veitch, psychological scientist at the National Research Council Canada, believes that workplace value should be determined by evaluating both solo and collaborative work efforts. Team performance has been under-represented in analysis of office space. She also says that there is a disconnect between people managing real estate, human resources departments, and those who work in offices and require privacy and freedom from distraction.

Veitch has developed a 'Better Buildings' scorecard to optimise investment in real estate assets and is planning a Better Buildings Living Lab to test new design concepts. As she writes: 'We live in a service economy in which intangible intellectual assets constitute most of the economic value of business organisations... building and office can be part of the solution to enhancing an organization's most valuable asset – its people. This will drive changes in how we measure workplace performance and value workplace assets.'

Global infrastructure consulting firm AECOM has been looking closely at this issue. Kelly Bacon, global workplace lead, makes a distinction between mathematical metrics around headcount and what she describes as 'philosophical metrics' around experience and wellbeing. She believes the mathematical ones will remain unchanged but suggests that 'with the spatial complications of hybrid working, that's where we are going to need new metrics.' James Calder of ERA-Co makes a different distinction between landlord metrics, which provide a steady formula for leases, and tenant metrics which, he says, are beginning to change dramatically. 'More complex formulae are coming,' he predicts. 'The question is not how to make office buildings more valuable but what do people need from them?"

Better Building Scorecard

Measuring these factors for organisational productivity:

ENVIRONMENTAL SATISFACTION With lighting, ventilation, interior quality etc	**JOB SATISFACTION** Linked to organisation and environment	**HEALTH RATINGS** Health symptoms, wellbeing, mood	**BUSINESS UNIT PERFORMANCE** Customer satisfaction, financial outcomes
ENVIRONMENTAL CONDITIONS Average particulate count, light level range etc	**ENERGY USE** Lighting, heating, cooling, ventilation, IT etc	**RESPONSIVENESS** Number of complaints, average response time	**STAFF COMMITMENT** Absenteeism

Source: Jennifer Veitch

2. Why should we rethink current metrics?

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> **Jennifer Veitch**
> National Research Council Canada

Mission of organisation

Christopher Budd, principal at US architecture firm STUDIOS, suggests that current metrics were already outdated before the pandemic and that to establish workplace value it's necessary to determine if the mission of the organisation is supported by the office. He explains: 'To see if mission is being achieved we should consider factors such as if people feel in control, have a positive outlook, and other similar evaluative measures.'

Whether we call them experience metrics, philosophical metrics or tenant metrics, clearly there is some appetite globally for a reappraisal of how workspace is valued. Real estate advisor and analyst Rob Harris, author of London's Global Office Economy: *From Clerical Factory to Digital Hub*, told us that the relationship between real estate and occupiers is shifting – quickly and radically. In a report for RICS (Royal Institute of Chartered Surveyors) entitled The Age of Unreal Estate, he writes: 'Perhaps most telling in the long term is that, today, more and more occupiers can choose to turn real estate on and off, rather like other corporate resources in their businesses (capital, human and equipment). Suddenly, for occupiers real estate is not so real. How has this happened? And if real estate is less real, then what is it? A product? A commodity? A service? A profession?'

James Goldsmith is head of leasing at AXA IM Alts, which is leading on the new amenity-rich 22 Bishopsgate office development in the City of London. He accepts that current metrics are in danger of becoming too limited and uses the example of the old Truman Brewery in London as a building that achieved a higher valuation than the modern office blocks around it due to its 'cool' status and generous volumes. But Goldsmith also warns that finding new metrics won't be easy. 'Our industry traditionally looks sideways and backwards to reference relative value', he explains. 'We need to bring in ideas from other industries to better reflect intrinsic value.'

In the next section, we review how other industries measure value.

3. How do other industries measure value?

Sectors like retail, hospitality, exhibitions and airlines all sell space and create valuation models on the basis of creating experiences and services that meet identified customer needs.

Our study of how other industries such as retail, hospitality, exhibitions and air travel measure value identified a critical shift – away from traditional cost, competitor or sales-based pricing strategies and valuation models towards understanding the value that an experience or service to customers brings, and pricing accordingly. All use data to identify what the customer values most and what will command a premium.

The implications for the design and management of space in these industries is readily apparent. The space must meet identified customer needs, company missions or perceptions of value. There is a requirement for more personalisation to offer different experiences or choices, and more agility in how formats are delivered. There is also a resolve to understand the whole experience and what the key pain points might be from a customer perspective.

Shops, hotels and exhibition venues make extensive use of data – both historic and forecasting – to understand value and demand. There is more attention to the interactions between online and in-person metrics, and more digital endpoints are integrated into physical space to link up online and offline experiences.

All of these things offer a template for what the office industry might require to shift to a more value-based pricing model. The lessons for the office sector means we need to understand things that don't fit neatly into any existing metric of how efficient the space is. Quality of experience, interaction between online and physical, interactions between people, changes in attitudes and behaviour, and stakeholder engagement all matter in a value-driven model. As Paul Edwards of Mirvac explains: 'In all sectors we are seeing personalisation, experiences and curation grow in importance. To demonstrate the value of the office we need to rethink how we measure and communicate this.'

Learning from other sectors

What retail, hospitality, airlines and exhibitions tell us:

- Broaden the range of metrics employed to encompass customer value
- Make more use of data – both historic and forecasting
- Pay more attention to the interactions between online and in-person metrics
- Use more digital endpoints and tools to link up online and offline experiences
- Shift the design and management of space to respond to identified needs
- Offer higher levels of personalisation and choice with more agile formats
- Understand end-to-end customer journey to resolve potential pain points

3. How do other industries measure value?

Retail

Retail has been going through a change that predates the pandemic. The classic metrics used continue to be productivity focused – for example, sales per square metre, conversion rate or average shopping basket size, up-sell, cross sell, ROI and traffic generation. These metrics help businesses understand their investment but with the increase in sales channels in particular the expansion of direct-to-consumer sales via digital platforms, the assessment of productivity is now a far more complex task.

More sales going online – and more brands going straight to the consumer with no physical store at all – started to drive change, which was only accelerated by the pandemic. One aspect of this is a push to understand how stores and online sales work together – in retail this is called the HALO metric. In 2018, a study identified a link between physical stores and online sales; essentially, where brands had physical stores, their online sales also increased in those areas. Where customers are potentially using the store as an opportunity to browse and familiarise before ordering online, the sales per square foot metric is arguably less useful as a way of evaluating the value of the physical space.

The total value of retail is now the new value proposition, the sum of the parts being sales and engagement generated from bricks and mortar, advertising, growing digital platforms such as Instagram and tik tok and online sales all contribute to the success and productivity of a brand.

Retail operators have started to shift towards what we might describe as experience metrics – how do you quantify the quality of an experience? UK retail design specialist Quinine, for example, has built a tool to evaluate a customer's experience – this measures such aspects as personalisation, surprise and function. The firm's founder Ian Johnston told us that this type of approach will be filtered through a lot of the new thinking around retail metrics.

Metrics such as trust and brand loyalty are also important – retail brands use various barometers to test how many people would recommend a brand to their friends. With these new metrics, however, it becomes important to understand the influencing factors that surround that data point because they're more open to interpretation.

As retailers increasingly place online platforms at the centre of their business model, retail operators are starting to explore what this means for the physical space – how can physical assets be leveraged to enhance gaps in the online experience? This might mean shifting the store to act as a broadcast centre for live streaming, or turning it into a fulfilment centre because proximity to the local community allows for cheaper, faster deliveries.

For a long time, as with offices, one-size-fits-all underpinned retail design. Retailers aimed to create the same experience and journey in all of their store locations whatever the size. This resulted in a kit-of-parts approach that allowed for scale and growth. However, it also reduced the potential for personalisation. Now retailers are starting to break down customer needs and design formats for specific people at a specific time at a specific size – tied to the different experiences that might be offered at different locations, Retailers are starting to become more agile in the way that they deliver their formats to meet varying demands.

The Mirvac perspective: We Show

Mirvac Retail launched its rapid delivery, retail-as-a-service model, WeShow, in December 2020. An Australian industry-first, WeShow allows successful online brands and entrepreneurs the opportunity to connect with and trial a new audience in a physical retail space. A full-service solution and partnership, Mirvac provides support and access to its team of retail experts, including design, visual merchandising and marketing.

To deliver on the concept, Mirvac Retail created a new re-usable, flexible modular fit-out, easily tailored and adapted for each brand. A successful pilot program with digital native luxury accessories brand Hills & West saw the business exposed to more than 13,000 new customers, resulting in a profit increase of 26 per cent. WeShow has now expanded to three new sites across Australia.

Source: Mirvac

3. How do other industries measure value?

Hospitality

In luxury hospitality, there are numerous factors that influence the attribution of value – where the hotel or restaurant is located, for example, the quality of it, how high is the equity of the brand. If you think of hotels as essentially a collection of boxes, it's the equity of the brand that elevates those boxes, the quality of the experience and service that you provide in that space, and the execution of the design.

Location is a significant variable – where it's located adds enormous value, both in terms of the hotel location and then the position of the box inside that hotel. For example, people will pay a premium for views over the waterfront – you might have a smaller footprint with an amazing view and it changes your perception of how good the space is. After that point, it's the nitty gritty of how big the bed, how powerful the shower – the physical components in the space that you're assigned.

In hospitality, it's never as simple as more space equals more cost. You could have a large room in a nationwide chain, but other hotels could charge more for a smaller room because of the brand, great view, or the quality of the experience you get. Understanding the value that the customer places on different aspects of their journey is key – there's a link between what people are prepared to pay and what they value. For example, some people won't pay more for a larger room but will spend a lot of money in a good restaurant, or pay a premium for access to an incredible beach. They tailor their expenditure based on different priorities and understanding that value range is crucial.

There are many different pricing strategies in the hotel world: differential pricing (different costs to different customers e.g. discounts for business travellers who might buy in volume), dynamic pricing (based on demand at different times of year), premium pricing (deliberately higher prices than competitors to enhance the perception of brand exclusivity) or value-based pricing (adding extras into the basic package to give the impression of offering a premium experience).

Hotel design is a total experience, and all of the elements in the journey that a guest takes will reinforce whether it's of the quality they are expecting – if a provider falls short they're likely to be measured by the lowest quality element of the whole journey. The paramount importance of the customer experience journey is one of the reasons why hotel investment is geared in a different way between investors, developers and brand owners from traditional office space valuation.

3. How do other industries measure value?

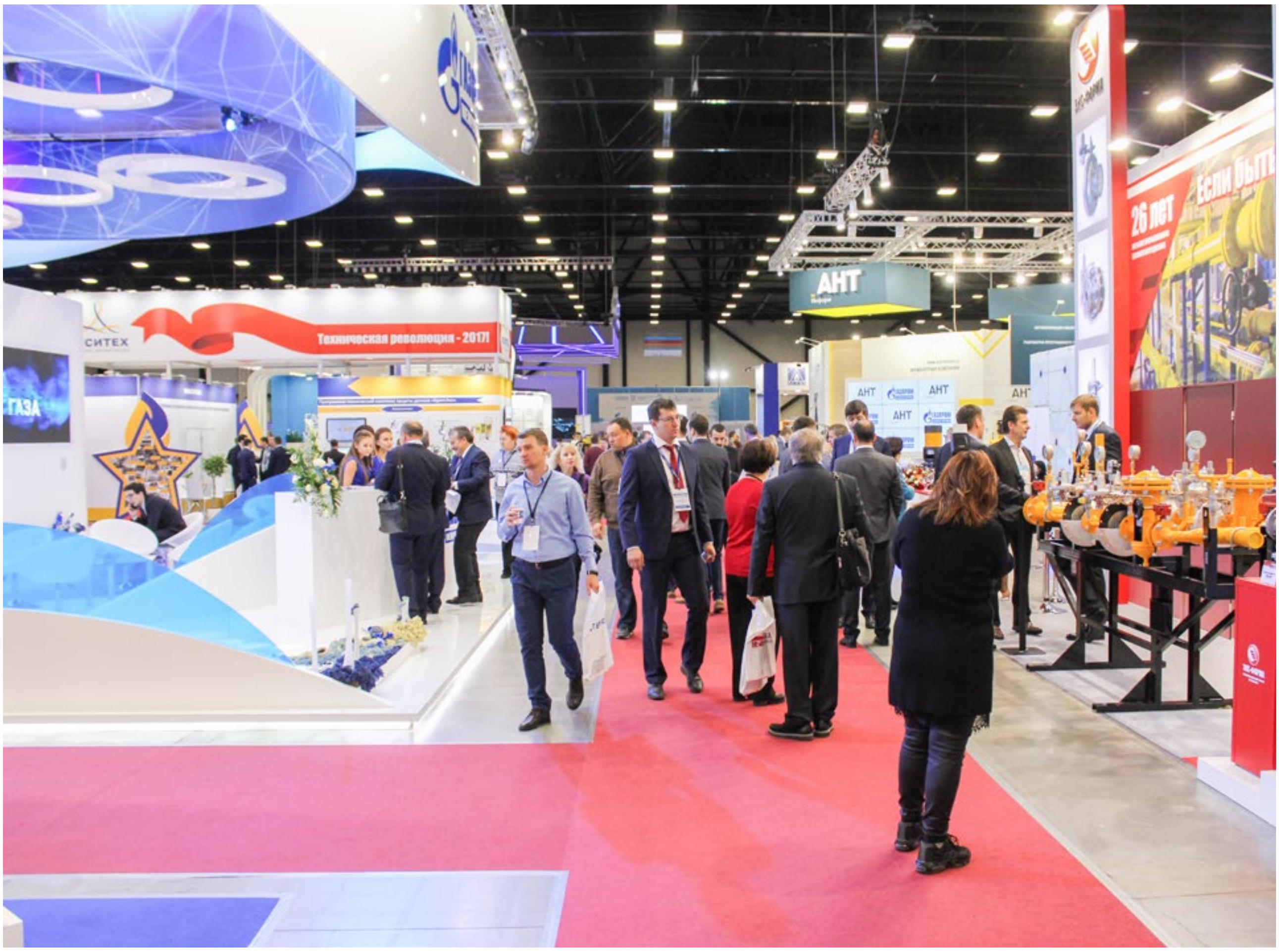
Exhibitions

The exhibition industry has been undergoing a change over the last decade when it comes to assigning a value to space. Exhibitions are generally difficult to objectively measure and subject to change from event to event. Linking price to value is therefore not always straightforward. Put simply, in the past there were two main orientations around which exhibition providers tended to set their prices – cost-based and competition-based. Cost-based pricing is straightforward; once a service is clearly defined, data is used to come up with a final cost, a margin is added and the price is set.

Competition-based pricing takes an additional input in the form of relevant competitor analysis and how they are positioned in the market.

The shift in the exhibition industry has been towards value-based pricing, in which the price set for a customer is based on an assessment of the value that an existing or potential customer perceives it to have. The travel industry was among the first to implement this approach, and it involves developing a detailed understanding of the value that customers place on different aspects of a product or service. In exhibitions, these aspects might include booth location, booking time, quality of interaction, level of brand exposure or flexibility in planning in relation to the show opening date.

Understanding what potential customers value drives decision-making in the design and management of exhibition space. For example, if customers are willing to pay a premium for a particular booth layout then that will drive decision making. Having the right metrics to draw on can drive changes to a proposed layout. Where a traditional format would typically treat space closest to the entrance as higher value, introducing 'magnets' in the form of attractive exhibitors or facilities in other areas of the exhibition venue can drive up the value of the space around them.



3. How do other industries measure value?

Airlines

Airlines are also instructive to examine in terms of pricing and value. With air travel, all of the passengers will get there at the same time and be served by staff with the same level of training – so on one level, there's a baseline experience for the price. However, airline value is more about a ratio of space which links to service. Although you do pay for a larger space, after a certain point it becomes less about the space and more about how you add value to the whole journey – like being picked up from your home by car when flying first class and processed at the wing to expedite the boarding process.

The ratio of cabin crew to passenger numbers dictates the level of service and experiences that you'll get – in economy, it's very functional, whereas in business or first class it's more about tailoring with lots of different options, all of which may require more ancillary space such as larger galleys.

Then it becomes about how you utilise that space to elevate the customer experience – for example, Virgin Atlantic designed a fully flat bed in the same space that had previously just been for reclining chairs to increase the value of that space for the customer wanting a night's sleep. Airlines work within small space margins to add value through personal service, whether it is providing an inflight ice cream or connecting to Netflix or lining up an Uber for the passenger when landed.

3. How do other industries measure value?

Use of technology

All the industry sectors discussed here deploy technologies as part of their space-value strategy. Retailers, for example, are using cameras to understand how customers are experiencing and navigating the shopping environment – and they're increasingly using digital endpoints in stores to increase interaction as part of the customer journey. All make extensive use of data, using detailed information to pilot and prototype what the experience might be and where potential pain points are before rolling it out.

Understanding how other industries create and measure value requires the office property sector to ask new questions. For example, if personalisation and user needs are important, should the corporate occupier have one huge HQ or 20 local offices that are closer to people and more tailored to what those local workers need? If employee trust and loyalty are important, should the company demonstrate values that align with what their workforce wants to see – for example, turning the lobby into a partnership space for charities that are supported by the business.

Company employees in a hybrid world will increasingly behave like consumers, so offices will need to communicate a real purpose and not just be bland and generic. One of the best examples of value-based pricing in the office sector is the flex space or coworking model – the cost per head may be higher, but customers value the flexibility and quality of the arrangement enough to make the premium worth paying.

Charlie Green, co-founder and co-CEO of flexible workspace provider The Office Group (TOG) explains that 'while the conventional pricing model has served the real estate industry well, the pandemic has accelerated a shift in power – with the needs of employees becoming the primary focus. We believe this demands a new value-based pricing model that incorporates a multitude of previously hard-to-measure factors.'

The Mirvac perspective: Portfolio as a platform

Mirvac is exploring the space-as-a-service model – and the revised valuation metrics that it implies – through a new portfolio-as-a-platform initiative. This will utilise the company's existing portfolio of property assets as a new lifestyle platform. Customers will eventually be able to choose from several different Mirvac locations, which will provide flexible and adaptable spaces for working. According to Paul Edwards of Mirvac: 'We're changing the language from tenants to partners as we reposition our relationship with customers to be one of collaboration and shared value. Being a partner within a Mirvac asset is set to open up a whole world of opportunity for our partners.'

Source: Mirvac

3. How do other industries measure value?

Consumption economics

With space as a service, organisations like TOG, other flexible space providers and progressive developers are in the vanguard of changing how office real estate is consumed. When occupiers conventionally sign a long lease, they are in effect making a large, upfront capital expenditure. However, in a 'consumption economics' model, cloud computing, managed services and the rise of consumer technology let you pay only for what you consume. In many areas of business, companies are now moving away from paying higher prices out of big CapEx budgets to paying lower prices from OpEx budgets only when and if they successfully consume the business value of the product. This general shift is likely to affect future metrics for the office.

Technology companies, for instance, used to be product driven – think of HP printers, Cisco routers or Microsoft Windows – with customers paying upfront for the product, installation, integration, training and other services needed to get the product operational. This model worked well for tech companies as customers paid a significant proportion of the overall fee at the outset. The financial crisis of 2008 began to drive change – cost-cutting resulted in technology upgrades being scrutinised more closely and calls for a new pay-for-consumption model.

In the world of consumption economics, technology companies have today transitioned from selling products to selling services. The unit price for each transaction is typically very low – the supplier is reliant on volume to generate profits, either through existing users consuming more features or adoption by new users. It is not hard to see software-as-a-service consumed on a subscription basis as similar to something like a lounge membership at a coworking space. But if we're moving to a consumption model, what new office metrics might support this customer focus?

> 'With the needs of employees becoming the primary focus, we believe this demands a new value-based pricing model that incorporates a multitude of previously hard-to-measure factors'
>
> **Charlie Green**
> The Office Group

4. What should we measure in offices?

Proposals for what to measure in the new office essentially reflect a shift from efficiency metrics to experience metrics, creating more human-centric environments for the hybrid era of choice.

In our study of new metrics for office value, we asked our expert panel drawn from academia, research, consulting, design practice, real estate development and management what supplementary or alternative metrics they might propose. Two measures emerged as the most popular candidates: one relates to the ESG (Environmental, Social and Governance) agenda around reducing energy costs and carbon, and the other is centred on employee wellness. Both choices benefit from pre-existing evaluation and certification frameworks for offices – BREAMM and LEED in the case of sustainability and the WELL Building standard, Fitwell and other schemes in the case of health and wellbeing.

Sustainability

In the hybrid world of work, the carbon footprint of the company will extend far beyond the office perimeter. However there is still a requirement for greener, more energy-efficient buildings as part of a mixed approach to sustainability. Analyst and author Rob Harris explains that 'metrics around green design and achieving zero carbon are going to be huge in the market'. Arnis Kakulis, AECOM's CRE market lead for Europe, agrees. 'Everyone knows they need to do it, but they need to measure against a baseline to show shareholders that they have achieved goals for Net Zero. They need to compare and quantify,' he explains. 'Every office is now being measured for sustainability in some way that didn't exist 10 years ago.'

The challenge is not easy, as a recent AECOM report describing an office fit-out cost model acknowledged: 'The lack of an agreed standard for measuring embodied carbon is perhaps symptomatic of the huge scale of the task ahead. Measurement tools are in development, but at present the onus is on developers and consultants to create their own benchmarks and vouch for their own data, a situation which is not sustainable in the long term.' AECOM has made strong progress, however, in advancing the principles of a circular economy on projects. Metrics around circularity, such as reuse of existing materials and redesign with flexible componentry, will add value by making offices more sustainable.

4. What should we measure in offices?

Health and Wellbeing

The healthcare sector, particularly in the U.S. where private companies dominate the field, has lengthy experience of developing metrics around health and wellbeing. Jennifer Veitch of the National Research Council of Canada believes that patient experiences in hospitals and how they are assessed will be relevant to future workplace design valuation efforts. Kay Sargent, Director of Workplace at U.S. architects HOK, reports that 'a happy, healthy, engaged, empowered worker is the best performer, so measuring stuff related to health is important'. But like measuring embodied carbon, this isn't routine items either.

Some of the answers, especially related to the growing interest in mental health, may lie in academic research and practice. Rianne Appel-Meulenbroek is an Associate Professor in corporate real estate and workplace at Eindhoven University of Technology – she is developing a comprehensive framework linking office design quality to improvements in ten different indicators of mental health. Shape Global is an employee performance survey company which has also built an evidence-based evaluation model that includes DASS (Depression Anxiety Stress Score) as a measure of mental health.

The WELL Building standard sets targets around 'mind' (interventions to mitigate mental ill health) as well as air and water quality, nourishment, light, sound, movement, thermal comfort and fostering community. All of these factors affect employee health and wellbeing, and all can be measured. The WELL framework has potential for developing new measures of value.

Other metrics

Innovation: Calculating how an office space might contribute directly to company innovation and creativity is the holy grail for many researchers. Rianne Appel-Meulenbroek believes that innovation might be assessed by looking at how an environment stimulates knowledge sharing, incidental meetings or colleagues otherwise getting to know each other. Stimulating creativity through the placing of furniture, access to nature, or changes to lighting and acoustic conditions is starting to receive more academic attention after being relatively under-researched. However some are sceptical about how this might be achieved. 'Psychologists can build models but the problem is what creates creativity?' says Professor Lynda Gratton. 'It is difficult to measure and to find the right pathways. The only way is through employee surveys.'

Social interactions: Ever since Boston Consulting Group's New York office created a 'collision coefficient' – a metric for the number of unplanned encounters in the workplace – using sociometric badges developed by technology company Humanyze, the real estate sector has shown growing interest in tracking social interaction as a metric of value. According to John Lang, CEO of Shape Global and Founding President of the Health and Productivity Institute of Australia, there is a science to tracking social interactions: 'We need to measure the positive impact of social contact so it's not seen as unproductive time out by managers. Some encounters can be game-changing.'

Team performance: Several of our experts suggested that office metrics currently focus either at the company level or at the level of the individual worker, but ignore the importance of team dynamics. The performance of teams appears to be well worth measuring, but methodologies to do so remain largely untested.

Learning: Companies were accused of cutting training budgets and reducing mentoring opportunities during the pandemic, so there is now likely to be renewed efforts to rebuild workplace learning activities and measure the outcomes. DEGW co-founder John Worthington uses the analogy of a university campus to make a distinction between efficiency metrics, which measure how many students can be fitted on campus, and effectiveness metrics, which measure such things as student grades, employment outcomes for graduates, and how many papers and patents are produced by academic researchers.

4. What should we measure in offices?

Human-centric metrics

The suggestions of our experts for what to measure in the office to capture value essentially reflect a shift from space-centric metrics to human-centric metrics. Several of those interviewed observed that rigid organisational focus on space efficiency metrics led, before the pandemic, to an intensification of space use and those densely occupied office environments that damaged concentration and wellbeing. Author and analyst Rob Harris believes that reversing what he calls 'the big squeeze' down from around 20 square metres per person to as low as 8 square metres will lead to 'more relaxed space' for office-based workers operating in the hybrid model.

Sir Stuart Lipton, one of Britain's most successful property developers, uses a different term – generosity – to describe a bright new scenario for the post-pandemic workplace. 'Companies will be more generous in the use of office space, he says. 'We will go from factory farming to free range. We don't like animals being penned, so why should we do it to people?' However, achieving this expansive vision will not make any changes or additions to the way office space is valued, says Lipton. The process will be automatic. 'In my book we are duty bound to give people an enjoyable experience and an opportunity to be productive,' says the man behind such landmark London schemes as Broadgate, Stockley Park, Chiswick Park and 22 Bishopsgate.

> 'Companies will be more generous in the use of office space. We will go from factory farming to free range. We don't like animals being penned, so why should we do it to people?'
>
> **Sir Stuart Lipton**
> Lipton Rogers

4. What should we measure in offices?

Human-centric metrics might be set to change the game in terms of office valuation but pose a real challenge to measure. Shape Global CEO John Lang explains that 'the higher up the curve you go in measuring productivity, the harder it becomes as there are so many confounding variables. Just switching on the lights and the heating will create sufficient comfort for immediate performance gain, but things might plateau after that', says Lang. Monitoring staff retention and attraction rates, studying culture, and conducting 'employer of choice' surveys might provide greater insight.

Despite the stiffness of the challenge, some companies are forging ahead to bring space metrics and human metrics together in one framework, even if there are more broad indicators than hard-and-fast measures at this stage of evolution. Cushman & Wakefield, for example has developed '10 new and elevated metrics to drive performance' (see box), with measures grouped under four headings: experience, talent, space and service. Bryan Berthold, Cushman & Wakefield's global lead for workplace experience, believes the time is right for a more joined-up approach: 'The C-suite is now focusing on new ways of working in a way that has never happened before.'

Clearly, occupier demands are driving change as workforces bruised by the pandemic start to return to the office – and senior leaders will advocate for the needs of their employees. But our experts believe that the consulting, design and developer communities are also leading the charge for real estate to include more human-centric measures.

10 new and elevated metrics to drive performance

EXPERIENCE	1. Workplace Experience: Experience per Square Foot metrics 2. Add Wellbeing to Well Building: moving beyond sustainability 3. Network Interactions: across email, instant messaging, calls etc
TALENT	4. Location, Attraction and Retention: HR metrics 5. Corporate Social Responsibility: commitment to ESG programs
SPACE	6. Space Utilisation Gap Analysis 7. Health & Safety: cleanliness, security, health status 8. Ecosystem Efficiency: metrics for working in and out of office
SERVICE	9. Hospitality Metrics: seat availability, sentiment scores, customers served etc 10. Facility Measures: supporting remote and hybrid workers

Source: Cushman & Wakefield

5. How can technology support a new approach?

An array of new technologies from workplace apps and sensors to virtual reality are set to help companies capture and analyse new and different types of data.

One of the most persuasive arguments for expanding the metrics for office space valuation is that tools of measurement have become more sophisticated and powerful with digital technology, making it possible to capture and analyse new types of data. It is certainly true that the introduction of workplace apps, sensors, location beacons, room booking and wayfinding systems as part of a cloud-based digital infrastructure in the workplace has the potential to change the game around the measurement of value.

Sensors that record levels of occupancy will contribute to an expansion of space metrics – and workplace apps that allow the user to give instant feedback on their experience, say, of waiting for an elevator or finding a meeting room will contribute to experience metrics. Analysis of network interactions, patterns of space booking or movement of people through space will help to reveal what is happening in the workplace. Viva Insights from Microsoft, for example, provides anonymous data on collaboration between employees, including statistics on emails, meetings and instant messages. This adds a whole new dimension to office design, layering complex patterns of interaction over occupancy and other data. Use of sociometric badges, which capture and anonymise who is speaking to whom and for how long in the office, brings a further dimension.

Having a clear strategy around data is fundamental, but real estate has been behind the curve compared to other industries. Analysing data simply on the level of occupancy is not, many believe, a true measure of value. It is important for companies to understand the behaviour of that office population: what they are doing when they come into the office, which types of spaces they are using, how often they are using them, how big or small their meetings are. Then you can begin to build a model to measure the contribution of office space to performance. As one commercial real estate (CRE) professional observed, 'The task is to yield quantitative data from qualitative experiences.'

Gamification of space

As data-collecting technologies embed themselves in the workplace, their adoption accelerated by the pandemic, and newer tech systems, open the possibility to generate further experience metrics. The rise of Virtual Reality headsets in hybrid working and the emergence of the metaverse as shared, persistent virtual space - akin to a digital mirror of the real world - have the potential to provide useful feedback. Already VR environments are used extensively in academic research around testing preferences in the workplace.

The performance of workplace technology itself can be measured. WiredScore is a global certification system to help landlords improve digital connectivity; SmartScore is a smart building standard that identifies best-in-class buildings from a technology perspective. With smart space and data comes the ability to measure everything – and it won't just be the CRE professionals and company leaders doing the measuring. Employees will start to rate their workplace experience in the same way that they rate an Uber driver or hotel stay – and these ratings will be added to the experience scores from which value can be calculated.

According to Philip Ross, CEO of consulting firm UnWork, 'Whether it's a reception meet-and-greet or support from a colleague, we are at the start of a gamification of work. People will rate their experiences and score their spaces. A gamified approach produces a workplace in which there is nowhere to hide, both for the worker but also for the employer.'

5. How can technology support a new approach?

The precision economy

This process has been in place for some time. A 2019 report by the Royal Society of Arts (RSA) described 'a future of hyper-surveillance' in which 'a proliferation of sensors allows firms to create value by capturing and analysing more information on objects, people and the environment'. There are dangers in what the RSA terms a 'precision economy' enabled by technology.

Employees have become more sensitive about data privacy, and companies have been keen to anonymise personal data and avoid accusations of spying on their own people. 'You've got to be careful. It needs a complementary approach,' says DEGW co-founder John Worthington. 'Where is the data coming from? How is it being interpreted, and by whom?'

But while some people think that digital monitoring of office activity has gone too far, others think advances in building technology have not gone far enough. James Calder of ERA-co explains: 'There are lots of disparate parts to the system but we're nowhere close to solving it. The whole digital experience needs to change. We need software upgrades for buildings, not an archaic mechanical approach.'

> 'We are at the start of a gamification of work. People will rate their experiences and score their spaces. A gamified approach produces a workplace in which there is nowhere to hide, both for the worker but also for the employer'
>
> **Philip Ross**
> UnWork

6. New metrics for a new workplace?

Developing a new framework of valuation for the future office will require the real estate industry to shift its mentality and develop new skillsets.

In this report, we've made the argument for re-evaluating or expanding the metrics around valuation of office space, looked at how other industries such as retail or hospitality measure value, explored what new measures might be considered, and examined the new technologies that will assist metric development.

What we have discovered among the experts we consulted is a broad consensus that efficiency metrics should be supplemented by experience metrics – there should be a shift from relying only on space-centric measures to including more human-centric ones. Scores around the ESG agenda, particularly carbon reduction, and employee wellbeing emerge as the most likely subjects for supplementary metrics.

Professionals in the field aren't looking for revolution – but as metrics come under growing scrutiny in the hybrid era, they do want to see evolution. As one real estate expert told us: 'We don't want to break the system, we want to make it better.' Sir Stuart Lipton thinks that 'it's far-fetched to think of new metrics – tenants and agents are not expecting any changes in how space is valued.' He believes, however, that the office experience will improve as occupiers up their game on providing quality space after the pandemic. The 22 Bishopsgate project is likely to set a benchmark in this area. According to James Goldsmith, who is leasing the development, 'We need new attitudes and skillsets in real estate more than new metrics.'

6. New metrics for a new workplace?

> ‘You won’t change the conversation talking about metrics, you’ll change it talking about values’
>
> **John Worthington**
> DEGW

John Worthington argues that ‘you won’t change the conversation talking about metrics, you’ll change it talking about values.’ Nevertheless, many in the office industry appear committed to exploring a new formula for measuring the value that a space brings to company productivity. Arnis Kakulis of AECOM explains: ‘The standard quantitative metrics can stay but should be strengthened by qualitative experiential metrics. We’d love to see a universal framework that ties all the elements together, and factors in cultural differences too.’

Charles Golding, who leads on guidance and standards for real estate valuation at RICS, believes that people will look at broader factors than headcount after the pandemic, but the process can never be formulaic – valuation is based around opinion, market evidence and experience in the market. According to the RICS report, The Age of Unreal Estate, there are six big shifts in real estate (see box) that need to happen in order to provide the foundations for a comprehensive new metrics system.

What Needs to Change

CUSTOMER-CENTRIC REAL ESTATE	PEOPLE-CENTRIC REAL ESTATE	DATA-CENTRIC REAL ESTATE
Placing the customer at the centre of industry	Enhancing experiences to demonstrate value	Using data to demonstrate value
RESPONSIBLE REAL ESTATE	**REAL ESTATE AS A RESOURCE**	**COMMODITY REAL ESTATE**
Aligning with the climate emergency agenda	Changing the language from asset to corporate resource	Simplifying tenure terms for the flexible office market

Source: The Age of Unreal Estate, RICS

6. New metrics for a new workplace?

> 'The standard quantitative metrics can stay but should be strengthened by qualitative experiential metrics. We'd love to see a universal framework that ties all the elements together...'
>
> **Arnis Kakulis**
> AECOM

Survey of clients

At the conclusion of this report, we conducted a short survey with Mirvac customers to circle back around some of the things we'd learnt and test them against current occupier needs and market realities. Mirvac was motivated to probe the issue because, in the words of Paul Edwards, 'the world of work has changed, so we took up the challenge and asked – are the old metrics still appropriate for the new world?' Mirvac's customers told us emphatically that the 'old metrics' are no longer relevant. As one occupier remarked, 'We are focusing on social connection, not capacity.'

Asked to say what broad aspect was most important today in evaluating office space, most customers went for either 'effectiveness' (business performance) or 'experience' (wellbeing/satisfaction of users). Efficiency ratios were not considered important anymore. This result echoed the opinions of our expert panel. But when occupiers were invited to propose new metrics for valuation of office space, the two top choices of our experts – energy use and employee wellbeing – barely registered. Instead, Mirvac customers chose flexibility/optionality as the top measure, followed by team performance/dynamics and social interaction. This reflected a different set of priorities.

Asked to point to other commercial sectors that might hold lessons for capturing space value in an innovative way, there was a general nod to retail, but as one respondent explained, 'it's still very early days for the next evolutionary change'. There was, however, a broad consensus that office real estate needs to adopt a more human-centric approach. Some occupiers also called for more investment in new technologies and better use of data, suggesting the industry has ground to make up in this area.

6. New metrics for a new workplace?

Finally, the survey asked Mirvac customers what they'd be willing to share in a partnership to drive mutual benefit. Some said they'd share utilisation/occupancy data or business strategy. More generally, there was a sense that, in the age of new metrics, companies could be an 'open book' if knowledge sharing was reciprocated. As one respondent remarked, 'Working together to define the future workplace is a benefit to both tenant and landlord'.

Building a new valuation system to which everyone subscribes – in the same fundamental way that the real estate sector instinctively coalesces around current headcount metrics right through the value chain– will require an 'open book' in terms of sharing knowledge and information, as well as an opening of minds and a more reflective approach.

Can we make it happen? Hybrid working is already evolving rapidly and James Calder of ERA-co suggests that 'If we don't get a hurry on, Mark Zuckerberg will offer a better metaverse than the real workplace.' However, as Paul Edwards of Mirvac points out, 'To change these metrics you need to change an industry. The entire value chain is aligned to these outdated metrics and measurements.' That takes time and careful consideration – but the discussion has begun and we'd really like you to help us to continue the conversation.

The Mirvac perspective

Shape the future of the workplace:

- → Adopt an open mind on rethinking or expanding office valuation metrics
- → Wake up to how hybrid working will affect how office space is used
- → Don't just say the office is dead or needs to be downsized
- → Think about the type of work people do, not just the number of people
- → Study how other sectors measure value based on customer experience or service
- → Think about creating curated experiences
- → Discuss with your landlord or owner how you can work together as partners to deliver value from the office
- → Look at an approach that combines space metrics with human metrics
- → Bring new skillsets into real estate and adopt a more people-centric approach
- → Make better use of data – and of technologies that capture and analyse data
- → Explore how to shift from efficiency metrics to experience metrics

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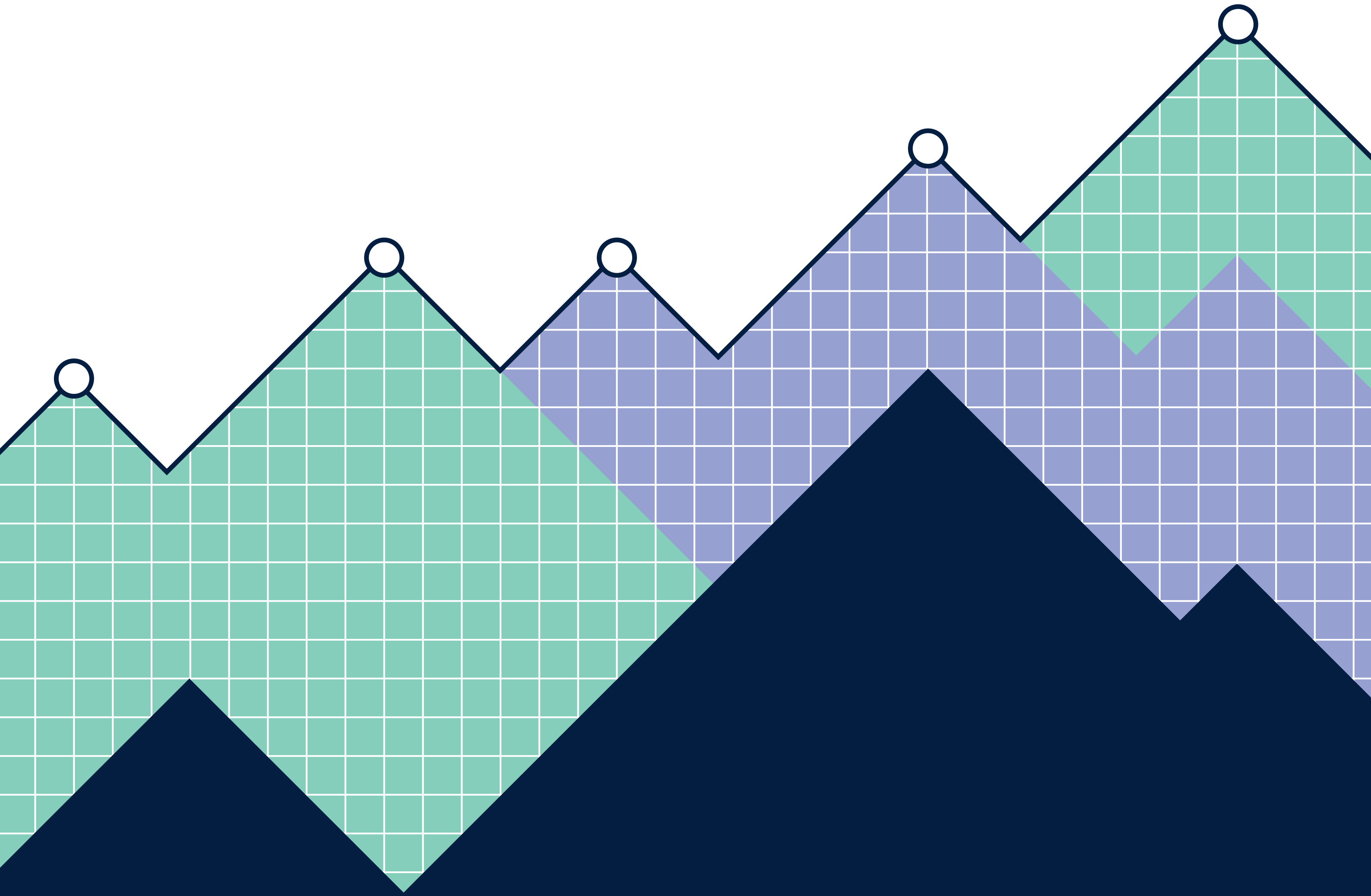

About Mirvac

Founded in 1972, Mirvac has been making a positive contribution to our cities and the urban landscape for 50 years, through our connected communities, exceptional workplaces and thriving shopping centres. We are an Australian Securities Exchange (ASX) top 50 company, the first Australian property group to be net positive in carbon[i] and in 2022, we were ranked number one in the world for gender equality by Equileap. Our purpose, to Reimagine Urban Life, inspires us to be innovative and bold, as we continue to create and curate extraordinary places and experiences that enrich people's lives.

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About WORKTECH Academy

WORKTECH Academy is the leading global platform and member network exploring how we'll work tomorrow. We look at innovation in the world of work and workplace through five key streams: people, place, technology, design and culture. We engage with our powerful network of over 4,500 individual members and more than 60 corporate, design and technology organisations around the world to deliver content on the latest trends, research and best practice in work and workplace. Mirvac is a Corporate Member of WORKTECH Academy.

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