



What is a Data Digest thought paper?

This thought paper is a collection of tech trends, future insights, and noteworthy case studies about a given topic.

It's not a definitive statement of what to do, it's a collection of what we could do and what we should be thinking about.

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A foreword.

2020 has undeniably disrupted most, if not all, facets of life. In the work domain, COVID-19 measures propelled workplace trends that were young, but emerging. It pushed the agenda of teleworking, the cloud office, and a distributed, yet highly connected workforce into the forefront. And it did so rather successfully, showcasing that this future of work (at an extreme level) is both feasible and beneficial, given some adjustments.

At this crossroads, we're able to reflect on work, the workplace, and workforce as we know it. What does modern-day work look like, what is the purpose of today's offices, and how will our workforce evolve into the future?

But first, a brief history of the office

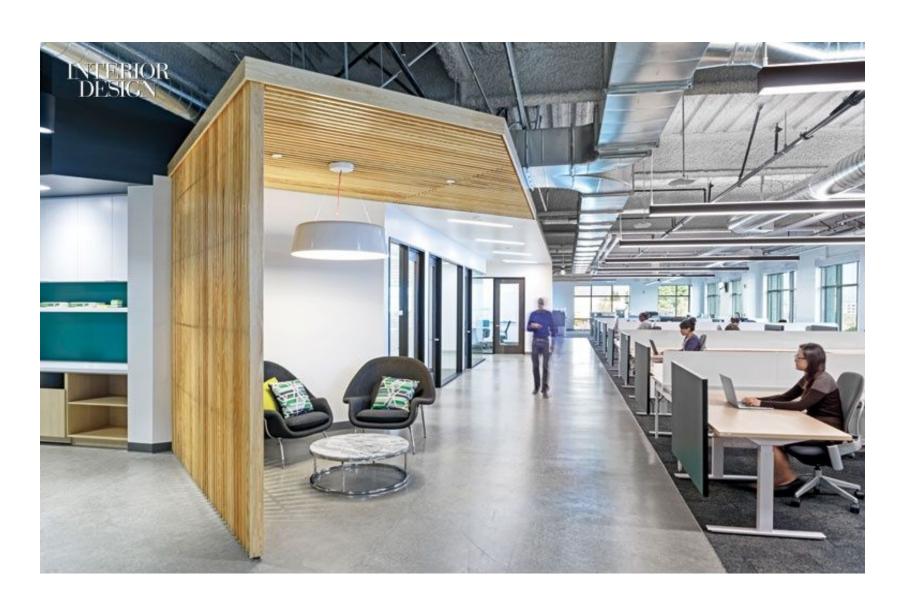
The office. The physical manifestation of an organisation.

But today, many critics say the office is having a bit of an identity crisis (Kellaway, 2013). We'll explore the origins of the office, what it has evolved to become, and its place in current society.

The world's first offices originated in 18th century Britain, and were built to provide staff with access to resources and assets, and to provide management with a line of sight. Over many years, this evolved into the culturally accepted (and 1938 Labour Standards en-Acted) idea of work – a 9-5 workday, centred around a desktop, at a desk, in an office.



As technology advanced and workplace cultures changed, so too did the nature of work and the workplaces in which they took place (or didn't). The proliferation of cloud services and focus on innovation and collaboration as opposed to supervision and labour, has resulted in a cultural shift in the definition and design of work, and the work office.





Theme I: The Work

The Cloud Office

While the 'cloud' is often an ominous and vague concept – in simple terms, cloud-based applications facilitate access to programs and information via an Internet browser as opposed to through installed apps on your desktop.

Outlook365 is a common cloud-based work application, while some examples closer to home include listening to music on Spotify, watching Netflix, and using Google Maps. These are all cloud-based services as they don't require download and storage of music, movies, or maps. Evidently, the cloud is more pervasive than we often realise, and there's great potential to bring this into the work domain. So, what does this mean for the nature of work?

Accessibility - It means working without having to be 'at work'. With an internet connection, cloud computing facilitates direct access to real-time files, data, tools, and people, without having to be physically at an office desk or connecting to a work computer via remote work software. Cloud computing makes work possible anywhere, on any device. It expands the office to private (home) and public spaces (cafes, coworking spaces, libraries, partner offices). A morning commute can now be utilized as an hour of work. A home maintenance appointment can be easily taken care of.

Being accessible from 'anywhere' also

extends to 'any device', with centralised and real-time information accessible on preferred devices. Bring Your Own Device practices are rising rapidly, evident already at CBCity.

Flexibility – hand-in-hand with greater accessibility comes flexibility. Flexibility in place and method of access, but also flexibility in time, enabling better work-life balance. Countless studies have shown that, when managed appropriately, flexibility leads to greater job satisfaction, lower absenteeism and turnover, increased commitment and stress reduction (Sander, 2020).

Key Takeaway: The cloud enables flexibility and accessibility for CBCity staff. The freedom to work anywhere, anytime, in any way.

Future Horizon: 1st horizon – Now. Cloud services are here and here to stay. They're already improving productivity and employee satisfaction, so immediate action is needed to maximise the benefits of the cloud.

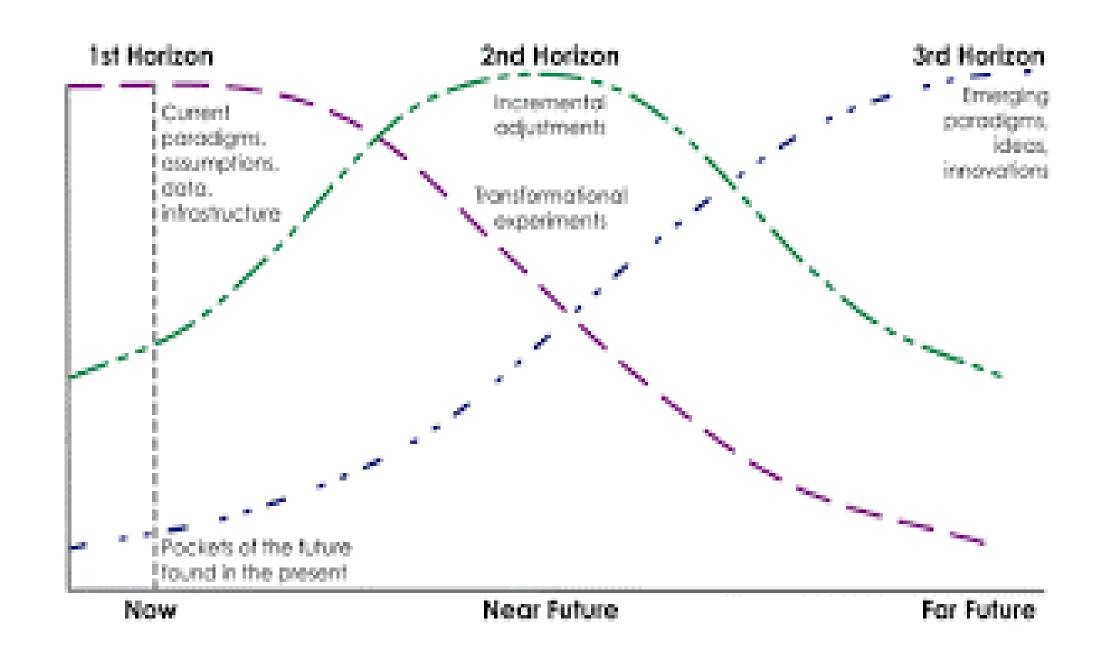






Figure 1: Smart boards and video-conferencing

A Blending of Digital and Physical

The digital transformation of work. Buzz words? Yes. Happening? Also, yes.
Undoubtedly, work has gotten more digital.
Digital tools like paperless forms, email, instant messaging, video calls, voice-activated devices have dominated so much so, that their predecessors – fax, mail forms and memos are now images hard to conjure up in the mind. Digital transformation has begun, but is in its infancy. So, what does the future of digital work look like?

Digital collaboration, creativity, and productivity infrastructure, and an office that facilitates it. Given the large-scale remote work environment we're currently in, it's important to consider how our digital work tools will transition back into the office.

Video conferencing – as remote work will remain post-pandemic, having now 75 million daily active Microsoft Teams users and 100 million daily Google Meet users (Warren, 2020), video-based infrastructure will be critical in keeping remote workers engaged. Incorporating these technologies into the office might involve dedicated video conferencing meeting rooms, smart

whiteboards (left), video call phone booths, movable video set-ups (Figure 3), and immersive video conferencing areas (Figure 2).



Figure 2: Immersive video conferencing



Figure 3: Modular video set-up

Voice-activated devices – use of VADs is rapidly growing, with 40% of adults using mobile voice search at least once daily. But beyond voice assistants (Echo, Siri, Cortana, Google Home) (Butt, 2020), voice is increasingly being used for dictation and scribing for work purposes. These, in conjunction with voice calls mean the office is getting noisier than ever. Some rather interesting office solutions have been proposed. Nicola Gillen, author of Future Office: Next-Generation Workplace Design, is a proponent of specialized spaces as well as 'cones of silence', or acoustic-adjusting nooks or rooms (Figure 5) (Scopelianos, 2019).





Figure 4: Quiet phone or video call booths

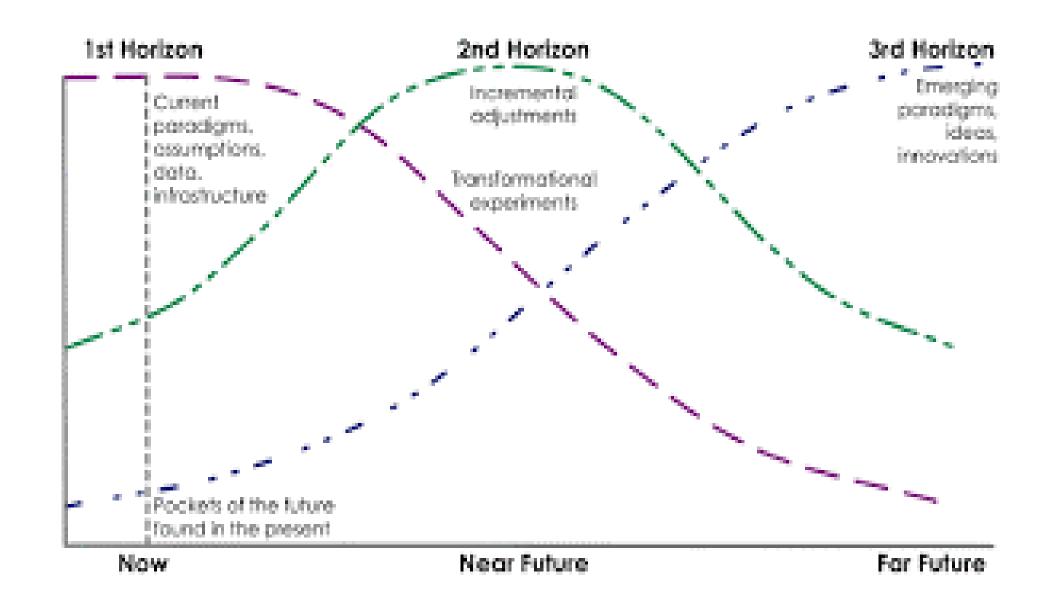


Figure 5: Acoustic hubs

Key Takeaway: we're using digital tools to facilitate our work day-to-day, with 796 CBCity staff members using video call in the past 90 days. It's crucial we incorporate these digital tools into our physical office environments for the future.

Future Horizon: 1st & 2nd horizon – Now & Near Future. Video conferencing is commonplace, but we still need infrastructure to best facilitate this new way of working. There are both standard and radically innovative ways to implement video and digital tools into our workplaces.

Modular spaces, smartdesks, smart booking systems, and acoustic hubs are innovations that need watching.



Pushing the boundaries: VR and AR

It sounds futuristic and like science fiction, but augmented and virtual reality *will* completely reshape the way we work.

Augmented reality involves adding a digitally fabricated view to a live (real) view, whereas virtual reality immerses you in a completely digitally fabricated view.



Figure 6: VR Office

For \$2 billion, Facebook purchased Oculus, placing a bet on VR as the future of digital communication.

They see the future of the office being a "dynamic virtual work environment, anchored by genuine social presence. Next generation devices would give people infinite workspaces with configurable virtual screens, whiteboards, other visionary tools. Shared virtual physical space, with in-person conversation" (De Simone, 2020).





Theme II: The Workplace

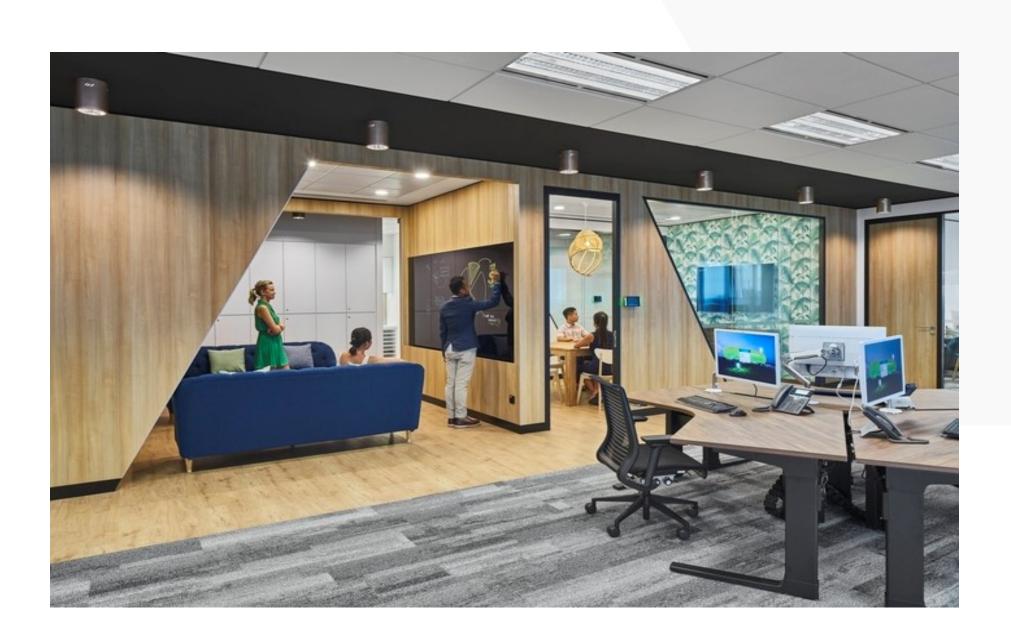
The Office as a Communication Tool

If the office no longer needs to serve its original purpose of housing assets and resources - then are offices still needed?

Many agree that offices will remain the physical manifestation of the organisation (ISS, 2020), however, many proponents argue that the value of the office is now in collaboration and communication; they see the office not as an amortised asset, but as a strategic tool for growth.

The CEO of Telenor, a Norwegian-based telecommunications company, thinks of its headquarters not as real estate but as a communication tool (Waber, Magnolfi & Lindsay, 2014). The Telenor HQ is designed with spaces to favour each type of communication; small, walled-off workstations for productivity (engagement), open spaces for wider interaction and collaboration (exploration), with these different spaces encouraging more interaction in general (energy).

Home bases - Gillen echoes this sentiment, supporting the adoption of 'home bases' (and also the death of open-plan) (Scopelianos, 2020). A home base is a general area where people work every day without being chained to a specific desk. Home bases provide different spaces for different purposes, for example desks, focus nooks, quiet rooms, breakout rooms or collaboration booths. These collaborative areas are already becoming increasingly common, with at least 50 percent of office space given to collaborative areas today, whereas 20 years ago 90 percent of space were for desks alone (Scopelianos, 2020).



These changes mark a paradigm shift in defining the value of the office which now serve greater purposes in collaboration and communication, and bringing people together.

Connectivity and shared spaces – Gillen also claims connectivity is a key aspect of offices for the future. Central staircases, coffee bars or gardens - environments that promote "natural collision" and "serendipitous interaction" (Scopelianos, 2020), foster a sense of community where people are likely to collaborate and communicate better.



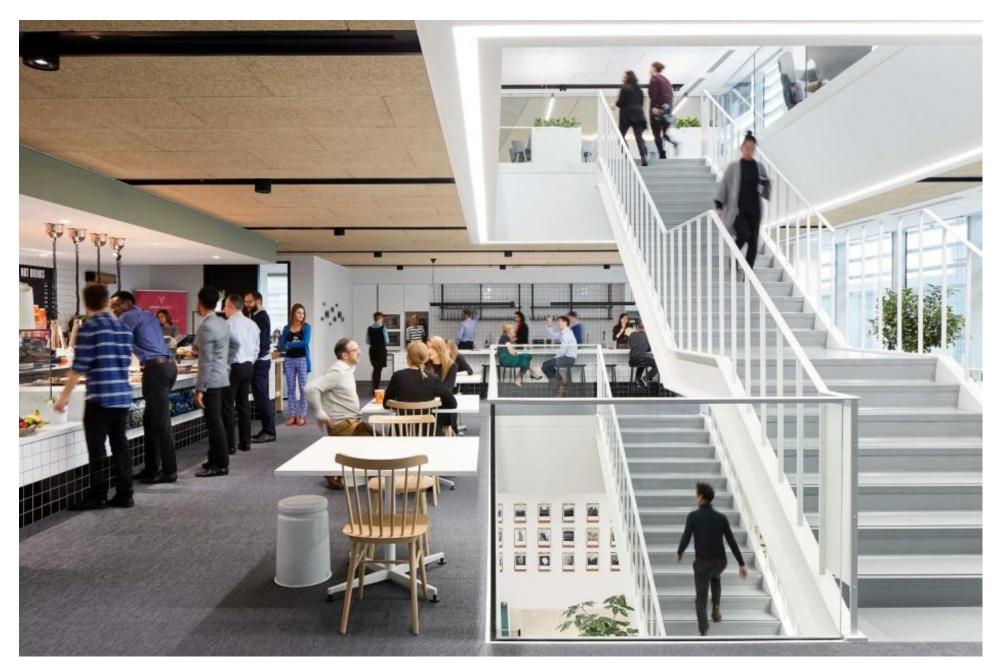
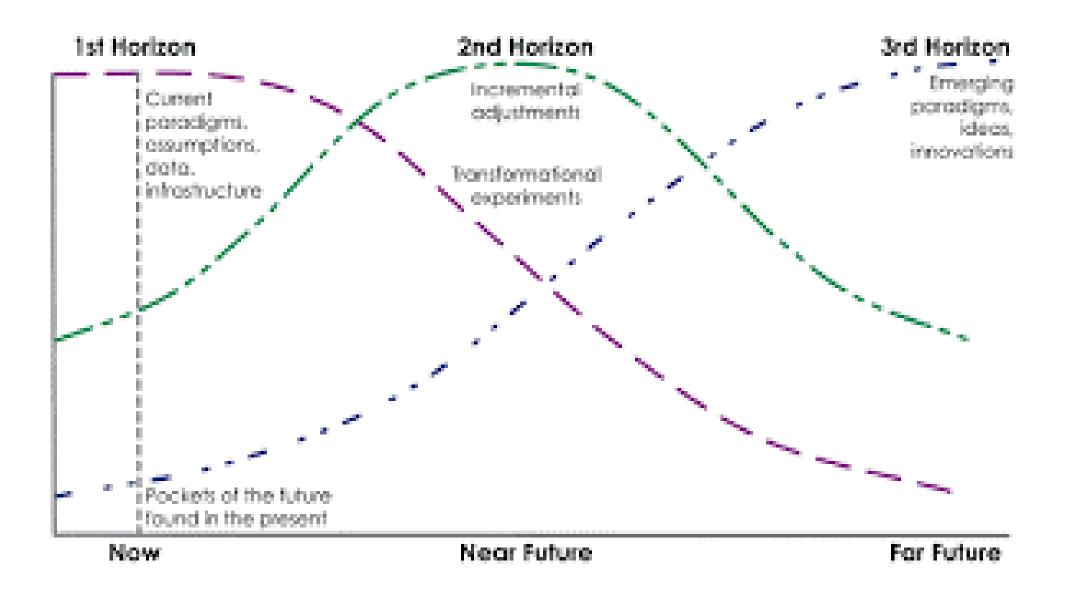


Figure 7: Central staircase at ABC Headquarters

Key Takeaway: the value of our offices has changed. It's no longer needed solely for productivity or asset management purposes, but rather, its value now is in bringing CBCity staff together to facilitate collaboration and communication.

Future Horizon: 1st & 2nd Horizon - Now and near future. Office design and workspaces are already evolving. Collaborative and activity-based spaces are increasing in prominence, and principles of connectivity and interaction will continue to redefine and redesign our future offices.



Pushing the boundaries – Samsung & Atlassian

Samsung's US headquarters is designed in stark contrast to a traditional hierarchical structure (and culture) (Waber, Magnolfi & Lindsay, 2014). Instead, it uses vast outdoor areas layered between floors to encourage mingling between disparate groups across the business.

Samsung says the design "reflects current and future workplace patterns away from the more solitary, individualistic working style of the past toward a collaborative environment that facilitates the exchange of ideas by maximizing opportunities for serendipitous encounters among employees" (NBBJ, 2015).



Figure 8: Samsung San Francisco HQ

Atlassian, Australia's big-time tech company, has released plans for a \$1 billion solar-powered, and world-tallest hybrid timber office. These are just some features that makes "the space highly sustainable and highly flexible. Purpose-built for the future of work, for tomorrow's world, not today's". Despite having a highly distributed workforce, the company believes in "the power of place, the power of geography, and the power of community", to bring its workforce together (Bleby, 2020).



won't have a traditional high-rise appearance.
Rather, it incorporates open spaces filled with plants and a variety of both outdoor and indoor collaborative spaces.



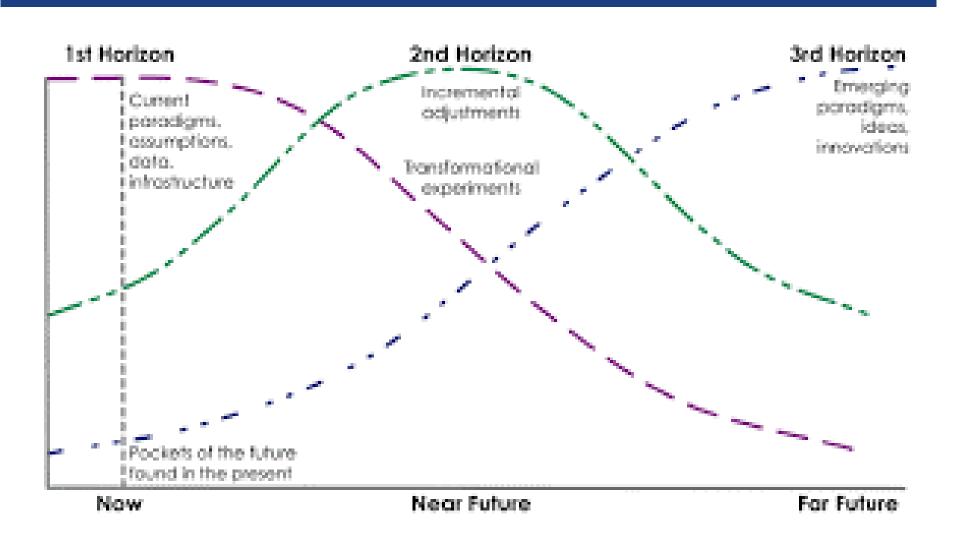
A Distributed, Decentralised Office

With cloud computing comes the distributed office. A group of highly networked, shared, multipurpose spaces that could redefine the boundaries within, and between companies.

This might appear as organisations offering both WFH flexibility, in addition to access to 'work bases' such as suburban work hubs and CBD co-working spaces. These multiple working environments may also include inter-organisational innovation hubs, bringing together groups of collaborating organisations in knowledge-sharing environments.

An interesting trend in China, where workplace design is getting increasingly innovative and sophisticated, is the demand for co-working space or WeWork-style offices. In fact, almost every top 10 Chinese corporation is currently investing in co-working spaces and incubator hubs.

Key Takeaway: a distributed office model is a network of small-scale, flexible office spaces including coworking spaces, innovation hubs, HQ and smaller suburban work bases, that make up the organisation's physical spaces. For CBCity, this could mean leveraging university or industry partnerships, the development of hubs, or an inter-LGA office.



Future Horizon: 2nd Horizon - Near future. Some countries are adopting the idea of a multimodal office structure, though Australia is not one, just yet. A cultural shift, with leading organisations and government planning officials, must ensue to move the dial towards a distributed office strategy.

Theme III: The Workforce

A Distributed Workforce

A distributed workforce refers to a workforce that is geographically dispersed both domestically and internationally. A distributed workforce may work alongside a distributed office model, or it may be organizational-wide, being fully distributed with no physical office to go into.

A distributed workforce is undoubtedly more difficult to manage, but if COVID-19 has shown us anything, it is that it can be done and staff can stay connected and engaged. A spectrum of distribution exists – individual members can be remote, specific teams may be distributed, or it may be full-scale like InVision and Automattic with all staff working remotely. Adopting an option that suits the organisation is key.

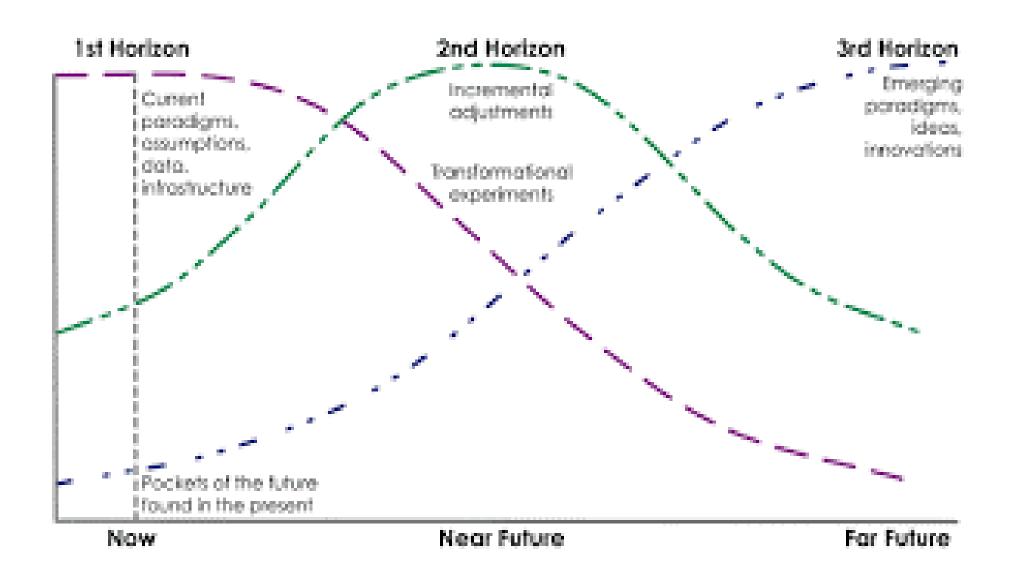




The benefits? Increased access to talent, reduced turnover due to increased flexibility and job satisfaction, greater innovation due to diversity of experience and mindsets.

Key Takeaway: a distributed workforce is the natural progression from cloud service adoption. The level of distribution can vary from individual-level, team-level, and fully-remote, but can be chosen to best suit CBCity's needs.

Future Horizon: 1st & 2nd Horizon – Now and Near future. Remote work is common in a majority of organisations. Fully remote workers or teams are here, but to a lesser degree. While fully distributed organisations, and their workforce, are a rare sight. The distributed workforce model is alreadyhere but will evolve significantly over the next decade.



Portfolio-based work

A portfolio-based approach to work emphasizes adopting a work-based not job-based perspective of labour and tasks. It establishes what work needs to be done in the office, and what can be done remotely, what skills are needed, for how long and which individuals within or outside of the organisation can meet these needs. It taps into automation, the gig economy, alliances and outsourcing to better utilize

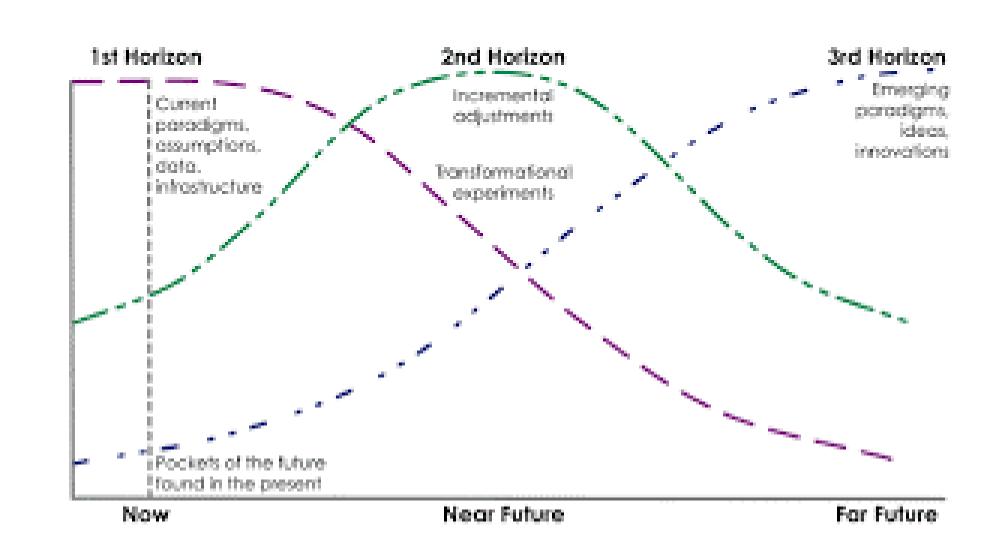
staff and their skillsets.

The growth of the gig economy is a driving factor in adopting a portfolio-based approach to work. People joining organisations now are looking for experiences and growth, so the need for stability is not as ingrained. But not only can a gig-mindset be adopted looking externally, but internally too. A better understanding of skillsets, capacity and areas for growth internally can foster a dynamic and agile gig workforce.



Key Takeaway: portfolio-based approach involves adopting a workbased, not job-based approach to work. It utilizes automation and the gig-workforce to best match project and work needs with the right skills from both within and outside of the organisation.

Future Horizon: 2nd Horizon - Near future. Though gig-economies are growing, they haven't yet been adopted by the majority of organisations. And while portfolio-based work is used in some capacity, namely in consulting firms, these practices have yet to extend to the majority.







A City Future initiative supporting our mission to: Dream, design and create the most amazing future for our City.

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