

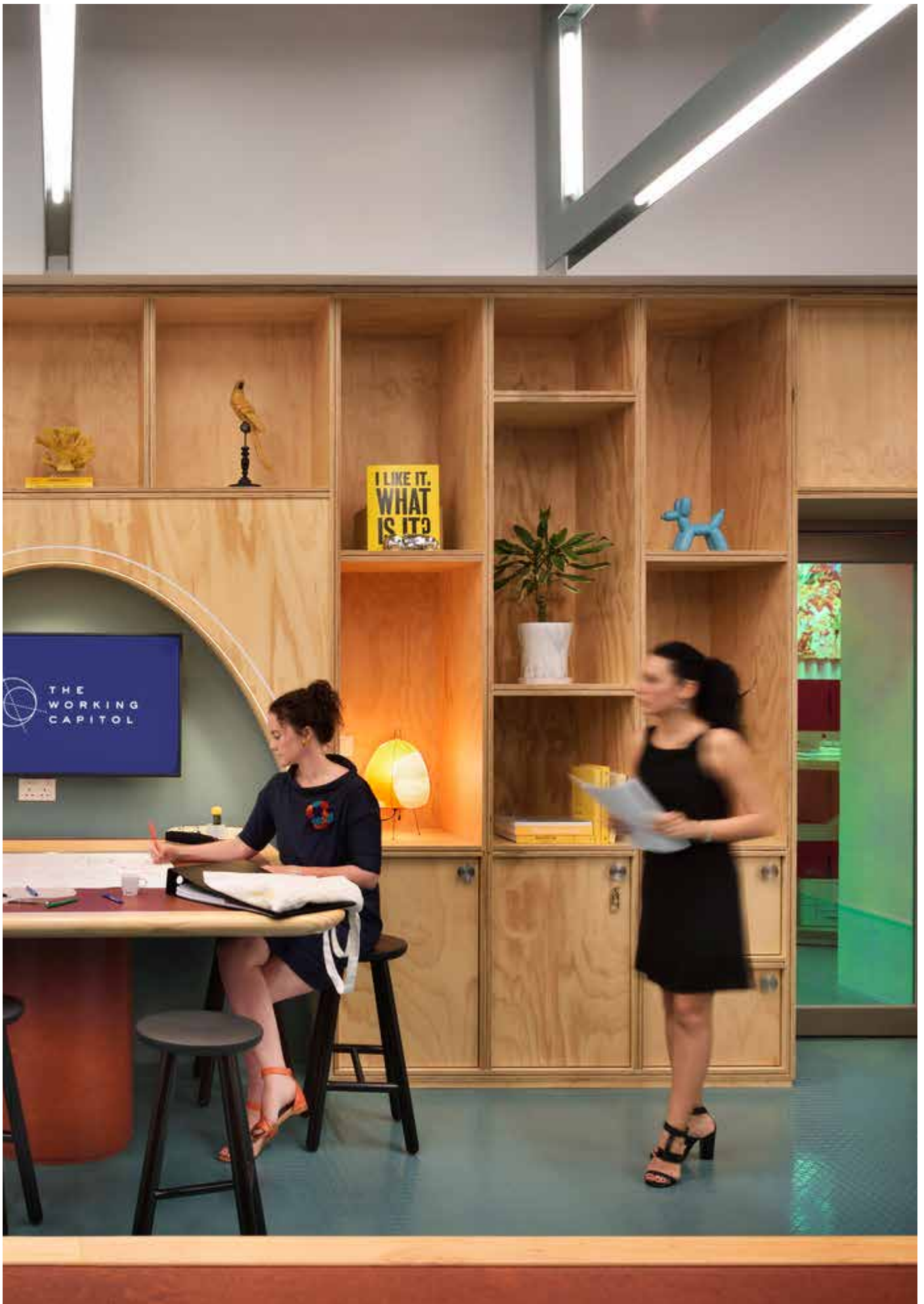
Spot the Difference

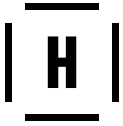
Incubators, Accelerators and

Coworking Spaces

January, 2020







Hassell
61 Little Collins Street
Melbourne, Victoria
Australia, 3000
hassellstudio.com
@hassell-studio

Contact
Michaela Sheahan
Senior Researcher
msheahan@hassellstudio.com
+61 03 8102 3132

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INNOVATE OR PERISH!

Innovation is the backdrop to all human history, but we're really working it hard these days. An unrelenting focus on science, business, and technology is pushing us to do things faster and better. One path to innovation is to provide new ideas with the space and resources to try (and maybe fail) – and what better model to do that than the incubator?

Incubators (and their close relatives, accelerators) have been operating for many years in the creative arts, technology, education, healthcare, finance and media. Most commonly they can be found in under-used, low rent or abandoned spaces.

But the approach to space and services is changing, helped along some years ago by the arrival of a new model of work: coworking communities use similar workspaces, but are more like a friend than a relative. More on them a little later.

Is an incubator a space, or a programme? The answer is both.

Most accelerator and incubator spaces run programmes where funding, mentoring, networking and other resources are provided in a dedicated space (purpose built, or maybe shared).

Up until recently, investment in programmes came from the public purse, venture capitalists and angel investors, but more recently, the corporate sector has begun to dominate the scene.¹

It's clear from the supply and demand for a variety of incubators (idea and prototype stage) and accelerators (scale up to commercialisation), that workspaces tailored to suit the sector and the business phase of budding entrepreneurs are important.

Universities in particular are good at providing low cost, open and democratic spaces for students to learn and share ideas in the early phases of incubation.

Accelerators on the other hand tend to be supported by the corporate sector looking for more developed business ideas, which lends itself to more segmented space for larger teams and a more sophisticated design aesthetic.

While around half of the incubator programs in the UK are non-sector specific, there are far fewer (30 per cent) non-specific accelerator programmes.¹

Spot The Difference

Financing new business ideas has always been a high-risk venture, so as the number of programmes and spaces grows exponentially, there's bound to be a few casualties along the way. In fact, since we last checked in five years ago with who's running what, things have changed a bit.

A lot of spaces and programmes have changed hands (coworking provider Gravity was bought by Naked Hub, WeWork bought out a number of others, including Naked Hub!)^{2,3} or shut-up shop altogether, like incubators Pollinizer and Impact HUB Westminster.

And of course, many new programmes and spaces have appeared – precise figures are elusive because the landscape is changing so rapidly, but there are 73 start-up programmes in universities alone.⁵

In Australia, accelerator programmes have grown for 17 to 36 between 2015 and 2018.⁴

In the UK in 2017 there were 368 incubators and accelerators operating¹ predominantly in the digital, life sciences, engineering, health and energy sectors.

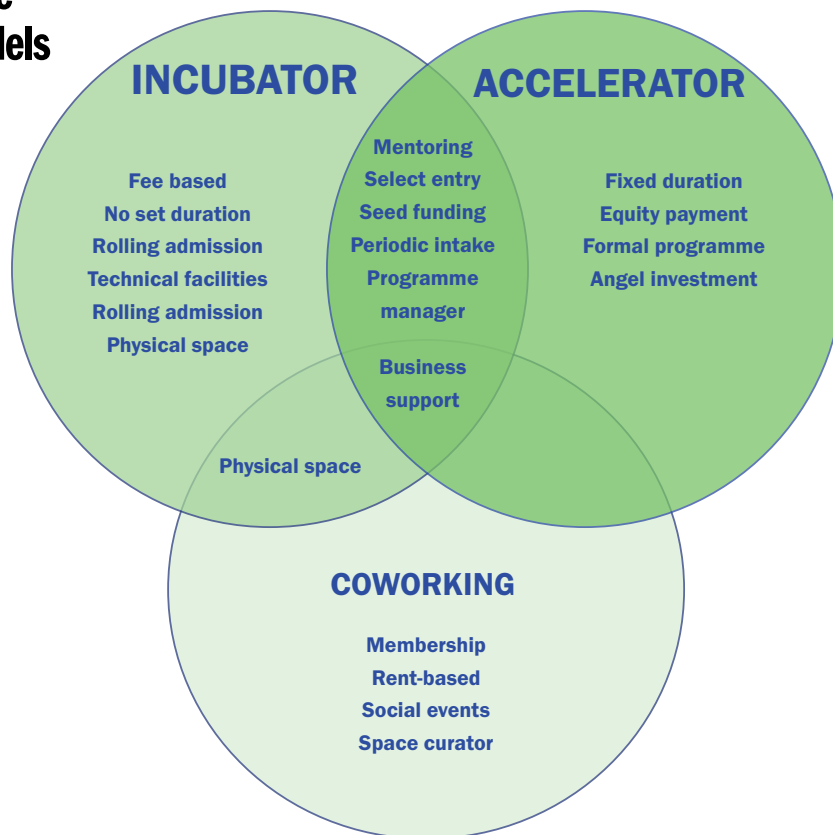
And in the US, there are over 1,250 incubators,⁶ and 500 accelerators operating.⁷ Is your head spinning yet?

Despite the digital revolution, all these programmes need a place and space to be.

Five years ago, over 1000 incubators in China were employing 1.4 million people in about 40 million square metres of floor area,⁸ which, if you know your tall buildings, is about 120 Burj Khalifa towers stacked on top of each other.

Now there are over 3,000 incubators,⁹ and that translates into a lot of space delivering (hopefully) a lot of innovation.

Innovation Space Operational Models



UK
368
incubators



Australia

73 start up programmes in universities

US
1,250 incubators
500 accelerators



China

1,000 incubators
1.4 million people employed
40 million square metres floor area

GETTING THE BALANCE RIGHT

The frequency of communication drops exponentially as the distance between coworkers increases.¹⁵

A short history

The history of incubators is a lot longer than some might think (Y Combinator, the leading incubator in the world¹⁰ was the first to use the term 'accelerator' in 2005¹¹) and doesn't start in the tiny garage of two computer boffins.

It starts in a giant tractor factory with not a soul in it. The Batavia Industrial Center in New York State was established in 1959 in a complex of disused industrial buildings when farm machinery giant Massey Ferguson closed down and left the region with an unemployment problem.

Struggling to find a large, single tenant, the owners decided instead to divide the space into smaller units and to provide support for new businesses. It's still operating.¹²

From these humble beginnings, incubator space design was born.

Proximity is good for business

Here's something you might have heard before, or at least a variation of it: "Environments that build walls around good ideas tend to be less innovative in the long run than more open-ended environments."¹³ This theory from Steven Johnson, in his book *Where Good Ideas Come From*, and many others like it, have generated great faith in the value of networking and sharing knowledge in incubation spaces.

In much of the on-line marketing material for incubators, being physically close to other start-up founders and mentors is highlighted as a major benefit of signing up. Member expectations of networking opportunities underpin many innovation hub business models.

Y-Combinator requires its start-ups to work on site to maximise idea development with mentors - "What we do, we have to do in person."¹⁴

We've known for years, thanks to the landmark study of Thomas Allen, that the frequency of communication drops exponentially as the distance between co-workers increases.¹⁵

There's also the economic case for industry clusters (at regional or precinct scale)¹⁶ and Granovetter's theory of the 'strength of weak ties' that nothing new ever comes from talking to people who think the same as you.¹³

Linking all these theories suggests that innovation occurs at the edges and intersections of communication networks, and the key is to get people who wouldn't normally meet to share ideas.

1. Fora Fitzrovia, London, UK. Photography by Mark Cocksedge
2. Hub Melbourne, Melbourne, Australia. Photography by Nicole England
3. Google, Mountain View, US. (Non-Hassell project)

Incubation is a social world, but in the end, everyone has to think hard, and put pen to paper.

Spot The Difference

Close, but not all the time

While working close to others is a good start, there's more to creative space design than pulling down the office walls and putting a couch in a common room.

Other spatial clues can allow occupants to feel comfortable to speak to those they need to without disturbing others.

Workplace design research has repeatedly shown that at the small scale, the most effective spaces bring people together while also providing privacy so people don't fear being overheard or interrupted.

Interaction depends on a balance between the social and physical dimensions of proximity, privacy and permissions.

"Getting the balance wrong can turn a well meant effort to foster creative collaboration into a frustrating lesson in unintended consequences."¹⁷

We don't want that. Good design provides the right support at the right time for all the activities that need to happen in an incubator- focused work, group work, meetings, access to equipment, private conversations, secure storage, events, eating, and just having a social chat.

Flinders at Tonsley, Flinders University, Adelaide, Australia. Photography by Sam Noonan



SPACES FOR INNOVATION

Workplace design, through the configuration of space, movement patterns, furniture and equipment can have major implications for innovative thinking.

Circulation paths,¹⁸ outdoor spaces and views (of nature preferably),¹⁹ ceiling heights (the higher the better),²⁰ and opportunities for expression of ideas (whiteboards, pinboards, AV)²¹ can all materially affect the behaviour and performance of people within workspaces.

The primary tool, however, in the designer's kit is shared space. While research about how incubators support innovation is limited, one study by Cooper et al relating to communication in a university incubator in the US, common areas were the best place to meet others for both business and social interaction.²²

This is no ground-breaking finding, but what was surprising was that the common area most valuable to the users of that incubator was outside. Frazzled late night tech entrepreneurs would meet in the car park for pizza deliveries, which were not possible inside because of the building security system.

The study indicated that contrary to the tech industry worker stereotype, face-to-face interaction was the most common and important form of communication. Who sat closest to who influenced who talked to who, suggesting that the space design was important in creating an entrepreneurial environment.

The study also identified that people sought social support from others for a sense of belonging, to manage stress, and to access information.

Clever design can address the difficulties for start-ups - extreme time limitations for networking, lack of information about others within the program, and a lack of trust about innovations and funding sources - by providing a range of spaces within a facility that cater to their particular needs.

Those needs include room to grow, social opportunity, technical support and critically, privacy.

Room To Grow

The spaces within an incubator, and perhaps more importantly in accelerators and those with longer programmes, must be versatile enough to allow for growth and variation in activity, as companies get larger or move to different phases of development.

This is particularly true for a company that is scaling up from research to prototyping or commercialisation.

In the hospital and university precinct of Manchester in the UK, a number of co-located bio-science incubator facilities (large and small, wet labs and office space, private and university owned) provide a pathway for development to ensure that the investment is not lost to a different location when a start-up outgrows their initial lodgings.²³

Deakin Prime, Deakin University, Melbourne, Australia. Photography by Nicole England

Spot The Difference

Social Opportunity

Communication with other start-ups at a similar stage provides valuable social support for early business development.

Cooper et al note that “The stage of a resident company’s development as well as the level of its members’ experience affect the type, depth and frequency of interaction that is desired. Companies with longer tenure in the incubator or that have members with previous entrepreneurial experience expressed less desire for frequent interaction with resident companies”.²²

So an incubator might need more social space than an accelerator, or, if a space has businesses spread across the development timeline, it will need lots of choice in where and how people get together.

Technical Support

On the technical front, timely access to mentors and administrative support enables fast responses that gives these programmes their ‘accelerator’ status.

For a start-up with little or no money, time is of the essence, and easy access to business leaders, legal and financial experts can speed up the process of establishing a business. These support services all need space too. New businesses also benefit from access to space, facilities and equipment that start-ups can rarely afford operating alone.

Privacy

Trust is an important asset in a shared workspace. The push and pull of independence and connectedness in innovation environments means sharing and accessing information needs to be balanced with the protection of confidential information.²²

Intellectual property can be protected by the provision of enclosed, bookable spaces for confidential discussions and secure storage options.

And then there’s the absolutely fundamental issue of having a quiet environment to just get work done. Sure – incubation is a social world, but in the end, everyone has to think hard, and put pen to paper (or fingers to the keyboard).

Design that gives acoustic, visual, and spatial clues for the appropriate levels of privacy and interaction is essential for a successful incubation space.





WHICH MODEL, WHAT SPACE?

1. Basic Research Incubator

Space Features

- Large floor plates leased in part or whole
- Generic wet and dry lab facilities
- Specialised equipment
- Commercial development
- Adjacent to clinical research facilities

Examples

- Co-Laborator Spaces, US, Russia, Germany, Japan
- Imperial Incubator, London
- Longwood Center, Boston
- Bio21 Institute Incubator, Melbourne

Scientific research is the focus of basic research incubators, which are often supported by pharmaceutical companies such as Bayer (Co-Laborator Space) and Johnson & Johnson (LabCentral, Boston), or have strong links to universities (Bio21, Melbourne). Cross-sectoral arrangements are also common. MaRS Innovation in Toronto (see economic development incubators) and the Manchester Corridor precinct in the UK, combine government, business and industry interests to provide space, services and funding for start-ups.

Basic research spaces vary in size and services, but often include wet labs and equipment, access to which may otherwise be prohibitively expensive for start-ups. Accelerator programmes are more common than incubation in these spaces due to the longer term and specialised nature of scientific research. However, early stage companies can access incubation funding programs separate to their commercial leasing arrangements. The Longwood Center in Boston is an example of commercial lab space, which, while not offering incubation programs, provides space outside the standard university model.

2. University Incubator

Space Features

- Under-utilised university buildings or purpose built
- Spaces for working, teaching, formal and informal meeting, events

Examples

- The Coterie, Queensland University of Technology, Brisbane
- New Venture Institute, Flinders University, Adelaide
- Energy Lab, University of Technology Sydney
- Melbourne Accelerator Program, The University of Melbourne

In the UK, approximately twenty per cent of all incubators are run out of universities.¹¹ In Australia half of the top twenty performing acceleration programs are run by universities.²⁴ Generally located within university administration, at least initially, and on-site, some of these foster student entrepreneurship, skills and links to industry (improving employability) without involvement in commercialisation. Others are focussed on developing specific ideas, and may invest directly in start-ups.²⁵

Exponential growth in this sector comes from increased commercialisation of university research. While university incubators usually don't generate profit, there are opportunities to share risk with private partners. Despite financial and real estate risks, potential conflicts of interest in staff deployment and issues of intellectual property, expansion in this type of incubator is unlikely to abate.

1. The Science Place, Townsville, Australia. Photography by Andrew Rankin

2. Flinders at Tonsley, Flinders University, Adelaide, Australia. Photography by Sam Noonan

90%
**of North American
incubators are
non-profit
organisations**



160
**economic development incubators
supported by the EU**



3. Economic Development Incubator

Space Features

- Large and small premises, often disused
- Small offices and workspaces
- Centralised communal areas

Examples

- MaRS Innovation, Toronto
- Citylabs, Manchester
- Flinders at Tonsley New Venture Institute, Adelaide

In a similar vein to the original incubator concept from the Batavia Center, cities around the world are using incubators to kick start economic development in locations or sectors that are under-performing. Most North American business incubators (over ninety per cent) are non-profit organisations focussed on economic development, with a large proportion of these (37 per cent) relating to technology businesses.⁶

While all incubators contribute to economic development, those supported by government, from the local level right up to transnational, tend to fall into this category. City councils support economic growth and urban regeneration with investment in premises and services in niche areas, while more major initiatives can provide a network of investment and expertise.

The European Commission supports 160 economic development incubators, in sectors as diverse as space, social innovation, mobility and creative industries, and more generalised organisations such as the Dublin Business Innovation Centre.²⁶

4. Private Incubator

Space Features

- Under-utilised university buildings or purpose built
- Spaces for working, teaching, formal and informal meeting, events

Examples

- Muru-D incubator, Sydney
- Y Combinator, Mountain View
- Google Campus, London
- Blue Chilli, Sydney, Melbourne, Brisbane
- Impact Hub, King's Cross, London

Privately run spaces and programs are the most visible group of the four incubator types, largely because of the focus in business on web-based technology development and the high profile and profitability of some of the players involved. There are thousands of small operators around the world, but these incubators are supported increasingly by large corporate organisations (e.g. Google, Telefonica, Barclays, Red Bull, Telstra) and backed by global investment networks.

In the UK, corporate incubators are increasingly common.¹ This trend is evident in Australia too, with the growth of programs such as Blue Chilli (Westpac) and Muru-D (Telstra). The Stone and Chalk fintech incubator and coworking space in Sydney is supported by major Australian and international finance corporations.

1. MaRS innovation District, Toronto, Canada

2. CitiLabs, Manchester, UK

3. Flinders at Tonsley, Adelaide, Australia.

Photography by Sam Noonan



5. Coworking Space

Space Features

- Often disused buildings
- Small offices, workspaces or desks only
- Informal and formal meeting spaces
- Café or other hospitality focal point

Examples

- Fora, London
- The Great Room, Singapore
- WeWork, global
- Hub Australia, Melbourne, Sydney, Adelaide

While not technically part of the incubator family, co-working spaces have some similarities, particularly to private incubators. Co-working communities operate on the same principle of collaboration and support through proximity, but use membership structures to support co-operative relationships. The primary differences lie in non-competitive, fee based membership. Some attract particular sectors, (e.g. One Roof in Melbourne caters to women-led businesses) but most are open to any small business or individual.

Coworking space is one of the fastest growth areas in commercial real estate. Despite its ill-fated public listing attempt in 2019, WeWork is the largest private space holder in several US cities.²⁷

Brisbane is Australia's co-working capital, with 2.8 per cent of commercial floor space in the city,²⁸ compared to 2.4 per cent in Sydney, and about four per cent in London.²⁹ Memberships typically include centralised administrative support, meeting spaces, and social networking events, all for a monthly fee. Formal incubation programmes are rarely offered, although start-ups working in coworking spaces may access independent, non-place based programmes.

In the heady, early days of co-working (early 2000s) spaces were low rent, rudimentary and funky, but as the market becomes crowded, and space needs more diverse, operators like The Great Room in Singapore, or Fora in London are taking a more sophisticated corporate club approach. Hospitality perks like free beer, upmarket menus, and specialist facilities such as recording studios, gym, and childcare are increasingly used to differentiate one space from another.

1. The Great Room, Singapore. Photography by E.K. Yap
2. HUB Melbourne, Australia. Photography by Nicole England
3. Fora Borough, London, UK. Photography by Hufton Crow

CONCLUSION

From the high tech lab facilities of a biomedical incubator to the single chair and desk provided for an app developer in a coworking space, these types of flexible workplaces represent a growing market.

Incubators and accelerators can be categorised in a number of ways – space or programme, profit and non-profit, idea or product development, or by sector type - basic research, university, economic development and private. Diverse start-up activity, products and objectives ensure a wide variety of business approaches, and an even broader range of space design solutions.

Whatever the category, the design challenge is to combine collaboration and quiet space in a way that supports innovative thinking and action.

Each of these types of incubator, accelerator and coworking space needs a unique design approach to find the optimal balance of interaction and privacy to deliver the innovative products and services our world now demands.

REFERENCES

1. Bone, J., Allen O., and Haley, C. (2017) Business Incubators and Accelerators: The National Picture. Nesta, United Kingdom, <https://www.nesta.org.uk/blog/incubators-and-accelerators-an-updated-directory-for-the-uk/>
2. Cheung, A. (2018) Overseas Companies Set to Rock Australia's 'Sleeping' Coworking Market. Commercial Real Estate online October 19, 2018, <https://www.commercialrealestate.com.au/news/overseas-companies-set-to-rock-australias-sleeping-coworking-market-expert-says-50770/>
3. Ghaffary, S. (2018) WeWork is on an Acquisition Spree — and They're All Over the Board. Vox online, April 12 2018, <https://www.vox.com/2018/3/7/17086788/wework-acquisition-list-conductor-meetup-flatiron>
4. Artesian (2018) Growth in the Australian Accelerator Market. Artesian <https://www.artesianinvest.com/artesianinvest/growth-in-the-australian-vc-market-august-2015-august-2018-2/>
5. Alexander, J. (2018) Australia's Startup Ecosystem is Booming and Universities are Jumping In. Smart Company online, May 8th 2018. <https://www.smartcompany.com.au/startupsmart/news/australias-startup-ecosystem-is-booming-and-universities-are-jumping-in/>
6. National Business Incubator Association (2015) <http://www.nbia.org/>
7. Gust (2016) Global Accelerator Report 2016. http://gust.com/accelerator_reports/2016/global/
8. Swissnex (2013) Tongji University Incubator. Switzerland's Outpost for Science, Technology and Culture in China. <http://www.swissnexchina.news.org/innovation/2013/10/27/tongji-university-incubator>
9. Xinhua (2017) China Tops the World in Incubators, Makerspaces. China Daily online, 19 September 2019 http://www.chinadaily.com.cn/business/2017-09/19/content_32203134.htm
10. Forbes Magazine (2012) Top Tech Incubators. Website, www.forbes.com/sites/tomiogeron/2012/04/30/top-tech-incubators-as-ranked-by-forbes-y-combinator-tops-with-7-billion-in-value/
11. Barrehag, L.; Alexander Fornell, A., Larsson, G., Mårdström, V., Westergård, V. and Wrackefeldt, S. (2012). Accelerating Success: A Study of Seed Accelerators and Their Defining Characteristics. Gothenburg, Sweden: Chalmers University of Technology.
12. Batavia (2015) Website <http://www.batavianewyork.com/for-businesses/pages/batavia-industrial-center>
13. Johnson, S. (2010) Where Good Ideas Come From. Penguin Publishing
14. Y Combinator (2015) Website <https://www.ycombinator.com/faq/>
15. Allen, Thomas J. (1984). Managing the Flow of Technology: Technology Transfer and the Dissemination of Technological Information Within the R&D Organization. Cambridge, MA: MIT Press
16. McDougal and Witte (2010) Knowledge Hubs, Innovation Precincts, Technology Parks, Employment Centres - Whatever Label You Want, They Are Much More Than Real Estate Projects, Economic Development Australia, Vol. 4, No. 3 pp 29-30. www.sgsep.com.au/system/files/Knowledge_Hubs_%28McDougall_Witte%29.pdf
17. Fayad and Weeks (2011) Who Moved My Cube? Harvard Business Review Website, . www.hbr.org/2011/07/who-moved-my-cube
18. Kabo, F. Hwang, Y., Levenstein, M., Owen-Smith, J. (2013), Shared Paths to the Lab: A Sociospatial Network Analysis of Collaboration. Environment and Behavior, Volume: 47 issue: 1, page(s): 57-84. Sage Journals. <https://journals.sagepub.com/doi/abs/10.1177/0013916513493909>
19. Watson, R. (2011) Future Minds: How the Digital Age is Changing Our Minds, Why This matters and What We Can do About it. Nicholas Brealey Publishing
20. Meyers-Levy, J. and Zhu, R., (2007) The Influence of Ceiling Height: the Effect of Priming on the Type of Processing that People Use, Journal of Consumer Research, vol 34, August 2007
21. Doorley and Witthoft (2012) What Makes a Space Good for Collaborative and Creative Work? D-school - Stanford University January 19, 2012 Podcast: <http://blogs.hbr.org/ideacast/2012/01/designing-spaces-for-creative.html>
22. Cooper, Hamel and Connaughton (2012) Motivation and Obstacles to Networking in a University Business Incubator. Journal of Technology Transfer 2012 37:433-453 Springer Publishing
23. Chantler, K. (2014) Director Academic Affairs and Innovation, Royal Manchester Infirmary. Interview with author, October 4, 2014.
24. Artesian (2017). Australia's 24 Most Active Accelerators and incubators. <https://www.smartcompany.com.au/startupsmart/news/australias-24-most-active-accelerators-incubators/>
25. McDowell, K. (2011) Go Forth and Innovate! To Be or Not To Be: University Incubators. Website, www.goforthandinnovate.blogspot.com.au
26. EBN Innovation Network (2015) Website, <http://ebn.be/>
27. We Work (2019) We Work Becomes Biggest Private Office Tenant in Manhattan. We Work online, <https://www.wework.com/newsroom/posts/wework-becomes-biggest-private-office-tenant-in-manhattan>
28. Cheung, A. (2019) Brisbane Has Biggest Proportion of Coworking Space of Any Australian City. Commercial Real Estate online, <https://www.commercialrealestate.com.au/news/brisbane-has-biggest-proportion-of-coworking-space-of-any-australian-city-838346/>
29. Cheung, A. (2018) The Lungs of Our Buildings: Why Co-working Will Only Get More Popular. Commercial Real Estate online, <https://www.commercialrealestate.com.au/news/the-lungs-of-our-buildings-why-coworking-will-only-get-more-popular-57131/>

Studios

Adelaide

Level 1 82 Waymouth Street
Adelaide SA Australia 5000
T +61 8 8220 5000
E adelaide@hassellstudio.com

San Francisco

Level 7 650 California Street
San Francisco CA 94108 United States
T +1 415 860 7067
E sanfrancisco@hassellstudio.com

Brisbane

36 Warry Street
Fortitude Valley QLD Australia 4006
T +61 7 3914 4000
E brisbane@hassellstudio.com

Shanghai

12F base 45 Caoxi North Road
Xuhui District Shanghai 200030 China
T +8621 5456 3666
E shanghai@hassellstudio.com

Hong Kong

22F, 169 Electric Road
North Point Hong Kong
T +852 2552 9098
E hongkong@hassellstudio.com

Singapore

33 Tras Street
#02-01 078973 Singapore
T +65 6224 4688
E singapore@hassellstudio.com

London

1 Curtain Place
London EC2A 3AN United Kingdom
T +44 20 7490 7669
E london@hassellstudio.com

Sydney

Level 2 Pier 8/9
23 Hickson Road
Sydney NSW Australia 2000
T +61 2 9101 2000
E sydney@hassellstudio.com

Melbourne

61 Little Collins Street
Melbourne VIC Australia 3000
T +61 3 8102 3000
E melbourne@hassellstudio.com

Perth

Level 1
Commonwealth Bank Building
242 Murray Street
Perth WA Australia 6000
T +61 8 6477 6000
E perth@hassellstudio.com