

Working Paper 3

Creative Spaces and Collingwood Arts Precinct

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Culture, Media, Economy (CME) is a research hub at the School of Media Film and Journalism at Monash University. It is a response to the current conjuncture in which new financial and business models, technologies, socio-cultural dynamics and geo-political configurations have radically transformed our understandings and practices of culture, media and economy. www.cmemonash.org

1. General Background to Creative Spaces

1a Creative Industries

Background

Creative industries have been notoriously difficult to define. This is a result of the switch in terminology between 'cultural' and 'creative' industries introduced by the UK New Labour government in 1998. The change of terminology was a tactical move to gain traction within government for an increased budget for the new Department of Culture, Media and Sport. It allowed the arts and cultural sector to benefit from the appeal of 'creativity' at a time when innovation agendas were taking off, and the traditional small and medium enterprises associated with the cultural sector were now joined by the idea of tech-related 'start-ups'.

The immediate consequence was the addition of 'software and computing services' to the fairly standard list of cultural industries. This addition expanded the 'creative industries' by 40%, thus adding statistical heft to the new terminology. The DCMS dropped Software and Computing in 2008; so too did the reports conducted by The Work Foundation for the Blair and Brown governments. The European Union does not include this sector, nor does UNESCO – currently providing the most sophisticated framework for the collection of cultural statistics (and linked to legal reporting requirements of governments).

This is not to say that digital technologies are not all-pervasive in this sector; simply that their services - as with computing and other production hardware (audio-visual equipment for example) - should not be included in the employment figures. They work to different dynamics and in different contexts and require distinct development strategies from government.

It is not to say that tech-related start-ups do not share similar values or like to occupy similar spaces to those in the cultural sector – many of them do. However, it is generally agreed that they are doing different things. We may wish to bring them together and seek synergies – but we need to acknowledge that these are two sectors before we explore cross-sectoral links.

The problems with adding 'Software and Computing' is one related to the term 'creativity', a capacity or value not confined to the cultural sector – however broadly defined. Many areas of work and life seek 'creativity' and, defined as bringing the new into the world, it can apply to branches of science, of business, of social practice etc. The UK New Labour definition of its potential for 'wealth and job creation through the generation and exploitation of intellectual property' also can apply to a vast range of 'non-cultural' activities which use IP (Patents, Copyright, Trademarks, Design). The more specific term 'copyright industries' often used in the US gets closer, but it is also clear that many arts and cultural activities don't directly trade in copyright.

A more usual definition of 'creative' industries suggests they are 'applied', that they use cultural/ symbolic value but linked to more functional products. This can be found in various 'concentric circle' models (David Throsby; The Work Foundation; European Union) where the arts at the centre fan out towards the cultural industries (TV, Film, Computer games, publishing etc.) and thence to the creative industries (architecture, fashion, design) and beyond (goods with high symbolic value – 'designer' cars, fridges, 'experiences' etc.). This however implies somehow that the arts are the sources of ideas and skills that the rest then apply – which is frequently not the case at all (think of a film and the screen writer – even if based on their original novel).

Working Definition

Given that Creative Victoria was renamed to embrace some notion of the creative industries, and CAP is situated policy-wise within this framework we need some working definition. We might follow best practice and a) exclude Software and Computing and b) call the sector cultural, or creative, or cultural and creative but do not seek to differentiate between a 'cultural' and a 'creative sector' as this is not possible to do.

We should follow Creative Victoria's own definition, which also echoes that of UNESCO, (involving 11 sectors: advertising, architecture, books, gaming, music, movie, newspapers and magazines, performing arts, radio, TV, visual arts). CV's strategic document has it:

"Creative industries are an evolving mix of sectors spanning arts, culture, screen, design, publishing and advertising. They cover disciplines as diverse as game development and graphic design, fashion and filmmaking, performing arts and publishing, architecture and advertising, media and music, comedy and craft. They include activities that are commercially-driven and community-based, experimental and export-intense.

Across all disciplines, Victoria's creative industries are driven by a powerhouse of small organisations, micro businesses and sole practitioners, comprising the vast majority of the sector. They operate within a creative ecosystem that extends from iconic cultural organisations and global businesses to educational institutions, government bodies and community groups".

Breadth and Depth

Andy Pratt also made the distinction between 'depth' and 'breadth'. The above definitions apply to a broad sector. Some research goes into 'depth' – tracing back the 'value chain' or 'ecosystem' of particular industries. Thus visual arts have connections to a range of specialist materials suppliers, making services (printing, exhibition set up, welding), legal and intermediary services (Christies, for example), packing and transport, restoration – along with the array of educational and media institutions that go to make up an 'art world'. Some sectors have deep and historical connections to mass manufacture, such as fashion (textiles) and architecture (construction), music (instruments, audio technologies).

Some creative industries strategies have focused as much on these manufacturing/ making links as on the 'creative' end. China, for example, has focused on musical instruments and mobile stages; Korea and Japan on gaming consoles etc. The objective is to keep these manufacturing links as a key source of growth and employment for the area (nation, region or city). "Post-industrial" countries are also beginning to identify 'advanced manufacture' as potential growth sectors, with small scale, bespoke, and globally networked companies beginning to move into products previously associated with large scale mass production. The implications for the creative sector are beginning to emerge, with previously distinct areas such as agriculture, manufacture and artisanal crafts beginning to intersect with creative spaces and fields of practice.

CAP is situated in an historic, almost classic case, manufacturing district. One task CAP faces is investigating potential for links with residual and emergent manufacture, artisanal/ craft and tech-oriented 'making' activities, along with urban gardening. How might these intersect with the creative sector, and what are the implications for these 'secondary' sectors moving close to the cultural/ creative (i.e. 'service') sector.

Values

As, in part, an intervention from a public body CAP will rightly require a public value justification. This will come in part from the 'needs' expressed by the sector, but there are a range of other considerations as outlined in the next section. It is worth highlighting that, according to the Creative State document these justifications include cultural, social and economic value. Providing for the needs of a creative sector might fall within economic development territory, but this might rely on a justification that the creative sector is valuable as a cultural asset over and above its growth potential. Obviously win win is good, but that is not always possible. Likewise, there may be social benefits of supporting a creative sector, because of a range of spill overs or externalities – improving the feel of a 'bad' area; encouraging community involvement and activation; allowing easier pathways to employment or training etc.

That is, economic development in the creative sector is always linked to other cultural and social considerations.

1b Creative Spaces/ Hubs/ Precincts

Creative Precincts/ Hubs come out of a long history of creative space policy practice, and present some related definitional challenges. Previously these concerned the different expectations placed on them as arts and cultural workspaces; now the definition has expanded to include a 'start-up' tech sector which shared many of the features – small and micro, networked, blurring of life/ work, social/ economic outcomes - previously associated with the arts and cultural sector.

Typically, CIHs are targeted at the small and medium zone of the 'creative ecosystem' identified by CV above. It is important to specify further what kinds of people are targeted and what kind of outcomes CAP is supposed to achieve. Whilst all hubs aim to satisfy some 'need', the actual need(s) they identify may relate to a strategic objective (targeted acceleration, digital hothousing, 'dirty' maker spaces) that goes beyond some of the expressed needs (cheap space near the city centre) of the sector. They are also related to the capacities and the organisational objectives of the institutions involved in their set-up. An educational institution will focus on certain things that a venture capitalist may not. And vice versa.

Creative hubs stand in a long line of spatial forms and policy terminologies aimed at concentrating the small-scale, fragmented and often dispersed set of individuals, companies and agencies that make up the creative sector. They do so not only to provide the affordable, flexible space the sector often requires but to facilitate synergies, develop networks, generate raised horizons (the buzz of ambition and energy), enhance common value (the 'brand' associated with working in such or such a place) and more generally make a positive contribution to the local context in a number of ways (regeneration, place-making, catalysing creativity etc.)

These sorts of interventions have been around for over forty years – since the community arts spaces of the 1970s and 1980s. They have been linked increasingly with the regeneration of older industrial buildings in the wake of de-industrialisation, and with the desire to stimulate the cultural or creative economy in areas seeking new industries and employment. These were led by different local government agencies – sometimes the arts sector, sometimes economic development, sometimes strategic marketing.

Since New Labour's energetic promotion of the Creative Industries and its successful 'export' to both to developed East Asian countries and to developing countries globally, the rationale has expanded. The re-use of old industrial era buildings (factories, schools, hospitals, prisons, train stations, power/ gas stations) has now become a distinctive global aesthetic, which is less about 'regeneration' than appealing to a specific group of people and businesses (creative class, hipsters, millennials etc.) and making a statement about a place being innovative, forward looking and youthful. All aspiring 'global cities' seek such places.

These spaces are also fed by real changes in work where the typical sectoral profile of the cultural sector – a few very large global companies surrounded by complex, place-based ecosystem of micro and small players - has expanded to other sectors. That the value of 'creativity' is now being sought by sectors outside the cultural has also meant that the terminology of 'creative spaces' can apply to a great range of companies and individuals.

One key element has remained constant: creative spaces are not (just) about the provision of low-cost, flexible lets, but about creating something great than the sum of its parts. Creative workspaces generate effects that are seen to benefit the occupants and the strategic expectations of the public sector – and increasingly the private sector too. The externalities generated by the 'greater than the sum of its parts' effect can be captured for public policy ends (regeneration, community development, creative catalysts, city branding

etc.) but also by the private sector for real estate development (gentrification, of the building or nearby area), company branding effects (such as We Work), and access to/ brokering of start-up/ equity investment link. Some of these private sector benefits may also be used within public sector initiatives.

1c Summary of Benefits

Occupants:

- transfer of tacit knowledge through informal learning and serendipity;
- efficient sourcing of skills and information;
- competition-collaboration of complementary business producing learning and efficiency effects;
- development of inter-cluster trading, networking and joint projects;
- inspiration by proximity;
- common branding and identification;
- potential for digital infrastructure to enhance the above.

Policy

- allow targeted application of industry development policies – e.g. Pilot schemes – and early feedback;
- concentrating and formalizing informal working can help identify needs and broker access to providers;
- site for creative industry forums/ seminars/ events;
- cross-subsidy or government support allows cheaper rents or other benefits for less profitable occupants, as part of wider cultural objectives or risky innovation;
- common branding and identification as part of local development and wider sectoral profile ('Creative Balarat');
- links to specific institutions as part of an industry development program (links to a theatre, or gallery, or a writers' festival) or targeted education/ training/ R&D function through a university;
- and latterly, intervening in the local real estate market to preserve affordable space.

1d Issues

Regeneration or Gentrification?

Historically creative workspaces/ clusters/ hubs have been part of attempts to regenerate certain (often industrial historical) areas of the city, along with cultural venues (galleries, museums) and retail/ consumption spaces (art/ craft shops, 'trendy' bars and restaurants). The creative buzz would thus both drive economic activity in the area (perhaps cross subsidising the cultural venues) and enhance the profile of the local area, the local creative sector and help brand the city as a whole. The emphasis on the consumption amenities rapidly accelerated in the wake of Richard Florida's popular 'creative class' theory in which

these professionals that now drove economic growth would be attracted to places with the bohemian, multi-cultural feel associated with the buzzing, 'hip' areas.

However, in the last decade gentrification has emerged as a major issue. Artists in Toronto demonstrated against Richard Florida's appointment at the local university; the intended or unintended effect of the presence of cultural spaces to drive up real estate value and forcing out low income residents – artists amongst them – is now a global issue. A related problem is that consumption businesses are more immediately profitable than production ones – especially in the cultural and start-up space. The consequences have been that consumption drives out production, and trans-local chains drive out the local one-offs.

Any new creative space needs to consider its impact on the local real estate ecology.

Which kind of creative?

This is crucial, as the generic notion of 'creative' hides a series of sector specific requirements, including that to be with others who share similar values. Artists want 'dirty' spaces; as do 'makers' but in different ways. Screen industries have certain requirements as do the performing arts; some 'start-ups' might want to be with aspiring 'unicorns', others will look for a more relaxed hipster feel. In addition, the strategic intent of the organisations involved and the city in which they are located will also have an impact on what space for what creative to achieve what outcome.

Physical space?

The proliferation of web based platforms has impacted on the creative sector in many ways, as is well known. It has not replaced the need for face-to-face interaction but it has re-configured it somewhat.

It is possible to run a business from home, gaining access to global markets via the internet. In practice most creative are drawn to some common social space for at least some part of their working day/ week. The quality of that social space is important, as witnesses by the popularity of certain places over others – often with an aesthetic and cultural ambience reflecting the broad values of those using it. However:

- Working in a café suits only certain kinds of creative work (laptop based) and individuals/ businesses at a certain stage in their development. Moving to a more formal workspace – no matter how flexible – is an important, and visible step.
- A successful creative workspace is a material manifestation of the co-presence and trust which underpins the networks of a creative milieu. Workspaces themselves make this trust and interdependence visible, this being part of their value creation, and they all seek to highlight these shared value – and values.
- Co-working is seen to enhance serendipity – but such serendipity remains completely random unless it builds on shared and cumulative knowledge, skills and values. A creative workspace does not just promote serendipity but also gives some forms and memory to the knowledge, skills and values of a creative milieu.

Digital Space?

Physical place is crucial but the possibilities opened up by digital technologies also re-configure the workspace in new ways. Individuals and forms might want much more flexibility as they disaggregate face to face and creative time. The way they network will involve people and companies well outside the workspace – and indeed the country, or continent. This might mean:

- different approaches to, and requirements for, networking within the space (international industry seminars or ‘salons’;
- advanced video-conferencing facilities/ or always-on portals;
- formal workspace to workspace agreements and programs, such as workspace brokered/ organised study trips or investor forums;
- live-work spaces for visiting creatives.

One key consideration is how we use – or don’t use – the data being generated by the occupants both to enhance the working of the space (e.g. is there a role of a specific ‘app’ in to nudge networking and serendipity?). This also applied to the more public visible function of the space (can their activities generate some kind of externally visible presence?) and to the kinds of data that city governments might find useful? This is discussed in the design section below.

Post-Digital Urbanism

The possibilities of creative workspaces have expanded in the wake of the digital revolution. In the creative sector the following new uses of digital technologies can be highlighted:

- Innovative spatial practices around sharing and utilising of urban and public spaces through the use of digital devices, communication and data;
- Public displays and installations to entertain and inform, including programmable building facades, public digital art interventions and programmable screens in shared spaces;
- New forms of urban participation, co-creation and co-design;
- Support, marketing and communication of local talent, creativity and ventures;
- Flexible creative work patterns enabled by digital communication and effective shared utilisation of spaces, facilities and resources, including shared ambient intelligence emerging from networks

How do these reconfigure the strategic objectives – for the occupants, the local area, the creative sector, the city – of creative spaces? They certainly introduce a new dimension that we might wish to consider in this consultancy.

2. If Creative Hubs is the answer – what is the question?

Creative spaces have emerged from self-organising artists/ creatives; from a city council (or development agency) with a creative industries agenda; from the private sector (usually start-up spaces with clear tenancy market); from arts organisations looking to move out of a simple performance/ exhibition space. CAP shares many of these characteristics but it not reducible to any, which is a key strength. Below is a brief overview (and thanks to Tom Fleming for many of the links).

Artist Studios

These have a long history in Australia and internationally. [ACME Studios in London](#) – organised by an artist collective - goes back to 1972. Since then local government provision of arts space has been a key cultural policy setting. From the 1990s, with the urban regeneration boom in older industrial inner cities, and the wholesale revamping of 19th century industrial infrastructure for commercial, cultural and consumption purposes, an urban real estate boom has put pressure on spaces for artists. Schemes such as Amsterdam's 'Breeding Places' sought to counter this. The new mayor of London Sadiq Khan has just announced a [program for artists studios](#) in the city.

A close comparator here would be [Creative Space Melbourne](#), which has carved out spaces for artists from a highly competitive Melbourne property market.

'Creative Factories'

A later generation of developments involved wholesale building development as a broader statement of intent than just artist studios. These studios would be one element in a broader offer that might include office space for anchor tenants, some performance space (public and rehearsal), exhibition, cafes, retail and social/ community elements. They are often in old industrial buildings.

These tended to be a partnership between an active arts group and a responsive local government with buildings on its hands. Sometimes this would involve a developer (again usually in close partnership with a local government). Some of these places might develop out of a squatter movement – famously *Takeles* in Berlin and many other places in Amsterdam and some other European cities. In the last decade or so this tended to be more about a local government and/ or developer responding to a vocal arts/ cultural lobby group with a strong vision. This vision tended to be locally focused – the regeneration of an iconic building, its local area community, the wider creative vision for a city.

Examples in the UK would be [The Custard Factory](#) (a private initiative), and more latterly the [Truman Brewery](#) and [Tea Building](#) in London. Other examples might be the [Kulturbrauerei](#) in Berlin, the [Westergasfabriek](#) in Amsterdam, [La Friche](#) in Marseilles, [794 in Beijing](#), [M50 in Shanghai](#).

The early success of these spaces in gaining high visibility – often under the radar of official promotional and tourism literature (794 in Beijing is a classic case) – resulted in many local governments and astute developers seeking out these spaces as potential creative hubs. The drivers were the possession of old buildings in search of a use and the rise in popularity of the idea of the ‘creative class’ which seemed to demand such informal, ‘happening’ spaces’; and usually less pronounced, a general desire to promote the creative industries.

Examples would include:

[Metelkova, Ljubljana](#)

[Rotterdam Creative Factory](#)

[Creative Fabriek, Hengelo](#)

[Leicester Creative Depot](#)

[São João da Madeira, Portugal](#)

[Showroom / Workstation, Sheffield.](#)

[Electric works, Sheffield](#)

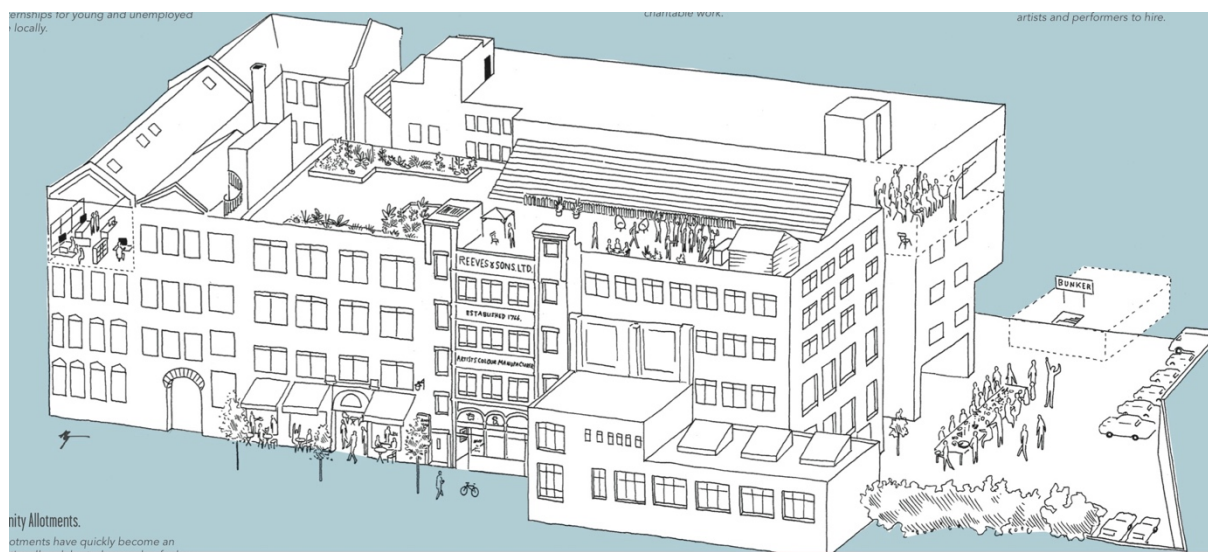
[Soho factory, Warsaw](#)

[Volkshotel](#)

[Lynfabrikken](#)

[Bootstrap, Dalston](#) London might provide a good example of the general approach. It has a mix of tenants and uses, with a roof top bar and cinema, along with a live music venue. It is very urban, hence its density and use of all spaces. Its key principles involve:

- Social Enterprise – its is not for profit.
- Mission-driven – a highly visible creative aspiration
- Impact-focused – it wants to make a different locally
- Mix of rents – cross subsidy
- Cross-art-form
- Cross-sector
- Production & Consumption



Co-working

Though all of these creative factories are about co-working, the term has become more associated with a kind of hot-desking through to medium term small business renting entity. It fits into a more general move towards freelancing as well as the shift in the association of 'creative' away from the artistic-cultural towards the start-up tech innovation economy world. As with the word 'creative' itself these space still tend to use the artistic persona (as opposed to that of the scientist or engineer) as a visible sign of being creative and a design aesthetic.

There are many examples of these and they have proved to be highly replicable across the globe. They tend to offer some kind of free or membership based entry, moving up towards more formal and medium term renting. They tend to be about lap top/ computer work.

[We Work](#) is perhaps the most well know.

Other examples would be:

[Impact Hub Kings Cross](#)
[Fishburner, Sydney](#)
[Soho3, Shanghai](#)

A number of organisations have moved into the co-working space without actually owning buildings, but simply acting as an intermediary for space owners and tenants. Creative Space Melbourne is an example of this in the public/ art sector. In Shanghai [MOZZOS.COM](#) is highly commercial.

There are different levels of 'curation' involved in these spaces. Some more or less self-select because of the aesthetic and existing 'feel' of the existing users. Many see any work being done on a lap top as 'creative' and thus part of the mix.

Others are more curated – focusing on a particular kind of business and with a more active studio manager. [ACMI-X](#) is a good example here. It is focused on Screen Industries and seeks to encourage users who have potential to be complementary to each other and engage in collaboration and cross trading. This kind of goal is more pronounced in the 'creative factory' kind of approach – and ACMI-X is a kind of hybrid factory/ co-working. This reflects a vision of a committed cultural organisation (ACMI) and management with a commitment to both public engagement and developing the creative industries. It requires a vision and an experienced, active studio manager to make it work.

Maker Spaces

At the other end of the spectrum from lap-top based co-working are the maker spaces. These include the 'hacker' spaces where hardware would be opened up, and 'open source' hardware developed (the Arduino' circuit board is the classic). In the US this morphed with a

wider 'maker movement' where all kind of older crafts might be recovered, including light manufacture, which may or may not have a 'cultural' dimension. At the outer reaches this also involved urban gardening, cooking and brewing. This multiple retrieval in turn may or may not be linked to the more 'innovation' oriented tech maker cultures.

Attempts to house and promote such cross fertilisation can be found in many places such as

[Fab lab, Manchester](#)
[Makerversity, amsterdam](#)
[Dortmund centre for art and creativity](#)

Examples in Melbourne would include [Space Tank](#).

The intersection of these different 'maker' cultures should absolutely not be ignored.

Organisation-led spaces

Many creative hubs have developed out of existing arts or cultural spaces. The motivation (rather like ACMI-X, though they have developed a physically distinct site) has been to expand their revenue base but also to connect with a broader sector than its own employees. Often this connection is one with audience/ visitors.

ACMI wanted to find ways of opening up its exhibition spaces to its audience in the form of available exhibition spaces linked to its workspace ACMI-X.

[Chapter, Cardiff](#) wanted to move its highly popular café into a more formal workspace setting, thus engaging directly with the kind of person who works physically in its premises. Could their creativity somehow be linked to or channelled through that of the Chapter Arts organisation itself?

[Watershed Bristol](#) has also tried to expand its offer to use workspace to bring in new potential collaborators. Its pervasive media studio an attempt to find ways not just at providing co-working space but actively stimulating and engaging a local creative community.

This use of creative workspace to help deliver public value through stimulation and engagement with actual and emergent creative producers, moving the audience, so to speak, from consumers to co-producers and creative in their own right, is an important dimension.

'Meanwhile' Spaces

The idea of 'pop-up' spaces is now ubiquitous (and often meaningless) but temporary occupation of space – in buildings set for development, or demolition, or simply un-used – has been an important element in the cultural animation of many cities. This does not seem to be a model for CAP but a key lesson for the city would be the role of easy access, flexible, short-term space for stimulating first steps into formal creative business practice.

Renew Newcastle is a good model here, less for its innovative intervention into a planning impasse and more for the way it made the invisible creativity of Newcastle visible. This has well known regeneration effects (Newcastle as the 'coolest city on the planet' etc.) but taking a space rather than working at home allowed artists creative to take a step, commit to a path, to try a career doing what they did in a low risk environment.

How is this to be achieved in CAP?

Summary

Hubs might enhance serendipity, collaboration, cross-trading and the network effects of their tenants by various degrees of active curation. Creative business themselves can gain benefits from being associated with the Hub brand – simply being in the building can suggest a certain ambition and cool.

The setting up of the Hub itself can in many cities or part of cities announce that the local government takes this sector seriously. That a creative career is a real possibility and one that is actively encouraged by local government and other institutions. A Hub is often a key part of a local creative industries/ creative city strategy, if only because they tend to be high impact in terms of visibility and (seemingly) more straightforward than a sectoral development strategy.

However, more active services might be developed. Co-working spaces offer mentoring, and broker access to larger companies and venture capital.

I have not come across a creative space with an 'in-house' creative business development service and it is hard to see how they could be delivered in house. First, a hub would not have enough demand to pay such a service and two, it is uncertain who would be able to provide such. These services are not generic – and those that are (accounting, bid writing, basic business administration) can be found in many places, including online.

A good studio manager can curate the space, help make connections within it, and identify/ broker contacts outside, would be more realistic. It would be up to the city and other institutions to develop creative services for the sector at a more general level rather than offer them in the hub. Though of course a creative development agency emerge could be a CAP tenant.

Other things the CAP might do would be to run a series of guest speaker seminars – either its own program co-funded with the cities/ state – or linked to different art institutions or universities.

The digital offer also needs to be clear – as detailed below.

Key Value Summary

Cost

Connectivity

Risk / sustainability

Flexibility

Sense of Ownership

Creative of Value more than property

Sense of Community

Social Capital

Cultural Capital

Locally Embedded, Globally Connected

3. Collingwood Arts Precinct: A Properly Smart Building

3a Constraints

Constraints to guide selection of tech/approach

- [MVP](#) Infrastructure
- No IT Department
- No Unnecessary Signups
- Hardware is Hard
- Un-university
- Automated admin
- Use existing systems
- Is it core business?
- Can we throw it away?
- Can we iterate?
- Is it low maintenance?
- Is it open source?
- Is it shareable?
- Is it resilient?

3b Design principles

A sort of super-lightweight IoT meets Pompidou Centre; nothing that needs technically supporting; all exposed cable-trays and handles; don't build anything if it already exists; make a hackable layer visible and tangible; focus on social fabric and human interaction as the glue; a two-for-one strategy of using any infrastructure you have to deploy (electricity, water, wifi) as a proxy for something else like sensing; everything on wheels; everything like camping etc. etc. etc.

Quiet tech

All this tech isn't in my face, it doesn't always require my attention. It feels unintrusive, unobtrusive, it leaves me to my day.

Minimum Viable Magic

Tech only tries to do the thing that tech should do—again, not what tech can do, what it *should* do—it doesn't try to over-reach, to over-complicate itself.

Two Birds, One Stone

This box here, it's where our Wifi comes from. But it's also counts how many people are in this gallery space. *(Build around the must-have: energy, heat, water, waste, lighting, connectivity, security etc.)*

Open, Plug and Play

I can get the data out of this network for my next art project. I can install this new sensor that we're building. Hackable, accessible, seamful, shareable. Also, using open protocols means I multiply who can develop and support solutions.

Low Maintenance, Everyday cheap

Don't worry, this sensor here is cheap. If it doesn't work, no big loss. It's easy and cheap, not a big deal.

Legible, Physical, Seamful

I can see where the tech is, I can see what it's doing. This green light shows the sensor is monitoring activity in the room. I know where the data's going. Honest tech.

Adaptive, Iterative

When the 'next Slack' inevitably arrives, we can easily switch over. We're not locked in.

Appropriated, hackable

I can make this studio space my own. I'm not just talking about moving furniture. I can plug in anything I want - a sensor, a display.

Social

CAP is all about serendipitous interactions. This tech here helps with that, it feels natural and seamless. (*Serendipity; greater than sum of parts.*)

Private / Shared / Public thresholds

I can be private and focused when I want, but also easily switch mode to sharing space, resource, thoughts. And at other times, we are public.

Resilient, Distributed

If this box here goes down, it's not a big deal. We've got alternatives, we can revert back to what we were using last time we did this.

Accessible, graduated?

Easy to use and extremely simple/accessible, yet reveals more depth over time / different entry levels

Exportable?

A product or approach developed here can be appropriate and developed elsewhere (either via open source or via more active management) / iPhone vs Slack to Github extensions

3c Digital Concepts

Slack for Precinct

Channels for physical spaces, shout (@here) to the whole studio, displays augmenting digital channels into our physical spaces, a tonne of integrations.

Solutions: Each room is a Slack user?

Hyper-Local Media

Displays what's happening right here, right now. Anyone can easily send something to the screen. (*Two for one: room booking to newspaper; [AIR](#)*)

Solutions: Bespoke audio channels; Electric Objects screens

Hackable Spine

Plug in a sensor, do it. Retrieve any data on the hackable layer. Secure data is left to a separate pipe. No firewalls, no logins here. The layer becomes a medium between the tech world and artistic world, but sharing the values of openness.

Solutions: get into that cable tray with Pi etc. Ensure bike racks etc. are open for sensors.

Building API

All building/precinct data is open (whilst respecting privacy/anonymity.) Any app can plug straight in, start pulling data with a simple RESTful query. Barriers to development are minimal. The precinct becomes a hub for urban tech innovation.

Do Not Disturb Doors

Cheap sensors on doors let us know when an artist is in their creative zone. Door open - come in. Door ajar - only if it's important. Door closed, I'm busy. Broadcast to physical displays and digital channels through the Building API.

Solution: Contact sensor plus Slack

Friendly Signs

Wayfinding, but more specifically ("You're on the right floor, and Anna's three doors down on the left, and she's in."). State on objects (bike racks, size of coffee queue.) Displays that know what you want before you ask for it. Using context (e.g. current events, movements) to add context.

Solution: Beco? Meraki?

A/B Engine (operational)

A platform to draw in data from all sorts of sources. Use this data to test changes - should this art piece go here (A) or here (B). Test the impacts. Extend A/B testing to the built environment.

Solution: Meraki/Cisco

Everything on Wheels

Anything that people might want to use can move. Sharing is encouraged - no matter how cheap, how expensive. RFID, bluetooth attached to objects keep track of all the kit.

Solution: ([Tile sensor](#) super-glued? Image recognition? Professor's library solution?)

Corridor Canvas

A distributed gallery of lightweight digital screens across the precinct, responding dynamically to content. Anyone passing by can send an image to the screen from their phone, until the next one comes along.

Solution: Electric Objects screens

The Handbook

A tenant's day-one - an 'unduction', not a throw-away induction. A short, concise book to describe what they really need to know. Digitally augmented.

Automated Arts Admin

Artists want to spend their time making, doing. Not filling out paperwork. This platform automates common tasks, such as Creative Victoria grant acquittals process.

Solution: tricky!

Courtyards, Corridors, Rooftops and Lanes

Solution: Silent cinema - projector silently playing films with soundtrack delivered over [AIR Radio](#) station-style embedded speakers in furniture x wireless headphone/phone solution

Studio Manager

(Ref. [Tom Sachs '10 Bullets' / Working to Code](#))

Dense City Block

Part-solution: in-character wayfinding

Supportive Brand

'Powered by CAP'; what can CAP power in the area?

Beacon to Collingwood (and Beyond)

Solution: 'Captions'-thinking (the anti-Haring) and web/social media (directory etc.)