COWORKING: THE NEW DESIGN OF WORKPLACES

Dulani Halvitigala¹, Hera Antoniades², Chris Eves³

¹School of Property, Construction and Project Management, RMIT University, Melbourne, Australia ²Faculty of Design Architecture and Building, University of Technology Sydney, Australia ³School of Property, Construction and Project Management, RMIT University, Melbourne, Australia

Abstract

Globalisation of business, innovative technologies and increase in knowledge-based industries have had significant impacts on organisations' business practices. This has subsequently affected the demand for space in built-facilities. As a result, the demand for flexible office space solutions such as coworking, or provision of communal, flexible office spaces on a short-term basis, have become a rapidly growing phenomenon.

By conducting a case study analyses of two large property trusts in Australia, this research paper examines how the office layouts and configurations are adapted in coworking spaces to facilitate such innovative spaces. Findings identify that the main design strategies for coworking spaces are to enhance space autonomy, create communities, facilitate collaboration, create spontaneous encounters, create multi-purpose and multi-generational spaces, create productive work environments and reduce individual workplace footprints. The research findings emphasise the importance of having more dynamic and creative office layouts and configurations that are better aligned with the interests of landlords, space operators and diverse groups of office space users in flexible office arrangements.

Keywords

Flexible spaces, Coworking, Office layouts, Office space designs

Introduction

The coworking culture in Australia and overseas is a rapidly emerging workplace phenomenon in today's knowledge-based economy. One of the main characteristics associated with coworking is to provide independent spaces within shared office spaces (Spinuzzi, 2012; Parrino, 2013). These spaces provide members with the opportunity to work alone or interact with like-minded people on a pay-as-you-go basis (Bouncken and Reuschl, 2016). The members can use the space anywhere from between a day to a month and longer.

Many landlords are challenged by this growing demand for flexible, scalable, collaborative spaces. Additionally, there are major implications on the performance and utilisation of commercial real estate and the increased burden of over utilisation of building facilities, such as lifts, escalators and associated facility usage due to space intensification. One of the slowest adaptors to this growing work practice has been office landlords who have been cautious in welcoming coworking operators into their buildings (Green, 2014). However, vibrant and engaging coworking spaces have the potential to create several tangible and intangible benefits to office landlords. These benefits are discussed in conjunction with the analysis from this research.

A recent survey by Deskmag (2019), titled 'The Global Working Survey' indicates an upward trend

Corresponding author: Dulani Halvitigala

with coworking spaces and coworking members. Below in Table 1 are the results of the survey.

At 31 st December	Number of Coworking spaces	Number of Coworking members
2015	8,900	545,500
2016	12,100	890,000
2017	15,500	1,270,000
2018	18,700	1,650,000
2019 (estimated)	22,400	2,170,000
2020 (estimated)	26,300	2,680,000

Table 1: Global Working Survey

Source: Deskmag (2019)

The table above indicates that from 2015 to 2018 the number of coworking spaces more than doubled due to the demand for these flexible work environments. Currently the average flexible leasing term is over 24 months, as opposed to under 12 months in 2013 (Colliers International 2018). Activity based working strategies complement flexible office environments, however whilst it is important to deliver functionality there is also the need to provide a balance with comfort and wellness (Colliers International 2019). To this end a well-designed office space environment and industry centric spaces have during these last few years, emerged as a desirable model.

Therefore, the aim of this research is to examine how office landlords have adapted their office layouts and configurations to facilitate innovative spaces. The objective of the paper is to conduct a case study analysis of two large property trusts in Australia. This will provide a platform for further exploration on the viability of the long-term stability and strategic approaches for coworking hubs. The first part of the paper discusses the literature for coworking spaces and the varying factors which influence the transformation of traditional office spaces into engaging coworking vibrant hubs. The research continues with an analysis and discussion of the two case studies undertaken. The conclusion summarises the main space design strategies adopted to facilitate such innovative spaces.

Literature Review

Coworking spaces are beneficial for those who desire an environment which facilitates creativity, critical thinking, knowledge sharing and collaboration. However, these requirements can present a challenge to landlords who provide the traditional office space environment. Additionally, research highlights the benefits of collaboration for start-ups to encourage creativity and innovation, and acknowledge that working in solidarity will not necessarily produce the required results (Gandini 2015; Gerdenitsch et al. 2016). Similarly, co working spaces enhancing innovation and entrepreneurship are identified as a "new form of urban infrastructure" (Merkel 2015).

Design and aesthetic surroundings

Freelancers and self-employed individuals will require suitable fit out spaces. Therefore, the design and aesthetic surroundings of co working space, and how the space is used is equally important. For instance, if the users are undertaking complex work which requires concentrated spaces with privacy, and an environment of no disturbance, this will encourage the development of soundproof cubicles, and so the intent of coworking spaces is defeated (Liegl 2014). However, whilst these coworking spaces are designed to encourage networking and collaboration, the outcomes are also dependent on user mix and location (Gandini 2015). Recent research focusing on specific space environments, rather than a CBD metropolis, has explored the question of whether coworking promotes entrepreneurship.

Therefore, the landlord faces the scenario of redesigning and modifying existing office spaces from the traditional blueprints to a vibrant engaging hub. In this regard, the research identified the need for a "supportive and a productive business climate" coupled with a "physical environment where creativity and innovation can flourish" (Fuzi 2015). Similarly, there is an expectation that coworking spaces will provide flexibility, and opportunities to access social support (Gerdenitsch et al. 2016).

Changing nature of the workforce

Serviced offices were introduced many decades ago and offered a different package of benefits. This included reception and secretarial services, phone lines, faxes and postal services, dedicated office space to the same users i.e. the right to occupy the same space during the term of the tenancy and short-term leases. However, with the changing nature of the workforce and the technological improvements many of these benefits have been superseded due to the advancement of mobile phones, internet and cloud-based access (Waters-Lynch and Potts 2017). Therefore, a key consideration for landlords is how to better design office spaces, simultaneously meet the changing nature of the workforce.

There appears to be an increasingly popular demand to position coworking centres in key regional areas (Cameron 2012; Forbes 2014). There are numerous benefits of coworking spaces for users such as the cost elimination of setting up a home-based office and clearly separating home life styles and professional work commitments. A clear detachment is the elimination of merging the home and office environment (Land et al. 2012); and further research suggests co-workers have started to leave their computers at coworking centres, rather than taking their work home (Kjaerulff 2010; Cameron 2012; Forbes 2014). Therefore, these changing work patterns provide a guide for commercial landlords to rethink the design of spaces and how the spaces are used within industry. Where once upon a time, the traditional long-term lease rental was the expectation for corporate businesses and freelance individuals chose to work from home; however, the last decade has witnessed a shift in the traditional office environment (Dixon and Ross 2011; Bryant 2003; Brunelle 2013; Ross and Blumenstein 2013).

Industry Perspective

In 2017, WeWork raised the profile of coworking hubs, and influenced the awareness of a new working style. This included a focus on optimum spatial design and a community environment. Similar outcomes occurred with Workspace365, WOTSO Workspace and Gravity to name a few (Office Hub 2018). Internationally, major flexible office space provides such as Regus, Servcorp, The Executive Centre, Compass Offices and Asia Pacific Serviced Offices shifted from the traditional serviced office space model to the coworking hubs model which offered greater flexibility and innovative modern office designs (Office Hub 2018). A number of Asian providers provide for instance, an in-house barista, sleeping pods and wellness rooms.

The younger workforce of today is a key driver of the coworking space and according to research undertaken by Office Hub (2018:5), "more than 76,000 people looking for flexible office space in 2017-18, coworking is most popular among 25-34-year-olds and steadily decreases in popularity among the older the age group". In a study undertaken by Steelcase360 (Knight Frank 2017) four main principle designs were identified to leverage millennial behaviours. These included a need to design for identity which includes the notion of social awareness and the awareness of environmental issues; the second was to design for growth, which includes team hub spaces, non-hierarchical and informal collaborative spaces. Thirdly the design should incorporate work-for-life, which covers support and physical wellbeing and a reflection of work-life integration; and fourthly to incorporate technology.

These design principles are also reiterated within the industry (Hub Australia 2019, Colliers 2018), where the space provides an experience encompassing community and culture. Again, comparisons are drawn against the traditional open plan office environment where the design is limited to identical workstations and standardised meeting rooms. Similarly, Oktra (2019) which is based in the UK states that the look and feel of the spaces is equally important as is space utilisation. Therefore, with the traditional 9 to 5 work environment shifting, remote working is becoming more popular and desirable. Collaboration, innovation, increased teamwork, and lateral thinking have become the buzz words of the coworking culture. Similarly, office space designs which provide an environment for cutting edge creativity, providing optimal use of space coupled with good lighting and enhanced workflow are transforming the traditional office space environment into more vibrant and engaging spaces.

The next section of the paper explains the methodology utilised for the case study analyses as the primary data source, and the secondary data source being a desktop analysis complementing the data from the case study.

Methodology

Due to the explorative nature of this research, a qualitative approach was adopted as the most effective research methodology (Silverman, 2013). Qualitative data is contextual; its analysis involves developing insights based on a deep understanding of a particular context (Cassell et al., 2018), which is the objective of this research. Case study analyses of two large Australian Real Estate Investment Trusts (REITs) were undertaken to examine how the office layouts and configurations in their coworking spaces were adapted in order to facilitate flexibilities in such workplaces. These two REITs are two of the largest Real Estate Investment Trusts in Australia and collectively own and manage of over \$18 billion worth diversified portfolios of high-quality Australian office, retail and logistics property assets (Annual reports of REITS). Both REITs have moved into the flexible office market and have included coworking spaces in their office portfolios. One of the REITs have entered the market directly by developing and operating their own coworking spaces. Therefore, the research question was examined from two different investment perspectives in relation to the coworking sector which is directly owning and operating coworking spaces and indirectly involving in the sector by leasing spaces to coworking operators.

Data were collected in two phases. Firstly, secondary data were collected by conducting an extensive, in-depth desktop analysis of the information provided on the two selected REITs' webpages in relation to their coworking spaces. Their websites were thoroughly analysed to collect secondary data in relation to the nature and operation of their coworking practices. Secondly, one-to-one, semistructured, in-depth interviews were conducted with the National Directors of flexible space solutions in the two selected REITs to obtain further clarification on their coworking strategies and practices. Semi-structured forms of interviews were used since they offer a versatile way of collecting data. allowing the interviewer to use probes with a view to clearing up vague responses, or to ask for elaboration of incomplete answers (Welman and Kruger, 2001). Both interviewees held the highest level of responsibility for key property related investment and management decisions for their coworking spaces. Interview questions were designed to elicit in-depth understanding of their perceptions and experience of developing flexible and adaptable office layouts to facilitate the demand from coworking spaces and their users. The topics covered in the interview questions included, most commonly requested office configurations by coworking space users, their impact on office design and space planning and how coworking space users' demand for alternative workplaces are addressed in landlords' new and existing buildings. The findings were analysed using thematic analysis, which aimed to identify patterns or themes within qualitative data collected (Creswell, 2009).

Research findings and discussion

Before the analysis commenced, the researchers read the in-depth interview transcripts and the secondary information collected from desktop analysis and developed an appropriate coding system. This was based on the research question, interview guideline and the findings from existing literature. Accordingly, major themes were identified, supported with quotes from the interviewees. The key themes identified the following main design features and configurations that were adapted in coworking spaces to facilitate flexibility and novelty in such spaces.

Efficient and functional office spaces

Both organisations had used efficient floor plates for their coworking spaces. They consisted of large uninterrupted, regular shaped floor plates, simplified building specifications and good natural light. Those floor spaces had long building spans which have allowed the spaces to be arranged for different types of work settings. Furthermore, the floor to ceiling height in their coworking spaces was consistent throughout the space allowing efficient use of the floor space and good natural lighting and ventilation.

Space intensification in flexible office spaces would place additional structural stress on building services if not designed for the future demands associated with such high density uses (Brittain et al. 2004). Therefore, both interviewees emphasised that the buildings where their coworking spaces are located have flexible building services which are capable to sustain the demand from space intensification and high occupant density in such flexible spaces. Those buildings have flexible building services such as HVAC systems, electrical systems, lighting, information and communication technologies and vertical transportation that are able to cope with the additional operational requirements caused by high occupant density in coworking spaces.

These coworking spaces were also supported by well-distributed cutting-edge Information and Communications Technologies which allow technological access in all parts in their coworking spaces to support flexible work settings. As suggested by one organisation, their coworking spaces "feature smart technology throughout, embracing elements like lighting that adjusts based on usage, a custom app for members and advanced WiFi systems" (Organisation 1). Plug-and-play services and wireless systems for electricity, data, voice and conferencing provide facilities for members to choose their preferred work stations and work anywhere they like within the coworking space.

Multi-purpose and multi-generational spaces

The existing literature has identified that individuals using coworking spaces vary across demographic and economic segments and have noticeably different perceptions on work-life balance and corporate hierarchy in workplaces (Green, 2014). Confirming this, both interviewees shared a common view that their coworking membership consists of individuals from four generations who have different work patterns and expectations related to physical work environments. Therefore, the designs of their coworking spaces have responded to this generational gap by creating workplaces that meet the requirements of the members from different generations.

Their coworking office layouts comprised of four main types of spaces. The aim being to facilitate different work settings which accommodate the various work practices of members from different generations and business backgrounds. These include:

- Concentrative work settings Enclosed work settings which can be used for concentrated individual work requiring creative and innovative thinking and problem solving.
- Collaborative work settings Large open spaces where members can meet to collaborate and work together. These spaces contain clusters of workstations in open spaces with a variety of furniture arrangements.
- Interactive work settings Spaces such as meeting rooms, conference rooms and project rooms where members can interact on various topics.

• Community spaces – Spaces where members can have casual meetings and socialise. Such spaces consist of onsite cafes, large lounges and communal kitchens. These spaces are also used by members to meet their clients and have meetings with them.

Overall, the internal office designs in their coworking spaces were not based on one-size-fits-all traditional applications and were comprised of multipurpose office spaces that can be easily tailored to suit different activities. This enhances the space autonomy and efficiency in their coworking spaces and reduces the individual workplace footprints. Both interviewees emphasised that their office layouts consist of multiple variations of work point styles, from traditional work stations to open collaborative areas, spaces shared between members and their external clients and breakout areas. Such work settings provide different work environments for individuals and organisations with different business orientations. As one organisation explained, some of their coworking spaces provide *"specially configured and secured flexible workspaces specifically designed to cater large financial institutions working on fintech projects"* (Organisation 1). Furthermore, their work settings have spaces that are suitable for organisations and individuals that are going through different stages in their business cycles such as starting up, transitioning and going through periods of growth or downturn. Such variation in work settings provides members with a choice of how, when, and where they work. Furthermore, easily removable partitioning has been used throughout their office layouts, which has provided the possibility of alternation and reconfiguration as needed in the future.

Creating communities

Social and professional connection with other knowledge workers is one of the primary reasons for members' preference to use coworking spaces. Social participation is typically enabled through a variety of platforms such as casual networking, seminars and workshops, expert sessions and social events. The coworking spaces of both case study organisations distinguished themselves from serviced offices by offering various social spaces, knowledge sharing environments, networking events, leisure activities and hosted events to promote interaction among members. One organisation also organises one-to-one industry-focused mentoring sessions with industry leaders with the intention of increasing the sense of belonging and community. Office layouts of the coworking spaces of both organisations consisted of large community spaces that created opportunities for serendipity and networking encounters. As explained by one organisation "our members have the option to use four themed conference rooms, a fully equipped podcast audio and video production studio, a large multipurpose room that accommodates over 50 people" (Organisation 1).

Furthermore, the availability of shared spaces such as large open kitchens including unlimited coffee, open courtyards, onsite cafes and spacious lounges in both organisations' office layouts facilitates personal introductions and fosters planned and spontaneous meetings among members. These shared spaces are located near the entrance of the coworking spaces and provide members a sense of shared culture and purpose when entering the space. Their coworking spaces also have used various material design features such as easily visible white boards, inspirational quotes at the entrance of the space and digital discussion platforms projected onto walls to further increase social interactions and communication within the membership community.

Facilitating collaboration

The findings identify that coworking spaces were designed to create an environment that fosters collaboration, creation and productivity among space users. As one organisation explained, their "choice of premium interior has been delicately chosen with a broader mission in mind – to craft the optimal setting for creation, collaboration and comfort" (Organisation 1). In fact, both interviewees suggested that their coworking spaces distinguished themselves from traditional office layouts by offering explicit emphasis on collaborative activities among space users throughout the design of their coworking spaces.

Large open spaces that facilitate professional collaboration with like-minded or complementary professionals within the membership community was a main theme in their space design. The design of their coworking spaces 'provides spaces that favour collaboration over competition, in open rather than closed spaces for members which facilitate modern knowledge sharing economy' (Organisation 2). It was reiterated by the other organisation which emphasised that their coworking spaces are designed to "help you connect with other businesses and collaborate with your team. If you wish to stretch your business contact list, you will be rubbing shoulders with property, tech and marketing experts within Melbourne's esteemed business precinct" (Organisation 1). Such collaborative, informal, knowledge-sharing working spaces promoting interaction provide further options to grow for individuals or start-up companies within their coworking communities. Both interviewees emphasised that a greater portion of their coworking spaces has been allocated for collaborative spaces. As a result, their members have the opportunity to knowledge share and collaborate with other individuals who they would not normally have exposure to, often connecting them with more business opportunities in the future in their relevant industries.

Both interviewees discussed the importance of having a greater proportion of collaborative spaces within their coworking spaces. They identified several benefits of having collaborative success including accessibility to information and ideas, exchange of knowledge and skills and enhanced problem-solving ability for individuals and companies from different backgrounds. It was suggested that the relaxed work environments in their coworking spaces express the values of collaboration, openness, community and accessibility. However, the interviewees emphasised that even though these values were encouraged in practice in their coworking spaces, the individuals have the freedom to choose what space arrangement they prefer to work in. As suggested by one organisation '*our space is designed to encourage collaboration, while also providing privacy and tranquillity for our members*' (Organisation 2).

Adapted aesthetics

Another main way of differentiating coworking spaces from traditional office spaces is through bespoke design aesthetics that blend work and play environments. Both case study organisations emphasised that their coworking spaces consist of open and transparent work settings, distinctly recognisable material used and unique furniture which have created non-traditional, creative and innovative work environments. Such design choices clearly reflect the images of non-bureaucratic, non-hierarchical, adaptive and innovation-friendly work settings. Extensive use of collaborative, interactive and community spaces in their coworking spaces suggest that such design features facilitate creativity and novelty over traditionality and predictability in work environments. Furthermore, their office spaces have incorporated biophilic office designs which provide more access to greenery and natural light with the intention of putting the space users closer in touch with nature and facilitate their creative thought patterns. As emphasised by one organisation "our space is all about the natural light, polished concrete and exposed industrial ceilings, softened with bespoke wooden surfaces and live greenery to optimise clarity, comfort and productivity of the users' (Organisation 1). Both coworking spaces have used modern, reconfigurable furniture which ensures that the space can be adapted to different work settings. Internal design features such as exposed gas and water pipes and modern stucco surfaced walls in their coworking spaces provide texture and identity to those spaces.

Colour coding of the walls and appropriate colourful artwork were also considered to be important when designing coworking spaces. The interviewees shared a common view that their strategy was to create coworking spaces that standout, distinguishable and memorable with the use of contemporary colours and unique characteristics with the highest aesthetic quality. The walls in their coworking spaces have achieved varying degrees of contrast with the use of multiple colour combination. This supported different work functions in coworking spaces. At the same time, they emphasised that overspecification and over-complication of building designs and specifications were avoided in coworking spaces as the objective was to create home-like spaces for users with warmth and inviting atmospheres.

Amenities and facilities

High quality building amenities to complement high density occupation levels in coworking spaces was also a main consideration when designing such spaces. Their coworking spaces have access to various amenities and facilities such as 24/7 access, on-hand concierge, internal high-quality cafeterias, larger atria/lobbies and lounges, administrative support, as well as cybercafés where members can have coffee while working. Furthermore, members have access to childcare facilities, gymnasiums, games rooms, yoga studios, meditation classes, green spaces within the premises, on-site secured lockers, bicycle storages, changing rooms and shower facilities within the building. Some coworking spaces also included a range of value-added services such as wellness facilities for coworking space users from various industries. The findings suggest that coworking spaces in case study organisations aimed to differentiate their spaces from the rest of the coworking spaces by providing various amenities and services as part of the design of their spaces.

Both interviewees stated that high quality building amenities would create all-inclusive home environments for occupiers and enhance the physical and psychological wellbeing of coworking space users who usually work in high density office environments. It was also suggested that the availability of modern amenities and facilities in coworking spaces allows members to work in an environment that represents an enhanced brand of their organisation.

Conclusion

The findings presented in this paper indicate users enjoy coworking vibrant hubs. For instance, popularity to provide engaging breakout and networking areas is a major consideration in the office space design. Additionally, a modern and innovative office design is also an influential factor.

Other key points of consideration include the size of the floorplate and the associated space intensification. With the growing demand for office environments offering social connectivity and interaction, there is a blurring of boundaries between traditional office space designs and dynamic adaptable environments. Additionally, with the changing nature of our work patterns, a broad workspace is inviting, and the design language will incorporate diversity and individual experiences such as courtyards, cafes and social destinations.

This case study analysis addresses the approach and strategies of large scale, sophisticated landlords – REITs – in relation to the design of coworking spaces. Large scale landlords' investment behaviours and experiences could be different from small scale, less sophisticated landlords due to a number of reasons. For instance, their strong market position, size and stability of the cash flows, awareness of the current and future market trends and the professional advice received when developing their investment strategies would differentiate them from small, less-sophisticated investors. Furthermore, the case study organisations generally own prime quality buildings located in prime locations. Therefore, the findings of this research must be seen as only truly representative of the groups that participated in this research. A study addressing the design strategies in small scale, less sophisticated coworking spaces would add another dimension to the findings of this research.

References

- Bouncken, R.B. and Reuschl, A.J. (2016), Coworking-spaces: how a phenomenon of the sharing economy builds a novel trend for the workplace and for entrepreneurship, *Review of Managerial Science*, Vol. 3, pp. 1-18.
- Brittain, J., Jaunzens, D. and Davies, H. (2004). Designing for Flexible Building Services in Officebased Environments: Understanding Client Needs, The Chartered Institution of Building Services Engineers, London, available at: <u>www.cibse.org/</u>

- Brunelle, E. (2013), Leadership and Mobile Working: The Impact of Distance on the Superior-Subordinate Relationship and the Moderating Effects of Leadership Style, *International Journal of Business and Social Science*, Vol. 4, No. 11, pp. 1-14.
- Bryant, S.E. (2003), The role of transformational and transactional leadership in creating, sharing and exploiting organizational knowledge, *Journal of Leadership & Organizational Studies*, Vol. 9, No. 4, pp. 32-44.
- Cameron, C. (2012), Coworking Offices- The Emerging Trend and Implications for Queensland in an era of High-speed Broadband, Department of Employment, Economic Development and Innovation, Queensland Government.
- Cassell, C., Cunliffe, A. L., and Grandy, G. (2018). The SAGE handbook of qualitative business and management research methods. Thousand Oaks, California; London: Sage Publications.
- Colliers International. (2018), The Flexible Workspace Outlook Report 2018, APAC.
- Colliers International. (2019), The Flexible Workspace Outlook Report 2019, APAC.
- Creswell, J. (2009). Research design: Qualitative, quantitative, and mixed methods approaches (3rd ed.). Thousand Oaks, CA: Sage Publications.
- Deskmag. (2019). 2019 Coworking Forecast, Deskmag Carsetn Foertsch.
- Dixon, M. and Ross, P. (2011),
- VWork: Measuring the benefits of agility at work, Regus/Unwired, [On-line] http://www.regus.com/images/Regus-VWork-7-nocrops_tcm304-39506.pdf (May 2011).
- Forbes, T. (2014), Queensland Public Servants Trial Digital Hubs, Flexible Work Arrangements, ABC: News [Online] <u>http://www.abc.net.au/news/2014-09-07/queensland-public-servants-trial-digital-hubs-flexible-work/5724826?section=qld</u> (7 Sep 2014).
- Fuzi, A. (2015), Co-Working spaces for promoting entrepreneurship in sparse regions: the case of South Wales. Regional Studies, *Regional Science*, Vol 2, No 1, pp.462-469
- Gandini, A. (2015), The rise of coworking spaces: A literature review, Ephemera, *Theory and Politics in Organization*, Vol. 15, No 1, pp. 193-205.
- Gerdenitsch C., Scheel T.E., Andorfer J., Korunka C. (2016), Coworking Spaces: A Source of Social Support for Independent Professionals, *Frontiers in Psychology*, Vol. 7, article 581.
- Green, R. (2014). Collaborate or compete: How do landlords respond to the rise in coworking?, *Cornell Real Estate Review*, Vol. 12, pp. 52-59.
- Hub Australia, <u>https://www.hubaustralia.com/workspace-design-size/</u> (accessed 1st September 2019)
- Kjaerulff, J. (2010), Internet and Change, Intervention Press, Arhus, Denmark
- Knight Frank (2016), Sydney coworking insight,

http://research.knightfrank.com.au/resinsight161024.pdf

- Knight Frank (2017), Culture Clash: Flexible Workspace, Coworking, and The Future.
- Land, C., Otto, B., Böhm, S. and Johansson, M. (2012). Creative Community or Co-mutiny? Practices, Positions and Political Potentials in Coworking Spaces, Proceedings of the 6th Art of Management and Organization Conference 2012: Creativity & Critique, University of York (4-7 September, 2012), pp. 47-48.
- Liegl, M., (2014), Nomadicity and the Care of Place—on the Aesthetic and Affective Organization of Space in Freelance Creative Work, *Computer Supported Cooperative Work (CSCW)*, Vol. 23, pp163–183
- Merkel, J., (2015), Coworking in the city, Ephemera, *Theory and Politics in Organization*, Vol. 15, No 1, pp. 121-139.
- Office Hub., (2018), The Australian Coworking Market Report 2017-2018, <u>marketing@office-hub.com</u> (Accessed 28th March 2019)
- Oktra Insights <u>https://www.oktra.co.uk/insights/what-makes-a-successful-coworking-design/</u> (Accessed 2nd September 2019)
- Parrino, L. (2013), "Coworking: assessing the role of proximity in knowledge exchange", Knowledge Management Research & Practice, Vol. 13 No. 3, pp. 261-271.
- Ross, P.K. and Blumenstein, M. (2013), Cloud computing: The Nexus of Strategy and Technology, Journal of Business Strategy, Vol. 34, No 4, pp. 39-47.
- Silverman, D. 2013. Doing Qualitative Research. A Practical Handbook. Sage Publications. London.
- Spinuzzi, C. (2012), "Working alone together: co-working as emergent collaborative activity", Journal of Business and Technical Communication, Vol. 26 No. 4, pp. 399-441.

- Waters-Lyncha, J., Potts, J., (2017), The social economy of coworking spaces: a focal point model of coordination, *Review of Social Economy*, Published online 16/1/2017.
- Welman, J. C. and Kruger, S.J. (2001). Research Methodology (2nd ed.). South Africa: Oxford University Press.