4 A look into Beirut's coworking scene

Exploring the pre- and post-pandemic conditions

Linda El Sahli, Mina Akhavan, and Ayman Kassem

Motivation and background studies: coworking spaces before COVID versus the pandemic era

Biased literature: a lack of empirical research on the Middle East

Technological advances, broadband, and an increasing dependency on high-speed internet continue to re-shape the nature of work and workplaces and therefore our societies. With the rise of teleworking, smart-working, and remote working (see Chapter 1), it seems that apart from home offices, various types of 'new spaces for work' (see Akhavan, 2021; Micek et al., 2020) are gaining legitimacy among workers; so-called coworking spaces (CSs) are one of the most popular. In their traditional form, privately owned and managed CSs are simply considered membership-based (monthly/daily rent), shared open-plan office environments where unaffiliated professionals and members of organizations 'work alone together' (Spinuzzi, 2012). They use and share physical and cognitive infrastructure and resources based on their needs (Capdevila, 2014).

The advantages of CSs go beyond cost savings and simple office or infrastructure provision; they offer values such as (i) collaboration, (ii) community, (iii) sustainability, (iv) openness, and (v) accessibility (Fuzi et al., 2014). The coworking model provides a sort of flexibility, which is very convenient at times when socioeconomic and cultural conditions are constantly changing. Both CSs and coworkers themselves benefit from this degree of flexibility in the way they handle their time, space, money, and work. Different types of new space for work such as CSs are freed of the rigid mechanisms of traditional working spaces.

We underline here that simple physical proximity and spatial co-location alone is not sufficient to create interaction, collaboration, and knowledge spillover (Parrino, 2015). The presence of other forms of proximity – social, cognitive, institutional, and organizational – is therefore essential (see Mariotti & Akhavan, 2020). Moreover, 'community making' in CSs does not refer merely to the internal workplace (Spinuzzi et al., 2019); it also concerns the sense of community between coworkers and residents in the neighbourhood (Akhavan & Mariotti, 2018). Another important element is the social aspect of

DOI: 10.4324/9781003181163-6

CSs in terms of face-to-face contact, mutual trust, and networking, which is essential for workers in creative industries and those with uncertain social and economic conditions such as freelancers, early-stage entrepreneurs, and young startups (see Waters-Lynch & Potts, 2017).

The literature on new spaces for work in general, and CSs in particular, is growing quickly (see Akhavan, 2021). Thus far, however, the publications are mainly based on empirical findings and theoretical insights from cases in the West (Europe and North America). Only a few publications are available from the Eastern world on CSs in the Philippines, studied by Tintiangko and Soriano (2020), and Shenzhen, China, explored by Luo and Chan (2020). Some perspectives from India were discussed by Bhattacharyya and Nair (2019).

Emergence and spread: pre-pandemic flourishing of coworking spaces

CSs have proliferated rapidly worldwide since the first official space was founded in the US in 2005. Prior to the COVID-19 pandemic, 26,000 CSs and 2.6 million users were estimated for 2020. The compound annual growth rate (CAGR) of the number of CSs in the period 2005–2020 was 76.4%, while the CAGR for the number of users (coworkers) in the years 2010–2020 was 55.4%. These numbers demonstrate the growing popularity of CSs on a global scale. Although the phenomenon of CSs started in North America, CSs have spread to other regions of the world, regardless of their socioeconomic structure. The data show that in 2019, the United States and the United Kingdom recorded a similar share of CSs (19% and 18%, respectively), while countries in the Asia Pacific (APAC) and EMEA regions (Europe, Middle East, Africa) held the highest share of CSs, with 35% and 21%, respectively (Statista, nd.).

The Global Coworking Survey (Deskmag, 2019) reports that CSs in Asia are mainly located in mega-cities with more than 1 million inhabitants, following the advantages of the urbanization and agglomeration economies. CSs in Asian cities are larger in size and capacity with respect to other parts of the world; the average size of CSs in Asia is 916 m², followed by North America and Europe with 845 m² and 760 m², respectively. Moreover, 28% of CSs in Asia have more than 200 members, compared to 18% in Europe and 16% in North America. On the contrary, Europe is by far the most specialized in small spaces (less than 50 members). In Asia, more than 88% of spaces are for profit (private CSs); only 4% are government-based (public CSs) and 7% are non-profit.

Coworking spaces during the COVID-19 pandemic: the future of coworking?

On 30 January 2020, the World Health Organization officially declared the outbreak of COVID-19 to be a global health emergency. Since then, the pandemic has had a tremendous effect on societies and individuals' ways of living and working (see Chapter 1). The immediate impacts of the COVID-19

pandemic in countries that imposed lockdowns or serious restrictions were rather similar. The outcomes of a survey by Coworker.com1 conducted in mid-March 2020 show that 71.6% of spaces witnessed a significant drop in the number of their coworkers since the outbreak. More specifically, the spaces experienced event cancellations (71%), meeting/conference room cancellations (about 66%), membership cancellations (34.7%), changing member behaviour (24.2%), space closures (20.2%), and sick members (8.7%).

During the pandemic, many companies were forced to apply remote working policies. However, it is not always possible to work from home or use informal third places (such as cafés) due to data and network security. In this case, CSs can provide a possible solution. As pointed out by Maria Nakamura, Business Innovation Manager of Arcc Spaces, with spaces in the Asian Pacific Region, 'SMEs and enterprises consider flexible workplace options due to flexible leasing terms. In flexible workplaces, businesses are able to take advantage of splitting their teams across multiple small private rooms, as opposed to occupying one large, combined space.'

Within this context, this book chapter follows a two-fold aim:

- To fill the gap in the literature on CSs in Asia, and more specifically in the Middle East. For the first time, this contribution presents the proliferation of CSs in one of the region's largest cities: Beirut. The emergence of such workplaces is then discussed as a tool for urban regeneration and attracting a new class of creative workers to the neighbourhood.
- To explore the immediate and one-year impacts of the COVID-19 pandemic on CSs in Beirut and the strategies that have been applied to face the crisis.

This chapter therefore discusses the citywide spread of CSs (their agglomerations and clustering) and then analyzes this more in detail on the neighbourhood scale (Beirut Digital District). This study involved various forms of data collection during 2020 and 2021: desk research, urban plans, fieldwork, and on-site visits. Primary data was collected through a survey: an online questionnaire and semi-structured interviews with the managers in two phases -March 2020 and March 2021. A mix of qualitative (maps and urban plans) and quantitative (descriptive statistics) methods were applied to the different data.

A tale of a city in the heart of the Middle East: Beirut and its rising coworking spaces

Exploring the proliferation of CSs in the city

After Lebanon gained independence from France in 1943, a period known as the Golden Age followed from the 1950s until the mid-1970s; the capital city of Beirut was considered the hub of economic, social, intellectual, and cultural life in the Middle East. All this changed, however, with the start of the civil war in April 1975, which lasted 15 years and split Beirut into East (Muslims) and West (Christians). A demarcation line – 'the Green Line' – was formed, separating the two sides. Most of the buildings along the line were severely damaged or destroyed during the war. Since the end of the war in 1990, a number of buildings have been rebuilt. The neighbourhood selected for further analysis is Beirut Digital District (BDD), which lies on Beirut's Green Line. It hosts some important CSs, making it a relevant case for the aim of this study.

The current population of the city of Beirut is estimated to be about 361,000, while Greater Beirut as the urban agglomeration comprising the city of Beirut and adjacent municipalities has a population of around 2.2 million,³ which makes it the third-largest city (after Amman and Tel Aviv) in the Levant.⁴ The GDP of Lebanon (current US\$) was estimated to be \$33 billion in 2020 (a decrease of 20% from 2019),⁵ with a per-capita GDP amounting to about \$5,500. However, due to the liquidity crisis, the ongoing economic and political crisis, the COVID-19 recession, and the port explosion on 4 August 2020, the situation has escalated tragically. Beirut's GDP contraction, which surpasses the IMF's latest forecast of a 12% drop in GDP, is due to the ongoing and worsening economic and political crisis in Lebanon.

The emergence of CSs in Beirut is very recent. One of the first, AltCity, was founded in 2011, amid the national crisis brought on by protests and political reforms. Even in this situation, AltCity was able to survive, and the team has managed to keep the goal of becoming a key player in the Lebanese startup scene firmly in their minds (Knight, 2014). Nevertheless, the road has been more difficult for many other CSs such as Innovation Factory Beirut and AR_KA, with recent political events forcing their closure.

We identified 13 active CSs in the city of Beirut (as of January 2020). An additional 4 CSs (Foundersbei, The Koozpace, Berytech Mar Roukoz, Regus Dbayeh-Le Mall) are located in Greater Beirut. All spaces are privately owned and managed. In most cases, the building was transformed into a CS from a different function, for instance, an industrial base, a sewing workshop, a church, residential building, etc. Few spaces were designed and built precisely as CSs.

As shown in the map in Figure 4.1, CSs in Beirut are mainly located in the central part of the city (Serail neighbourhood, port district, and Basta Faouka neighbourhood in Bachoura District), followed by south-western neighbourhoods (Mathaf in Mazraa District, Sioufi and Mar Mitn in Achrafieh District). The CSs located in the most expensive areas of Beirut close to the historical centre are mainly part of international firms, branches of Servcorp and Regus. CSs also tend to be located in Bachoura District, which is known to have been badly damaged by the civil war, with the majority of it not rebuilt or renovated like other areas that were given higher priority, such as Beirut Souks and the historical centre.

The location pattern of CS in Beirut city is similar to some determinants outlined in the literature (Mariotti et al., 2017, 2021; Di Marino & Mariotti, 2020): (i) proximity to dense services and business activities related to the urbanization and agglomeration economies; (ii) proximity to universities and research centres

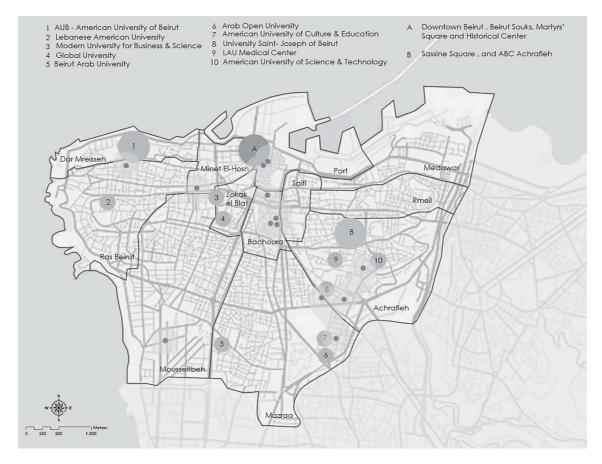


Figure 4.1 Location of CSs in the city of Beirut close to the main business districts and universities (as of 2020). Each red dot represents a CS.

Source: Prepared by the author.



Figure 4.2 Panels (1) and (2) show BDD in the Bachoura district, while panels (3) and (4) show Antwork in the Spears District. Both cases reuse renovated historical buildings. Source: © 2021 moustaabdulwahed.

associated with a skilled workforce and business opportunities; (iii) reputation of the district; (iv) multifunctionality of the areas (mixed land use and provision of public and private services), in particular for the Mathah district (hosting Regus, Berytech, and KAPA), the Beirut central and Azariyah Districts (hosting Regus, Servcorp), Ashrafieh (hosting Fabrika), Spears District (hosting Antwork), Hamra (hosting The Olive Grove); and (v) deprived/abandoned (but also developing and central) urban neighbourhoods. Bachoura District, which hosts two major CSs – Beirut Digital District (BDD) and Berytech – is undergoing socio-spatial rehabilitation. It is worth noting that both BDD and Antwork have renovated and reused damaged historical buildings, as shown in Figure 4.2.

Zooming in on the neighbourhood scale: Beirut Digital District (BDD)

Bachoura District is known as a remnant of the 15-year civil war and it remained practically untouched until the development of BDD. However, there are many historical landmarks in the district that lend it historical importance, such as the Muslim cemetery of 1892, Saint Vincent de Paul Church, and the iconic Beirut Dome, also known as 'the egg', from the 1960s. BDD took a very strategic decision to establish itself in Bachoura, since it is in the centre of Beirut and highly accessible. Looking at previous land use in the area, we see that it mostly consisted of residential or commercial/residential complexes. Moreover, Bachoura is situated within walking distance of major landmarks and shopping areas and within a 15-minute drive from major educational and health centres.

BDD is a cluster of specialized spaces designed to create a hub for the digital and creative industries. It hosts three CSs, two eateries to increase the efficiency of office spaces and keeps employees closer to work during breaks, two furnished social lounges with gaming areas to relax and socialize, and a fitness area with free access to daily fitness classes. Such services help coworkers to relieve stress and enhance their well-being. BDD is a one-stop-shop for time-consuming governmental paperwork for businesses, which, along with many other services and facilities, makes it a go-to place for coworkers.

In March 2020 during the start of the COVID outbreak, we conducted semi-structured interviews with two managers of the three coworking spaces in BDD. According to the managers, there are numerous benefits to having the CSs within this central business district, and the entire BDD community became a part of the revitalization of the neighbourhood. In fact, the BBD project increased the attractiveness of the area. It was responsible for the urban revitalization of the Bachoura district, using land that had been abandoned for many years and refurbishing some existing underutilized buildings. It introduced a new architectural language in the district and changed its character.

Since BDD has accelerated the process of change in Bachoura's social class, it can be argued that this project has prepared the base for future mass gentrification. One very visual representation of this phenomenon is the mural painted by a foreign artist as instructed by BDD to show the vision of a new Bachoura: a vision representing technology and innovation. Unlike other urban art, however, the mural was not painted by someone from the district. Hence, it shows an enforced yet positive vision, which is nevertheless a vision of a developing neighbourhood, attracting young people to move forward and innovate. Bachoura cannot represent the Green Line and the painful past forever. Instead, the concern should be to prevent any displacement of the district's past residents, while ensuring that new buildings do not replace historical buildings or erase the traces of memory.

The COVID-19 pandemic and the 2020 Beirut explosion: immediate impacts on coworking spaces

Empirical findings of the survey with CS managers conducted in March 2020

As with many countries worldwide, Lebanon's economy and its capital were hit by the COVID-19 pandemic. The CSs in Beirut were closed for several months during the lockdowns, and with the government encouraging businesses to reopen, most CSs had reopened as of June 2020. Nonetheless, a lot had changed and forced measures were taken in terms of space capacity and design, since social distancing is still a matter of concern. To explore the immediate effects of the pandemic on CSs in Lebanon, an online questionnaire was sent to all the CS managers in March 2020; 11 responded for an 85% response rate. The following provides descriptive statistics regarding the answers to the five main questions.

- i The first question was about the 'immediate consequences of the pandemic restriction on the CS'. Almost half of spaces (40%) reported cancelled events; roughly one third (30%) had cancellations of meeting room bookings; and very few (15%) responded that both training courses and memberships (desks and offices) had been cancelled. Notably, none of the CSs suffered from all the given consequences at once.
- The managers were also asked about the 'means used to maintain contact with their CS community'. Of these, 20% said that they used social interactions; 15% used tools, channels, or online services (such as virtual events) to maintain contact with the community; 10% used both the promotion of community activities and training courses/webinars. Furthermore, when the managers were asked to provide a rating from 1–10 (1 being nothing or none to 10 being very much) as to how much contact the CSs were able to maintain with their community, the majority gave a rating of 6–7, which is relatively high.
- iii Regarding the question about 'whether there were any short-term strategies between the coworking spaces and their landlords', a few of the CS managers refrained from answering. However, most CS managers confirmed that they had never had any problems in that respect; there was leniency with payments because of the given situation and a considerable discount. Nevertheless, one case stands out in BDD: two of the three CSs are run by the property owners themselves, ZRE, so this question was not applicable in their case.
- iv Managers were asked about 'measures that need to be put in place in CSs to contrast the economic effects of the economic crisis'. Nearly 70% selected optional 'rent suspensions', and more than 30% chose 'ease loans' as a practical measure. The comment was made that it would be great if certain public

- policies were in place for CSs and startups; for example, free or reduced internet fees, waived legal consultations for starting businesses (for CS members), tax breaks, and reduced utility fees. In the end, CSs help support the local economy, so it would be great if the government and public policies supported such places.
- As for the question about 'feasible actions to be considered before the end of the year (2020)', some managers (about 35%) answered 'reshaping their spaces and supply'; a few (about 20%) selected the three options of 'online reconversion of several services', 'no changes needed, as the situation will get back to normal', and 'other actions'. Others instead responded, 'I do not know but I think there would be more opportunities'. Notably, none of the spaces intended to close temporarily or permanently, nor were any reductions of employees mentioned by the CS managers.

2020 Beirut explosion: immediate response

The devastating explosion at the Port of Beirut on 4 August 2020 occurred amid a severe economic crisis and the coronavirus pandemic. It destroyed vast areas of the capital, leaving hundreds of thousands of homeless people and stoking anger about the authorities' negligence and corruption (Houssari, 2020). The blast added to a pool of setbacks and challenges, both operational and psychological, for those determined to succeed in Beirut. Despite mounting challenges and the tragedy that impacted the entire country, Lebanese entrepreneurs are still determined to move forward, shift their strategies, and adapt their business models based on the ongoing crisis, after addressing immediate needs. Alfanar, a philanthropic organization, is likewise attempting to address entanglements in gathering the extent of needs to alleviate hunger, a responsibility that began towards the end of 2019 and has drastically expanded since the Beirut port explosion (BDD, 2020). Other organizations have shifted their business models and strategy as a result of the blast. LiveLove Beirut, an initiative established to highlight the beauty and wonders of Lebanon, quickly changed their main goal, and the team has been working vigorously to raise funds for relief efforts.

The NGO LiveLove Beirut formed the Beirut Relief Coalition (BRC) after the explosion. The coalition brings together non-profit organizations and initiatives to streamline rebuilding and rehabilitation efforts. 'With BRC, we aim to unite all forces and work hand in hand to rebuild Beirut in the most efficient and transparent way possible,' says Edward Bitar, founder of LiveLove Beirut. 'BDD has become ground zero - offering us offices, logistics and warehouses. We have created a disaster management and response plan, with specialized teams working in our call center, dispatching requests for help, organizing and distributing supplies and donations from our warehouse, assessing damages on the ground, and beginning the reconstruction process' (BDD, 2020).

Combating the pandemic: what has happened to coworking spaces in Beirut after a year of severe crisis?

Empirical findings of the survey with CS managers conducted in March 2021

In March 2021, after nearly a year since the start of the pandemic, we followed up with a second survey sent to the CS managers. Thirty percent of CSs were fully open, while 70% were open for essential activities only. The questionnaire included four sets of questions that tackled four main aspects regarding the impact of the pandemic:

- 1 Changes in the services provided
- 2 Changes in the profile and entire community of coworkers
- 3 Financial difficulties and governmental support
- 4 Design and spatial management issues

The survey included an online questionnaire *paired with* phone call interviews in which nine managers participated. We identify and summarize the findings here.

- a Many of the impacts discussed are actually confused with the impact of the current political and financial crisis. Since 2019, a major economic crisis has exploded the largest in the history of Lebanon including severe devaluation of the local currency, which has dropped by 80%. This crisis has inflated many impacts shared with the pandemic in terms of financial difficulties. For instance, both the financial crisis and the pandemic have pushed many businesses to downsize, leaving their original big offices and moving to CSs which are financially more convenient due to the flexibility in rental plans. On the other hand, utilities and maintenance, which were never considered a major cost, have now become a big problem. The Lebanese economy is 'dollarized' since almost everything is imported using USD, and because of the devaluation of the Lebanese currency with respect to the American dollar, everything has become much more expensive.
- The common dilemma among most CSs relates to rental contracts for offices and desks. Managers stated that many clients were already paying their medium- or long-term rentals, but now due to the pandemic, they are paying without being able to come and use their spaces due to lock-downs and curfews. The financial crisis has also added to this dilemma, because most rental contracts with clients were already made in USD following the previous official exchange rate to LBP. However, due to the shortage of USD in the country, austerity/governmental restrictions on the use of foreign currencies, and severe devaluation of the LBP compared to the American dollar (if the client decides to pay in LBP), everything must be rethought. Rent suspensions, flexible rental packages, and daily passes are among the main solutions offered in this regard.

- c Considering the dilemma of rentals and payments, we noted an exceptional case in which one of the CSs stated that the majority of their clients are foreign NGOs with long-term rental contracts, a status that provided a stable income in USD, which made this space more relaxed when facing the pandemic and the financial crisis.
- d In spatial terms, the size of the spaces played an important role during the pandemic. CSs with big open floor plans were easily able to implement distancing between desks, lounges, cubicles, etc. Some of the CSs used flexible open floors and were already using mobile partitions, cubicles, and configurable furniture that could accommodate privacy and distancing. Those with smaller spaces had to re-organize the furniture layout, reduce the number of activities per day, or organize their hours to avoid groups of more than six people.
- e For the managers, 'community' was regarded as a crucial element. It was clearly stated that the coworking community has been missed a lot during the pandemic. The managers nostalgically described and recalled pre-COVID times, with all the events that used to bring coworkers together, such as happy Fridays, holiday celebrations, aperitifs, and lunch gatherings. This is an aspect that attached coworkers to their CS and managerial staff. Now during the pandemic, the managers are trying to maintain ties with their communities by means of online events, group chats, webinars, online workshops, live sessions, organized tournaments, and online competitions.
- All CSs which are all private confirmed that they did not obtain any governmental support to counter the economic effects of the crisis. Despite all the difficulties, however, almost all managers answered that they are optimistic about the future of coworking spaces in Lebanon.
- Finally, with regard to coworker profiles, the majority of CSs noticed an increase in the number of freelancers, students, independent professionals, medium-sized enterprises, and downsizing businesses.

Conclusion and future research: the future of coworking in Lebanon?

In this chapter, the proliferation of CSs in Beirut was discussed on both the city and neighbourhood scales. Despite the political instability, the coworking culture seems to be expanding and growing popular as they show diverse mechanisms of survival and success. Zooming in on the neighbourhood scale, we presented the recent BDD project, which was developed in a deprived district. BDD has generally increased the attractiveness of the area. The project is basically an innovation district which calls for the concentration of creative activities in one place; it has certainly been responsible for the urban revitalization of the Bachoura District. The decision to include CSs in new project development in the BDD shows that it has been successful in attracting young people to an abandoned/marginalized neighbourhood. Lebanon lacks laws and

legal strategies to protect the heritage of Beirut, which may lead to the loss of its history and its people being displaced. However, CSs in BDD serve the city's youth in the best way possible. The urban regeneration potential of CSs includes the reuse of vacant buildings, contributing to recycling idle urban assets and therefore contributing to fulfilling a circular economy.

Following one of the core aims of this chapter – to explore the effects of the COVID-19 pandemic on CSs – we presented the findings of two surveys conducted at the beginning of the outbreak (March 2020) and one year later (March 2021). From our extensive research, we can conclude that the coworking phenomenon has a promising and growing future in Lebanon, as an example case from the Middle East. In fact, the sociocultural concept of working patterns and working spaces is changing in this region. The current cultural change has also been pushed by the COVID-19 pandemic, which includes a massive shift towards remote working now occurring all over the world.

Moving beyond Beirut, this study calls for more empirical research on other cities in the Eastern world. From a methodological point of view, apart from some limited comparative studies (Akhavan et al., 2020; Parrino, 2015), most publications are based on individual contexts. More comparative studies are therefore needed to investigate and understand the spatial and cultural factors involved in creating the different types of CSs offered to varied coworker profiles.

Notes

- 1 The survey: 'How coworking spaces are navigating COVID-19' 14,000 CSs in 172 countries worldwide, available at: www.coworker.com/mag/survey-how-coworking-spaces-are-navigating-covid-19
- 2 See: www.constructionplusasia.com/my/maria-nakamura/
- 3 In Beirut, no formal census or population count has been taken since the 1930s; the World Population Review has estimated the population for 2021. Available at: https://worldpopulationreview.com/world-cities/beirut-population.
- 4 The Levant comprises Lebanon, Syria, Iraq, Palestine, and Jordan.
- 5 According to the World Bank national accounts data, available at: https://data.world bank.org/indicator/NY.GDP.MKTP.CD?locations=LB

References

Akhavan, M. (2021) 'Third places for work: A comprehensive review of the literature on coworking spaces and makerspaces', in I. Mariotti, S. Di Vita, & M. Akhavan (Eds.), New workplaces – location patterns, urban effects and development trajectories. Cham: Springer International Publishing, pp. 13–32. ISBN: 978-3-030-63442-1. Available at: https://doi.org/10.1007/978-3-030-63443-8.

Akhavan, M., & Mariotti, I. (2018) 'The effects of coworking spaces on local communities in the Italian context', *Territorio*, 87(8), pp. 85–92. Available at: https://doi.org/10.3280/ TR2018-087014.

Akhavan, M., Mariotti, I., Di Marino, M., & Chavoshi, S.H. (2020) Exploring new workplaces in Milan and Oslo: Typologies, location factors and policy tools. Presented at the ERSA Web Conference 2020–25 August until the 27 August 2020. Available at: https://az659834.

- vo.msecnd.net/eventsairwesteuprod/production-ersa-public/90276e58db0f48d08d1dc14
- BDD (2020) 'How has the blast impacted Lebanese EntrepreneurS? | Blog |', Beirutdigitaldistrict. Available at: https://beirutdigitaldistrict.com/blog/how-has-the-blast-impacted-lebanese-
- Bhattacharyya, S.S., & Nair, S. (2019) 'Explicating the future of work: Perspectives from India', Journal of Management Development, 38(3), pp. 175-194. Available at: https://doi. org/10.1108/JMD-01-2019-0032.
- Capdevila, I. (2014) Coworkers, makers, and fabbers global, local and internal dynamics of innovation in localized communities in Barcelona. PhD Thesis, HEC Montréal École affiliée à l'Université de Montréal, Montréal.
- Deskmag (2019) The global coworking survey. 2019 Ultimate Coworking Space Data Report. Available at: https://coworkingstatistics.com/coworkingstatistics/ultimate-coworking-spacedata-report.
- Di Marino, M., & Mariotti, I. (2020) 'Location factors of NeWSps in the peripheries', in G. Micek et al. (Eds.), Definition and typologies of the phenomenon of the new working spaces Deliverable D 1.1. Internal Working Paper. COST Action CA18214: The Geography of New Working Spaces and Impact on the Periphery (2019–2023), pp. 30–36. Available at: https://www.eurometrex.org/wp-content/uploads/2021/08/ESPON_IMAGINE_Sci entific_Annex_2_In-depth_analysis_logistic_creative_industries_0.pdf.
- Fuzi, A., Clifton, N., & Loudon, G. (2014) New in-house organizational spaces that support creativity and innovation: The co-working space. R & D Management Conference, Stuttgart, 3-6 June.
- Houssari (2020) Beirut counts the cost of devastating blast. Available at: www.arabnews.com/ node/1720416/middle-east.
- Knight, L. (2014) 'Beirut coworking space AltCity is finding its path', Wamda. Available at: www.wamda.com/2014/08/beirut-s-co-working-space-altcity-is-on-its-chosen-path.
- Luo, Y., & Chan, R.C.K. (2020) 'Production of coworking spaces: Evidence from Shenzhen, China', Geoforum, p. 1, January. Available at: https://doi.org/10.1016/j. geoforum.2020.01.008.
- Mariotti, I., & Akhavan, M. (2020) 'Exploring proximities in coworking spaces: Evidence from Italy', European Spatial Research and Policy, 27(1), pp. 37–52. Available at: https://doi. org/10.18778/1231-1952.27.1.02.
- Mariotti, I., Akhavan, M., & Rossi, F. (2021) 'The preferred location of coworking spaces in Italy: An empirical investigation in urban and peripheral areas', European Planning Studies. Available at: https://doi.org/10.1080/09654313.2021.1895080.
- Mariotti, I., Pacchi, C., & Di Vita, S. (2017) 'Co-working spaces in Milan: Location patterns and urban effects', Journal of Urban Technology, 24(3), pp. 47-66. Available at: https:// doi.org/10.1080/10630732.2017.1311556.
- Micek, G., Mariotti, I., Di Marino, M., Akhavan, M., Di Vita, S., Lange, B., Paas, T., Sinitsyna, A., Alfieri, L., & Chebotareva, M. (Eds.). (2020) Definition and typologies of the phenomenon of the new working spaces. Deliverable D 1.1. Internal working paper. COST Action CA18214: The Geography of New Working Spaces and Impact on the Periphery (2019–2023), pp. 30–36. Available at: https://www.google.com/url?sa=t&rct=j&q= &esrc=s&source=web&cd=&ved=2ahUKEwjxnqnbr-j3AhXOxosBHcX3AEIQFnoE CAMQAQ&url=https%3A%2F%2Fjournals.francoangeli.it%2Findex.php%2Fterritor ioOA%2Farticle%2Fview%2F12925&usg=AOvVaw1bT5o2m_3uM-vWw6LBllpr&cs hid=1652853773.
- Parrino, L. (2015) 'Coworking: Assessing the role of proximity in knowledge exchange', Knowledge Management Research & Practice, 13(3), pp. 261–271. Available at: https://doi. org/10.1057/kmrp.2013.47.

- Spinuzzi, C. (2012) 'Working alone, together: Coworking as emergent collaborative activity', *Journal of Business and Technical Communication*, 26(4), pp. 399–441. Available at: https://doi.org/10.1177/1050651912444070.
- Spinuzzi, C., Bodrožić, Z., Scaratti, G., & Ivaldi, S. (2019) "Coworking is about community": But what is "community" in coworking?, *Journal of Business and Technical Communication*, 33(2), pp. 112–140. Available at: https://doi.org/10.1177/1050651918816357.
- Statista. (nd.). Statista research department. Available at: www.statista.com/topics/2999/coworking-spaces/.
- Tintiangko, J., & Soriano, C.R. (2020) 'Coworking spaces in the global South: Local articulations and imaginaries', *Journal of Urban Technology*, 27(1), pp. 67–85. Available at: https://doi.org/10.1080/10630732.2019.1696144.
- Waters-Lynch, J.M., & Potts, J. (2017) 'The social economy of coworking spaces: A focal point model of coordination', *Review of Social Economy*, 75(4), pp. 417–433. Available at: https://doi.org/10.1080/00346764.2016.1269938.