

COWORKING SPACES - IS IT JUST A BUZZWORD, OR DOES IT HAVE POTENTIAL?

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ABSTRACT

Since 2005, coworking spaces have evolved from being a start-up concept in San Francisco, to a global phenomenon with over 28,000 locations worldwide. The concept is intended as a gathering point and workspace for small businesses. Although it represents a somewhat atypical segment, the concept has disrupted the conservative office market in Norway. Therefore, the study aims to investigate whether coworking spaces are just a buzzword or a concept with long-term potential.

A literature review and several interviews were conducted to gain insight on the consequences of coworking spaces for the actors and how the concept is executed in the Norwegian office market. The findings show that even though coworking spaces have a small share in the office rental market, it has managed to make a disruptive change. Gaining the attention of commercial real estate agents, property owners and businesses. Coworking spaces meets a user segment who often are dealing with unstable financial terms, giving them flexibility to expand or increase, while offering suitable offices and a community. The flexible office concept also possesses features that can contribute to a sustainable development. Like being a part of a sharing economy, higher area efficiency, shared resources, and access to a social platform. But still, the concept creates a greater risk for the actors, who is left with all the costs. Making it hard to create an economic sustainable concept. To create a lower-risk bottom line, coworking actors should diversify their revenue streams. However, coworking spaces can facilitate to a more sustainable office industry if both businesses and individuals are more receptive to the use of shared spaces and participating in the sharing economy.

KEYWORDS _ *Coworking spaces, shared office spaces, sustainability, real estate, flexibility*

INTRODUCTION

The workplace is more than just a desk and the way we work have changed after the corona pandemic (Wangen, 2019). To adapt the office to a changing company, such as new work and collaboration processes, companies relocate, expand and rearrange their offices (Eco-lighthouse, 2021). As a part of a sustainable development it is important that everyone contributes towards a greener way of living (NHO, 2023). In relation to the office, they can be more sustainable by reducing the energy use, have central office locations, building with energy management services and reduce the amount of office area (Eco-lighthouse, 2021). One must consider both smart and sustainable solutions when changing or replacing office spaces. Area efficiency, for instance, is a crucial element. Coworking spaces are known for being a part of a sharing economy since the concept promotes the use of shared office spaces, social zones and a new infrastructure in the office (Bebegal-Mirabent, 2021; Business Research Insight, 2023; Huang et al., 2020; Oswald & Zhao, 2020). The concept is often formed as a membership with payment per use and with a focus on a high level of service, a social environment and good facilities (Jensen, 2022). They are localized primarily in larger cities at transportation hubs. Since 2005 coworking spaces have taken the global market by storm and is a phenomenon that have change the market for property real estate (Deskmag, 2019; Echeverri et al., 2021; Kojo & Nenonen, 2017). As of June 2022 there were over 28 000 coworking spaces worldwide, and the market is expected to grow (Business Research Insight, 2023; Coworker, 2023; Technavio, 2022). In Oslo flexible office spaces includes only around 2 % of the office rental market. However, the concept has gained traction among actors, property owners and commercial real estate agents. To understand how coworking spaces functions and how the concept can be implemented, it is important to understand the business model in order to take good and informative decisions for a property strategy (Echeverri et al., 2021). At the same time, there must be incentives for the coworking actors to run a coworking spaces and there must be room in the property market for the concept to grow. Overall, the world is largely governed by economic decisions. So why do actors engage in coworking spaces if it is a concept that is not profitable in the long run? According to Kojo & Nenonen (2017) is it necessary to look at research regarding the economic effects with the use of coworking spaces and analyse the business model to give the actors useful insight in the opportunities in the concept. For coworking spaces to be more than just a buzzword, the concept must survive in the future and take part in a sustainable development. Both from an environmental, economic, and social perspective. Thus, coworking spaces must generate a continuous income stream over time and create a profitable concept. Furthermore, both society and businesses are more than ever concerned with ensuring that the goods and services we use and produce, are sustainable and contribute to a sharing economy.

METHODOLOGY

The paper was conducted after finalizing a master thesis at the Norwegian University of Science and Technology in Trondheim in Norway. It is based on the research from the thesis and the paper is formed as a more concise summary. The findings are structured into several themes related to the purpose of the paper. The goal of this research was to explore the phenomenon of coworking spaces and look at the potential and risks of such a concept in the Norwegian office market. To gather data, several interviews and a literature review was conducted. A total of 14 informants have contributed, whereas 12 interviews and 2 mail correspondences. Table 1 shows the three categories of informants and their relevance.

The literature review was formed as a qualitative study and is based on a total of 64 publications. Coworking space is a subject that is not very well represented in academic literature (Bouncken et al., 2020; Howell, 2022; Yang et al., 2018). This can be due to the concept falling between several fields, like entrepreneurship and work psychology (Bebegal-Mirabent, 2021). Therefore, the publications represented in this paper originates from literature reviews, news articles, trends, and surveys from the coworking market, both in Norway and international. In addition, a *Business model canvas* (BMC), developed by Alexander Osterwald, was used to structure the actors information regarding their customer segment, partners, costs and income streams (Innovation Norway, 2023).

Table 1: Relevance of the informants for the interviews by code

Category	Code	Relevance	Amount
Commercial real estate agents	NM	General insight into the office market, both within conventional office leasing and flexible office solutions.	3 + 1 (by email)
Coworking actors who rents	CWL	Insight from the inside on how the concept of coworking spaces is operated.	5
Property owners with coworking concepts	CWG	Challenging coworking spaces by operating flexible office solutions in their own buildings where there are also conventional lease agreements.	4 + 1 (by email)

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FINDINGS

Characteristics of coworking spaces

The primary value creation in coworking spaces is to offer a place to work, social zones and other necessary facilities. According to Jakonen et al. (2017) the community, sharing and cooperation are the core of a coworking space, and not the work desk itself. The clearest distinction between coworking spaces and an ordinary office is the length of the lease agreement (Pohler, 2011). The lease agreement between the coworking space and the user is most common formed as a membership that gives access to a physical, social and virtual work environment which can vary in time, from hours to days, month or years (Bouncken & Reuschl, 2018; Echeverri et al., 2021; Yu et al., 2019). In addition, many coworking spaces have close access to public transportation and long opening hours, which make it possible for the members to work whenever it fits them (Bouncken & Reuschl, 2018; Sankari et al., 2018; Weijts-Perrée et al., 2018).

These characteristics also apply to the Norwegian coworking spaces, according to the findings in the interviews. They emphasize the importance of having spaces localized in the city centre to attract small businesses who often have young employees who often appreciate closeness to the urban city life. Even though one can differ between the two types of actors in this study, CWL and CWG, both categories of actors have similar characteristic for what they are offering their members. Both categories focus on offering a place to work for small businesses, but they vary in the degree of community which they want to build up in their offices.

The lack of a clear definition

Coworking spaces are often associated with concepts like office hotels, serviced offices and shared office spaces. Based on the interviews it became clear that even though the informants were invited to take a part of the interview based on the same conditions, the ten actors have different interpretations of coworking spaces. Some describe their concept as a coworking space with a clear

vision to create a community for the members. Others say that the coworking space only are a small part of their main activity and that hot desks are not anything they focus on. Some also uses the term *flexible offices*, instead of *coworking spaces*. This applies especially to the property owners with flexible offices in their portfolio. Something that is interesting is that even though the majority do not consider coworking spaces as their main activity, they respond to surveys and questions regarding coworking spaces.

The CWG-actors mostly use the term *flexible offices* or *shared office spaces*. Most of them clarifies that the shared office space is only a small part of their main portfolio, but that it is becoming an important service to deliver. The development of shared offices spaces in their own building gives them an extended portfolio. The findings show that all the property owners want to develop shared office spaces to create a greater flexibility for the other tenants in the building. This means that they can take use of the shared spaces when they have a need for an extra meeting room or more desk space. At the same time, this extra flexibility leads to an increased rental cost for the tenants. But, the CWG-actors are dependent of the other tenants in the building to not develop too many meeting rooms on their own floors for the concept to work smoothly. This to increase the area- and resource efficiency of the building and take full use of the benefits that a shared office can contribute with.

According to the CWG-actors, the areas used for shared offices are often floors with a structure that is not suitable for large offices with an open landscape. Instead, they offer small offices in a shared office space for smaller tenants. Another reason is that it may be floors that a tenant has an option for. To make use of the available area, the property owner may establish a shared office space for a given period. They also clarify that they do not make a huge profitability out of the shared office space, but they see less loss of income. The alternative would be to have empty areas with fixed costs every month with no income.

Because of the lack of a clear definition, several actors who do not have traditional coworking spaces, are seen at coworking spaces since they are offering flexibility. This have contributed to expand the meaning of coworking spaces and made it relevant to more than just individuals outside an organisation. From being aimed at start-ups and freelancers, the concept of coworking have developed to being relevant for business of all sizes. The rapid growth for coworking spaces is particularly related to the growth of small and medium enterprises (SME), who represent 90% of all businesses worldwide (Business Research Insight, 2023; Technavio, 2022). Even though the market for coworking spaces have had a rapid growth for the last ten years, the market for flexible office spaces in Oslo in Norway is only around 2 %. At the same time small businesses represents 27,2 % of all active businesses in Norway (SSB, 2023). While large businesses only make up for 5 %. Whether the 27,2 % of the businesses in Norway are in need for the use of flexible office spaces, are not certain. Therefore, it is difficult to assume a growth in the market based on the assumption that small businesses are in the need of office spaces like coworking spaces.

The meaning of flexibility

The interviews and the literature review show that flexibility is one of the clearest characteristics for a coworking spaces (Bouncken et al., 2020; Howell, 2022; Sankari et al., 2018; Spinuzzi, 2012). It comes in various forms, such as the ability to easily adjust the office size, short-term lease agreements, accommodating the needs of other tenants in the building, and the opportunity for the actors to move their members around on different locations. At the same time, the flexibility also presents challenges concerning area efficiency and the overall profitability of the concept.

The flexibility offered by coworking spaces does not only mitigate risks for the actors, but also fosters opportunities for collaborations among the users. Additionally, the short-term lease agreements contribute to economic profitability for the users (Kojo & Nenonen, 2017). Since they pay a set price for the necessary office space, which includes all costs. Such as energy and cleaning costs. This

cost-saving aspect can be particularly advantageous for small businesses dealing with uncertainty regarding future growth and financial stability.

Maintaining flexibility in premises, which for a large part of the time are fully booked, is a challenge for all actors. They must find a balance between optimising the area, so they have room for several members, but at the same time have available seats to maintain the flexibility in the concept. The fuller the premises, the lower the flexibility. When meeting such a challenge, the property owners see the advantage of having several locations to move the members around on. By owning the building, they gain another dimension of flexibility. They can easily close the coworking space and use the area for long term rental with lower risk.

Echeverri et al. (2021) differentiate between functional and financial flexibility. Functional flexibility is about the use of a dynamic office space that can adapt to a wide range of users, such as incorporating flexible work hours and shared desks. In their study, Echeverri et al. reveal that organizations seek methods to manage financial risk and address conditions that may introduce uncertainty in property-related decisions, which aligns with the concept of financial flexibility. This could be associated with opting for shorter lease agreements in flexible offices and establishing a diversified portfolio to mitigate the risks. Coworking spaces, with their short commitment periods compared to traditional offices, exemplify lease agreements that offer such financial flexibility.

It is expected that the flexible offices will be more used by larger corporations and property companies worldwide (Business Research Insight, 2023). The change in how we work after the pandemic, with the high increase of home offices, have led to organisations wanting to downsize their fixed areas and use flexible offices. This is something Jensen (2022) puts in context with the financial portfolio flexibility presented by Echeverri et al (2021). The long-term lease agreements require organisations to be able to pay fixed rental costs and utility costs for the whole period. The use of short lease agreements can reduce these fixed costs and give organisations more flexibility in the amount of office area they possess.

Contribution to a sustainable development

The concept of coworking is based on the principal of sharing available resources and services between different people, which can contribute to the concept of the sharing economy. Based on the design and the operating model of coworking spaces, the literature shows that this can be described as sustainable features (Kojo & Nenonen, 2017).

The use of flexible work models (FWM), like coworking spaces, have positive effects on more than just the individual users (Yu et al., 2019). Figure 1 shows that the emergence of flexible work models can have positive effects on environment, economy, and urban planning. Coworking spaces are often used by a diversity of users, which gives the actors an opportunity to optimize the areas and resources, and reduce unnecessary losses (Kojo & Nenonen, 2017). The concept can also contribute to a better work-life balance for the users since they are often placed in closeness to everyday activities, public transport, and restaurants. In addition, coworking spaces contribute to recycling, less use of paper and energy saving technology (Spinuzzi, 2012).

Even though coworking spaces carries characteristics that can be connected to the sharing economy, there were only one of the interviewees that mention this connection. In addition to having a high area efficiency, a location in central parts of a city can reduce the environmental costs connected to transportation by encouraging the use of a more sustainable way of transportation. A study conducted by Yu. et al (2019) showed that the establishment of flexible offices in the central part of Huston lead to a considerable reduction of the rush traffic.

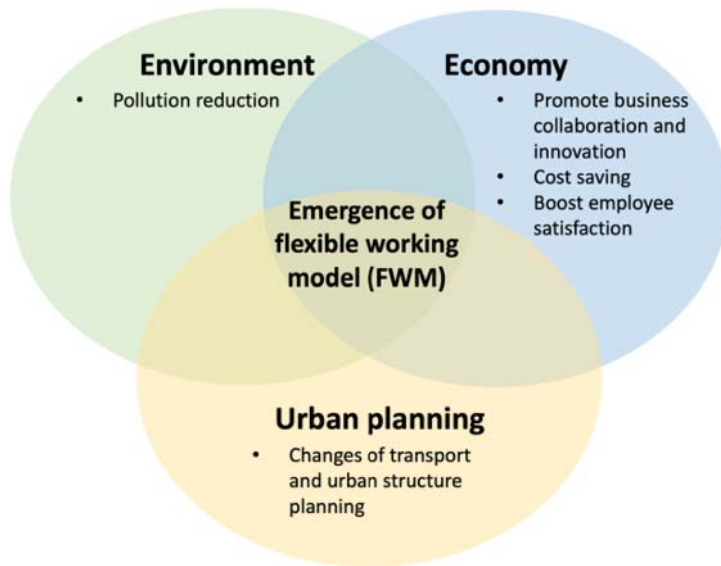


Figure 1: How a flexible work model influence environment, economy and urban planning (Yu et al., 2019)

The most recent market report from the Oslo shows that the office vacancy is only 5.1 % (DNB Næringsmegling, 2023). Even though the office vacancy is very low, it does not mean that the offices are filled with employees. A survey conducted right before the pandemic came to Norway in 2020 exposed that several large firms had offices who were partly empty, so-called *space waste* (Løvteit, 2021). The survey showed that there was an average of 50 % office occupancy. This was found to be a consequence of over dimensioning the fixed office space and employees working outside the office. By using unused offices, it can contribute to increase the actual area efficiency in an office building and reduce the environmental costs.

Profitability and economic challenges

In a study by Bernard Moriset (2013), concerns regarding the sustainability and growth of coworking spaces are highlighted. The rapid growth of coworking spaces has raised questions about profitability and risk, and that there are implications with the study that lacks deep studies (Howell, 2022).

According to a survey by the Norwegian real estate company UNION (2023), office occupancy is correlated with the years the coworking space have been in operation. Despite consistently high occupancy rates in Norwegian coworking spaces since the pandemic, the break-even occupancy has increase by 5 %. Making it harder for the actors to run profitable locations.

As Figure 2 shows, 58 % of Norwegian coworking actors reported that they have profitable occupancy rates, down from 69 % in August 2022. A significant 96 % of operators now cite increased costs as a top market challenge, up from 75 % in August 2022.

For the CWG-actors, the shared office spaces are a way to increase the property company's total portfolio, but it is difficult to create a profitability concept. This is due to high competition in the market and the establishment time. This is a barrier that the also the commercial real estate agents see. The interviews uncovered that most of the actors needs at least two to three years to establish a coworking space with a steady number of members. Because of the corona pandemic the establishment time have increased.

To achieve economic sustainability, they must increase the price of the service and sell more of the common areas, according to the CWL-actors. To find the correct price is difficult since the market for flexible offices is transparent. If they set the price too high, they instantly see the consequences when members start to terminate their contracts. Both CWL and CWG have given discounts to attract new members during and after corona. This has led to low market prices, and lower profitability. Many of the actors are still locked in these discount prices. But they are sure that the profitability will increase when the discount prices have expired.

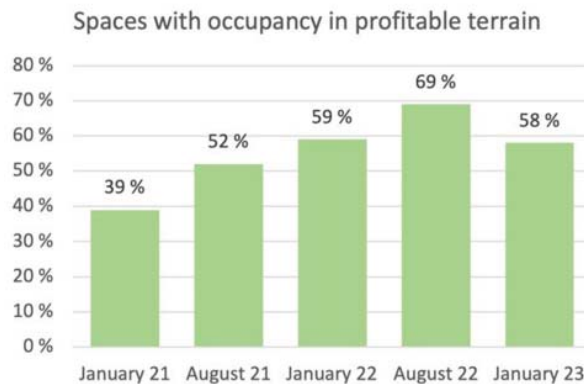


Figure 2: Profitability of coworking spaces in Norway (UNION, 2023)

According to the interviewees, the recurring challenge is to find a balance between a price that covers the costs and a price that the members are willing to pay for. The costs are significantly higher for the actors of flexible offices, compared to office spaces with a long-term lease. Included in the membership price are among other things, rent, energy costs, receptionist, and cleaning. To cover the costs, the actors are dependent on a high enough price and the members must recognise what the price includes. The difficulty behind this is that the members are often small businesses or individuals who have their company's money close to their own personal finance. At the same time, the members act like normal consumers. When they have less disposable income, they tend to cut costs. Therefore, it can be difficult to influence the members' patterns to increase the revenue of a coworking space.

To create a profitable concept the actors also see the importance of area efficiency. The area efficiency depends on sellable area compared to the total area. The challenge with gaining high area efficiency for coworking spaces is that they must set aside some areas for common spaces. These areas will reduce the total area efficiency and they also contribute to costs that need to be covered through higher membership prices.

According to the property owners, what is not shown in the numbers is the positive effects of creating good relations with their members. When members outgrow their flexible offices and are in the need of a bigger space, the property owner can offer an office space with an ordinary lease. Keeping the members in their overall portfolio.

Business model canvas

In connection with the interviews a business model canvas was filled out by the CWL- and CWG-actors. Out of ten coworking-actors, five filled out the BMC themself. For the remaining five, the BMC were filled out based on the information given in the interviews. Figure 3 presents an overview of a summary of the BMC, where the response is sorted into nine categories. The repeated answers are given in keywords or short sentences.

From the summary it can be interpreted that both CWG and CWL have a similar approach To whom they intent to create a value for and what the most important source of income is. Which is that they create the concept for individuals or small business, and that the memberships are the most important income. In addition, several of the actors have an income from charging meeting rooms by the hour and offering event space. The costs associated with rent is the highest cost among all actors. Even though the actors in the CWG-category also are the property owners, the shared office space is developed as a separate business who pay a market value for the office space to the main property company. In addition to the rent, cost associated with salary and energy are high.

<p>8 Key partners</p> <p>Who are the key partners?</p> <p>CWL:</p> <ul style="list-style-type: none"> Property owner The bank Public financial support Partners <p>CWG:</p> <ul style="list-style-type: none"> Cleaning Cafeteria Investors 	<p>7 Key activities</p> <p>What key activities does the value proposition require?</p> <p>CWL:</p> <ul style="list-style-type: none"> Marketing Events Daily operations <p>CWG:</p> <ul style="list-style-type: none"> Daily operations Cleaning Rental of premises <p>6 Key resources</p> <p>Which resources are necessary to deliver the value propositions?</p> <p>CWL: CWG:</p> <ul style="list-style-type: none"> Employees Employees 	<p>2 Value propositions</p> <p>What value are delivered to the customers?</p> <p>CWL:</p> <ul style="list-style-type: none"> Community Help the customer to grow Flexible office solutions <p>CWG:</p> <ul style="list-style-type: none"> Flexibility for the members and other tenants Office space Service 	<p>4 Customer relationships</p> <p>What are the relations to the customer and how do one keep them?</p> <p>CWL:</p> <ul style="list-style-type: none"> Good service Flexibility Access to a community <p>CWG:</p> <ul style="list-style-type: none"> Good service Flexibilities <p>3 Channels</p> <p>How are the customers reached?</p> <p>CWL: CWG:</p> <ul style="list-style-type: none"> Social media Social media Brokerage Brokerage services services Own websites Own websites Word of mouth 	<p>1 Customer segments</p> <p>Who are the value created for?</p> <p>CWL:</p> <ul style="list-style-type: none"> Everyone is welcome Small businesses Innovation environments <p>CWG:</p> <ul style="list-style-type: none"> Everyone is welcome Start-ups Small businesses
<p>9 Cost structure</p> <p>What are the most important costs?</p> <p>CWL: CWG:</p> <ul style="list-style-type: none"> Rental costs Rental costs Electricity and energy Electricity and energy Salary 		<p>5 Revenue streams</p> <p>What are the sources of income?</p> <p>CWL: CWG:</p> <ul style="list-style-type: none"> Income from office space Income from office space A small amount of hot desk A small amount of hot desk Meeting room Meeting room Events Auditorium Café Events 		






















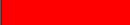
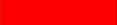


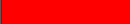
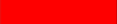
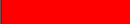
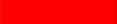




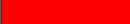
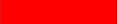
Figure 3: Business model canvas summary of CWL and CWG-actors in Norway

The profitability of the actors

To get hands on information about the profitability and the result before taxes, Proff.no was used to gain insight and compare it to what the actors said in the interviews. Some of the actors, CWL2, CWL4 and CWG4, have separated several of their locations into their own stock-based company for each location.

From Table 2 one can see that all the CWG-actors have *not satisfying* profitability and negative results before taxes. This is marked with a red colour in the table. CWL2 and CWL have partly profitable numbers. Both CWL2 and CWL4 have one location each that have excellent profitability and a result before taxes that is greater than zero. The same actors are also two of six locations which states that take paid for meeting rooms. Of a total of 18 locations, only four states to have another income stream in the same business as the coworking space or shared office.

Table 2: Summary of the profitability and income streams for the actors

		 = Excellent (>15 %)	 = Weak (1-5,9 %)	 = Not satisfying (<1 %)	Result before taxes:  > 0  < 0	
		Profitability (proff.no)	Result before taxes 2021 (proff.no)	The highest cost is rent	Other income stream than just coworking spaces/offices	Paid for meetings rooms
Coworking-actors who rent (CWL)	CWL1			YES	YES (restaurant, cleaning, reception)	YES
	CWL2			YES	NO	YES
						
						
	CWL3			YES	YES (events)	NO, included
CWL4			YES	NO	YES	
CWL5			YES	YES (café, events)	YES	
Property owners (CWG)	CWG1			YES	NO	NO, included
				YES	NO	NO, included
				YES	NO	NO, included
				YES	NO	NO, included
	CWG2			YES	NO	NO, included
	CWG3			YES	NO	NO, included
	CWG4			YES	YES (auditorium, events)	YES
	CWG5			YES	NO, not in the coworking part, but they have two other businesses	YES

The future of coworking spaces

Property real estate agents consider profitability a major obstacle for the concept to further development in Norway. The pandemic shifted work dynamics creating a demand for flexible offices. The property owners have seen a slight change in the ordinary office tenants. The uncertainty after the pandemic and increased costs has led to tenants wanting to negotiate on further leases to be shorter. Despite higher risks compared to long-term leases, property owners see the value of having an offer for small businesses and individuals. They say that they will continue offering flexible offices in their buildings.

News articles and office market surveys in Norway show that there is a tendency of change. While the coworking-actors anticipate growth in Oslo, commercial real estate agents are sceptical. Given the numerous surveys conducted by UNION, it shows that there is an interest and a potential for the concept in the market. The commercial real estate agents follow the coworking market to cover a segment that the traditional office market does not accommodate. There may be reasons to believe that the market for coworking spaces will grow. But the NM-category mentions an interesting scenario. If small businesses, who represents the 2 % share in Norway, grows out of the coworking space and into an ordinary office. It will free up space to new members. Leaving the flexible office share still at 2 %. If this is the case, it is not certain that the market for coworking spaces will grow.

While incorporating flexibility into property portfolio can enhance an organisation's adaptability to change, concerns arise regarding the willingness of employees to embrace such flexible spaces. As found in the paper by Boge et al. (2018) the employees in a large institution for research and

higher education, a large consultancy company and a medium-sized consultancy company (in total 4367 employees, the employees preferences of what kind of workplace is suitable for their tasks are influenced by the type of office and the hours at the workstation. The paper indicated that it is important that the employees' tasks and work patterns are taken into consideration when providing offices. The fear of sharing workspaces with unfamiliar individuals may hinder the desired outcomes of coworking spaces, which aims to better social relations and reduce isolation. This particular concern has been identified as a barrier to the growth of the coworking market, as mentioned by the commercial real estate agents. For the market to thrive, it is dependent of an extended use of flexible office spaces among businesses of various sizes.

CONCLUSION

This study combined a literature review with several interviews to investigate the office concept *coworking spaces*. The intention was to see if the concept is more than just a buzzword that have disrupted the Norwegian office market since its origin in 2005. The study investigated and identified four highlights regarding coworking spaces;

- (1) *The problem concerning the lack of a clear definition*
- (2) *The meaning of flexibility in coworking spaces*
- (3) *Characteristics that can contribute to a more sustainable future*
- (4) *How the profitability is a challenge in the Norwegian office market.*

(1) As a result of the rapid growth of coworking spaces worldwide, the concept has lost its identity. Findings show that multiple actors have created coworking spaces, but with a varying degree of community and included features. In the Norwegian office market, two distinct types of coworking space actors were identified - coworking actors who rents an office space for subleasing to members (CWL) and property owners who incorporate flexible offices in their portfolio (CWG). The main difference was found to be a higher focus on creating a community with the CWL-actors, while the CWG-actors prioritize expanding their real estate company and make use of available office space in their buildings.

(2) There are several types of flexibility associated with coworking spaces, but the most notable is the short-term lease agreements. As the members benefit from increased office space flexibility and various all-inclusive features, this poses uncertainty and risk for the coworking space actors. Their business model relies on buying long and selling short. This creates a risk because there is no guarantee that they can fill up the office space if the members resign with short notice. At the same time, the actors must maintain the balance between offering flexibility and have high occupancy rates. Both the actors and the commercial real estate agents say that the degree of flexibility decreases when the occupancy rate increases. For the actors to offer high flexibility to their members, the available area must be paid for. Typically, by increasing the membership fees. Which can be difficult in a transparent market where the user segment often faces economic instability.

(3) Coworking spaces have the potential to contribute to a more sustainable office market by fulfilling social and environmental aspects. Resource sharing, closeness to public transportation and access to a social environment is some of the characteristics. In addition, the actors have a high focus on increase the area efficiency and create an environment for sharing. The concept gives an opportunity to make use of available office spaces that are unoccupied, either due to challenges in finding a suitable tenant or because the design of the space does not align with traditional landscape offices. This approach can help minimize the amount of *space waste* in an office market, which have low vacancy rates on paper.

(4) Profitability is the main challenge for the concept. Even though the break-even occupancy has stayed consistently high in the Norwegian office market, it has increased with 5 % due to increased

costs. Making it harder to gain profit from coworking spaces. Justifying the high cost per square meter of the concept, compared to regular office spaces, is difficult. However, a higher price is necessary to cover all the expenses this all-inclusive concept offers its members.

So far, the study indicates that coworking spaces can be more than just a buzzword and have a future in today's office market. It is hard to predict how quick the market for coworking spaces will develop and the future need for an office, especially after Covid-19. However, coworking spaces are a contribution to the office market when there is a rapid change, and it gives an opportunity for cost savings, increased flexibility and higher area- and resource efficiency that can contribute to a sustainable development. Such a trend can increase the proportion of flexible offices in the market and reduce the amount of space tied to conventional lease agreements. Additionally, coworking actors should diversify their revenue streams to create a lower-risk bottom line. This could include charging for meeting rooms, raising membership fees, events, or entering into turnover-based lease agreements.

For the coworking space to survive and grow beyond 2 %, there is a need for a change in the Norwegian office market, where a sharing economy should be in focus. Both for individuals and larger businesses. Coworking spaces can contribute to lighten the pressure in the office rental market, especially in Oslo, and it can be a supplement to a main office when there is a need for more capacity. For now, it seems like the concept have been carried by a significant boost due to the disruptive change coworking space have brought to the office market, both in Norway and globally. Therefore, it will be thrilling to see how and if coworking will continue developing in the future.

To create a deeper understanding of the potential of coworking spaces, there is a need for further research. Conducting a systematic investigation of several business models could shed light on how the concept can achieve higher profitability.

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