



***The CORAL-ITN survey:  
demographics and  
functions of Collaborative  
Workspaces in Europe***



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[coral-itn.eu](https://coral-itn.eu)

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## Executive summary

The survey was conducted in 2023 as part of the CORAL-ITN project, collecting responses from 273 managers of collaborative workspaces (CWS) from 34 European countries with the aim of unpacking their demography and measuring the different kinds of impacts of CWS.

**Most of the CWS define themselves as coworking spaces, as well as cultural and creative hubs, business incubators or start-up accelerators, makerspaces and hackerspaces, with no major differences between CWS located in cities and outside cities.**

The majority of CWS are located in buildings which are rented (47%), owned (32%), or rented from public institutions (11%). Outside cities, CWS are more likely to own the space or this is given to them free of charge by public institutions.

**The main income stream for CWS comes from renting hot desks and office space, while revenues come from offering workshops and educational services. Thus, a new role emerges for CWS, that of education and skills upgrading provider, for a diverse audience (co-workers, but also unemployed, etc). However, CWS outside cities and small CWS also rely on personal funds (of the owner(s)), and public subsidies, while those in cities and large CWS usually rely on the above-mentioned market streams.**

The maximum capacity of CWS is on average 81 users. In CWS located in cities that goes up to 113 users, while outside cities it is about 37 users. Small CWS and CWS located outside cities tend to have a greater share of users who are not residents in the municipality of the space. Also, CWS located outside cities are more open and accessible to non-members, than those located in cities.

**The share of full-time employees compared to the total of the staff members (including volunteers) is directly proportional to the size of the CWS and to the geographical scale (i.e. it is higher in CWS in cities). Small CWS and CWS outside cities are characterised by a higher presence of volunteers taking care of the space.**

CWS that are less market-oriented have a broader social focus (through organising cultural events or events for a broad and diverse audience, e.g. children), while the ones that are market-oriented organise social activities in order to support the well-being of their clients (sport and recreational events, community activities).

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## Introduction

**This CORAL brief presents the main demographics of the CORAL-ITN survey (March- August 2023). The goal of this brief is to share the results of the survey that covered the diverse characteristics of collaborative workspaces (CWS) in densely populated areas (cities) as well as in intermediate and thinly populated areas (towns, suburbs and rural areas) in Europe. CWS seem to differ in functions, hard infrastructure, financial sustainability strategies, accessibility, ownership status and so on, depending on their location and their size.**

With the data available, the brief suggests the importance of implementing ad-hoc policies according to the different characteristics of CWS. Moreover, it gives important insights on the role of CWS as providers of professional up-skilling and educational contents, through training, workshops, and activities directed not only to the CWS members, but also to external individuals.

## Methodology

The cross-sectional data for this brief is gathered through an online survey directed to managers and hosts of CWS. The survey was carried out from March until August 2023 and directed to 7,002 CWS in 37 European countries, which have been found through Google Maps by searching keywords such as “Coworking”, “Fab Lab”, and “Makerspace”. In addition, we used several other websites listing CWS on the regional, national or European level, as well as datasets kindly provided by members of COST Action CA 18214- The Geography of New Working Spaces and the Impact on the Periphery<sup>1</sup>. Further information, regarding the identification process of CWS in Europe can be found in Marmo & Avdikos (2024)<sup>2</sup>.

Out of roughly 350 responses received, the cleaned dataset includes 273 respondents (Figure 1), with a 90% confidence level (and 5% margin of error).

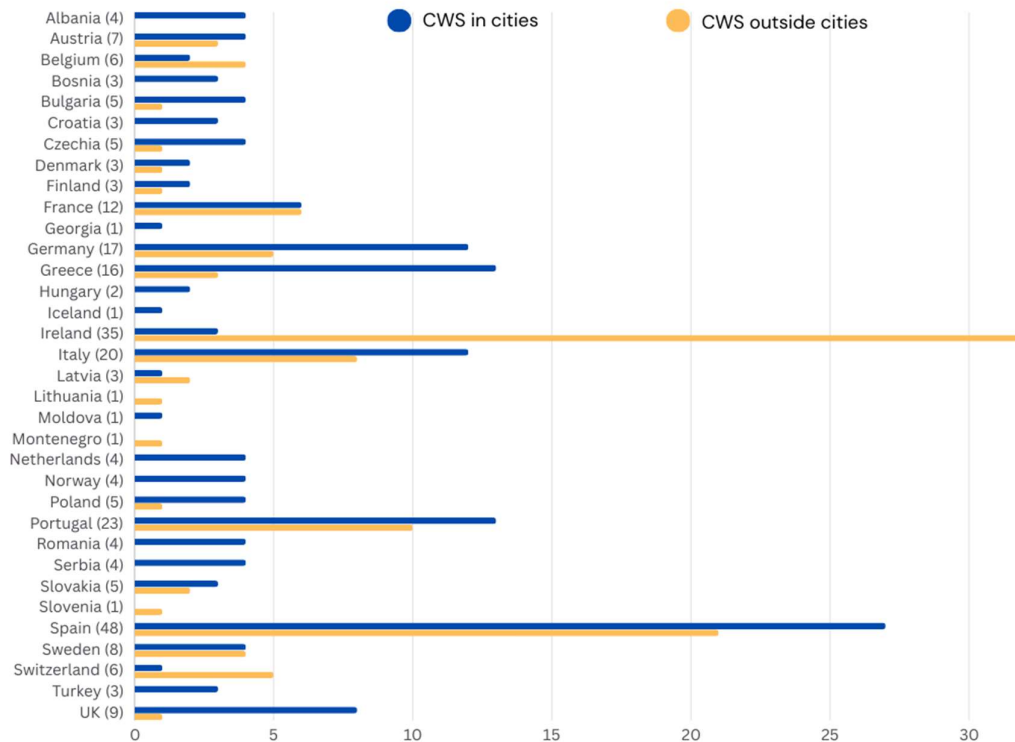


Figure 1: Total respondents from 273 CWS located in the following 34 European country.

<sup>1</sup> Ilaria Mariotti for the dataset of CWS in Italy, Grzegorz Micek for the dataset of CWS in Poland, and Oliver Rafaj for the dataset of CWS in Slovakia, Mikel Oleaga for the dataset of CWS in Austria.

<sup>2</sup> Marmo, L. and Avdikos, V. (2024) The regional geography of Collaborative Workspaces in Europe, MSCA CORAL-ITN Brief 1, Athens, DOI:10.13140/RG.2.2.18386.12485

In few cases we received more than one response from managers or hosts of the same CWS, thus we considered only one response. Additionally, some respondents did not fill in some key indicators, such as the municipality where the CWS is located, their role in the CWS (manager or host, member, or external user), or did not provide any relevant answer, and thus were excluded from the final dataset. Among the final 273 responses, not all questions were compulsory, and therefore we do not dispose of the full number of observations for all the indicators presented in this brief. The response rate of the survey was limited, accounting for 4% of all the identified and contacted CWS. This may be due to the presence of several other surveys directed to CWS managers and hosts, and the lack of direct relationships with the majority of the identified CWS.

The 273 CWS managers or hosts who filled the survey are divided in two groups based on the Degree of Urbanisation (DEGURBA) classification from EUROSTAT<sup>3</sup> available at the Local Administrative Units (LAU)<sup>4</sup> level, which comprise the municipalities and communes of the European Union. This classification is based on the share of local inhabitants living in urban clusters and in urban centres. Urban clusters are groups of contiguous grid cells of 1 km<sup>2</sup> with a density of at least 300 inhabitants per km<sup>2</sup> and a minimum population of 5,000<sup>5</sup>. Urban centres are cluster of contiguous grid cells of 1 km<sup>2</sup> (excluding diagonals) with a population density of at least 1,500 inhabitants per km<sup>2</sup> and collectively a minimum population of 50,000 inhabitants after gap-filling<sup>6</sup>.

Thus, the DEGURBA classification divides Local Administrative Units (LAU) into three types of area: Cities (densely populated areas), Towns and suburbs (intermediate density areas), and Rural areas (thinly populated areas). Cities are local administrative units (LAU) where at least 50% of the population lives in one or more urban centres<sup>7</sup>. Towns and suburbs are areas where less than 50 % of the population lives in rural grid cells and less than 50 % of the population lives in urban centres<sup>8</sup>. Rural areas are areas where more than 50 % of the population lives in rural grid cells<sup>9</sup>. Given the low number of responses from CWS located in rural areas, we grouped together CWS located in towns and suburbs, and rural areas, namely CWS "outside cities".

The countries with the highest number of responses are Spain (48), Ireland (35), Portugal (23), Italy (20), Germany (17), Greece (16), and France (12). Finally, the

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<sup>3</sup> <https://ec.europa.eu/eurostat/web/degree-of-urbanisation/background>

<sup>4</sup> <https://ec.europa.eu/eurostat/web/nuts/local-administrative-units>

<sup>5</sup> [https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Glossary:Urban\\_cluster](https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Glossary:Urban_cluster)

<sup>6</sup> [https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Glossary:Urban\\_centre](https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Glossary:Urban_centre)

<sup>7</sup> <https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Glossary:City>

<sup>8</sup> [https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Glossary:Town\\_or\\_suburb](https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Glossary:Town_or_suburb)

<sup>9</sup> [https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Glossary:Rural\\_area](https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Glossary:Rural_area)



countries with the highest number of CWS in cities are Spain (27), Greece and Portugal (13), Germany and Italy (12); whilst Ireland (32), Spain (21), and Portugal (10) have the highest number of respondents from CWS located outside cities.

# 1. Demographics

## 1.1. Year of opening

The majority of CWS part of the dataset have been launched in the last 10 years, with a peak between 2018 and 2022 (excluding 2020, which has been influenced by the COVID-19 pandemic), as shown in Figure 2. In our dataset, we found that the largest number of CWS located in cities started operating in 2018 and 2019, counting for both years 20 new CWS. While, for CWS located outside cities, the peak was recorded in 2021 and 2022, with 22 and 19 CWS respectively.

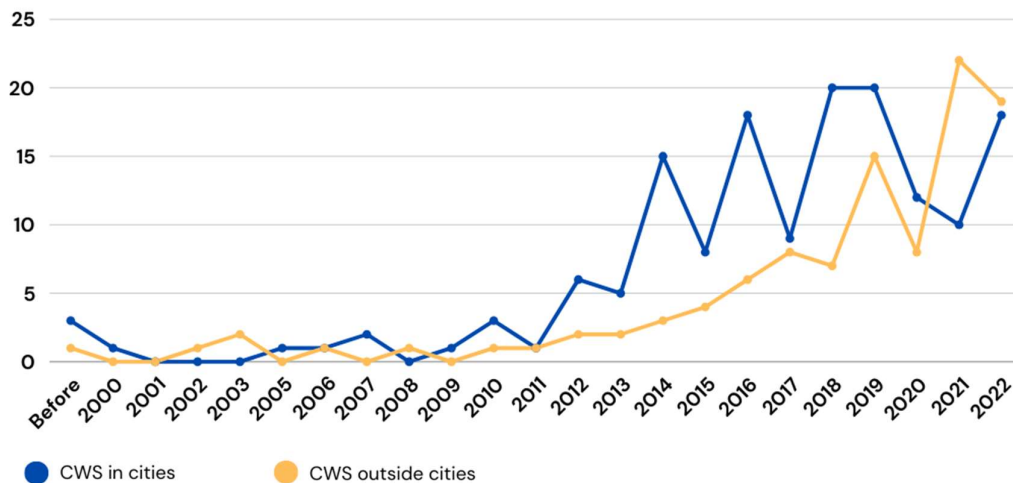


Figure 2: Year of opening of the 273 European CWS part of the dataset from the CORAL-ITN survey from 2023, divided according to their location.

Quite interestingly, CWS outside cities that opened before 2010-2012 are hard to find, suggesting that it might be a phenomenon which spread in rural areas, only in the last decade, especially after the Covid outbreak, which encouraged many individuals to move out of cities, especially the ones having the possibility to work remotely.

Alternatively, the higher longevity of urban CWS might suggest that CWS are more likely to survive in cities than in more peripheral contexts. However, there is no data to support this argument.

## 1.2. Space self-definition

Among the CWS part of the sample, 58% are CWS located in cities, while the rest (42%) is located outside cities. These distributions are very close to the distributions found while mapping CWS in Europe (Marmo and Avdikos, 2024a), where from a total population of 12,009 CWS we have found that 66% are in cities (and 34% outside cities). From that fact, the sample of the survey seems quite representative considering the regional geography of the CWS in Europe. Moreover, 91% (Table 1) of them define themselves as a coworking space. Moreover, we found CWS that define themselves as cultural and creative hubs, business incubators or start-up accelerators, makerspaces and hackerspaces, accounting for 25%, 23%, 14% of CWS respectively. Furthermore, community and youth centres, Fab Labs, artist residencies, and co-living spaces account for 9%, 8%, 7%, and 6% of all the respondents, respectively.

Table 1: Types of CWS according to managers' definitions in cities, outside cities, and in total (multiple answers).

	Cities		Outside cities		Total	
	Freq	%	Freq.	%	Freq.	%
Coworking Space	145	92	102	90	247	92
Cultural & Creative Hub	42	27	26	23	68	25
Business Incubator or Start-up Accelerator	38	24	25	22	63	23
Makerspace & Hackerspace	22	14	15	13	37	14
Community and Youth Center	12	8	13	12	25	9
Fab Lab	9	6	12	11	21	8
Artist residency	11	7	9	8	20	7
Co-living Space	8	5	7	6	15	6
<b>Total CWS</b>	<b>157</b>		<b>113</b>		<b>270</b>	

The respondents could select more than one typology of space and could indicate another terminology that would define their space. Many of them selected two or more definitions. Few ones also defined their space as, for instance, FoodLab, Multidisciplinary Creative Space, Citizen Activity Hub, Scale-up Community, Land Experimentation Space, Impact Innovation Lab, Playful Space, and few more. This reflects the wide array of different spaces that fits under the umbrella term of CWS,

providing a diverse set of activities and services following their program, or alternatively because of the necessity to diversify their portfolio of activities to be financially sustainable or attract the right people.

Moreover, Table 1 shows the differences in distribution of the CWS in cities and outside cities, which include towns, suburbs, and rural areas.

We can observe that there are no major differences between the types of CWS in cities and outside cities. In cities it is more likely to find coworking spaces (92% compared to 90% outside cities), cultural and creative hubs (27% compared to 23%), business incubators or start-up accelerators (24% compared to 22%), and makerspaces or hackerspaces (14% compared to 13%). While outside cities it is slightly more likely to find community and youth centres (12% compared to 8% in cities), Fab labs (11% compared to 6%), and more artist residencies and cultural and creative hubs (8% and 6% respectively compared to 7% and 5%).

### 1.3. Space size

We distinguish CWS according to their size. We divided the CWS of the sample in three groups, each one containing a third of the CWS. The two terciles that divide the ordered distribution into three parts are: 180 m<sup>2</sup> and 500 m<sup>2</sup>. Thus, a small CWS is identified as a space with a size that is lower or equal to 180 m<sup>2</sup> ( $X \leq 180$ ), a medium CWS between 180 and 500 m<sup>2</sup> ( $180 > X \leq 500$ ), and a large CWS has a size larger than 500 m<sup>2</sup> ( $X > 500$ ).

Table 2 presents the three groups. We observe that in cities CWS are more likely to be of medium or large size, while outside cities they are more likely to be rather small.

Table 2: Small, medium, and large CWS in cities and outside cities.

	Cities		Outside cities		Total	
	Freq.	%	Freq.	%	Freq.	%
<b>Small CWS</b>	29	23	49	49	78	34
<b>Medium CWS</b>	51	40	27	27	78	34
<b>Large CWS</b>	48	37	24	24	72	32
<b>Total</b>	<b>128</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>228</b>	<b>100</b>

## 2. Financial sustainability & Labour

### 2.1. Income streams

Table 3 shows the main sources of income for the observed 259 CWS. 81% of the CWS rely on revenues from renting out space as one of the main income streams. Also, self-finance (personal investments or savings), and revenues from offering workshops, seminars, and educational contexts are common sources, with 36% and 32% of the CWS relying on such streams.

Table 3: CWS's main sources of income (multiple answers).

	Freq.	%
Revenues from renting out space	209	81
Self-finance (Personal investments / savings)	92	36
Revenues from offering workshops, seminars and educational content	83	32
Revenues from services offered in the space (bar, events, etc.)	68	26
Public subsidies from local or regional government	56	22
Grants from national sources	35	14
Grants from the European Union or other international institutions	32	12
Private donations, sponsorship or patronage sources	15	6
Public subsidies from national government	12	5
Bank loans	10	4
Equity finance (money is exchanged for part-ownership or shares in the company)	4	2
<b>Total CWS</b>	<b>259</b>	

Moreover, in Table 4 we can observe which income stream has been indicated from the CWS managers as their main three income streams. Apart from the revenues that come from renting hot desks and office space, which ranks first as the primary and secondary sources of income, we can see that the revenues from offering workshops and educational services rank among the top as the secondary and tertiary income stream. Thus, according to the observed income streams, we see that

a new role emerges for CWS, that of education and skills upgrading provider, for a diverse audience (co-workers, unemployed, etc).

Table 4: CWS's primary, secondary, and tertiary income streams

	Primary		Secondary		Tertiary	
	Freq.	%	Freq.	%	Freq.	%
Revenues from renting out space	141	54	50	23	29	18
Self-finance (Personal investments / savings)	48	19	27	13	21	13
Revenues from offering workshops, seminars and educational contents	6	2	48	22	29	18
Revenues from services offered in the space (bar, events, etc.)	7	3	35	16	26	17
Public subsidies from local or regional government	19	7	22	10	15	10
Grants from national sources	16	6	11	5	9	6
Grants from the European Union or other international institutions	11	4	12	6	9	6
Private donations, sponsorship or patronage sources	3	1	4	2	8	5
Public subsidies from national government	6	2	2	1	4	3
Bank loans	2	1	4	2	4	3
Equity finance (money is exchanged for part-ownership or shares in the company)	0	0	1	0.5	3	2
<b>Total</b>	<b>259</b>	<b>100</b>	<b>216</b>	<b>100</b>	<b>157</b>	<b>100</b>

Furthermore, we classified the income streams in two groups: Market streams, and Personal funds and external subsidies. The former group includes revenues from renting out space, revenues from offering workshops, seminars and educational

contents, revenues from services offered in the space (bar, events, etc.), and equity finance (money is exchanged for part-ownership or shares in the company). The latter group includes self-finance (personal investments or savings), public subsidies from local or regional government, public subsidies from national government, grants from national sources, grants from the European Union or other international institutions, bank loans, and private donations, sponsorship or patronage sources. Based on this classification, Table 5 shows the amount of CWS that mainly rely on market streams (44%), personal funds and external subsidies (26%), or a mix of both (29%). Additionally, in the same table, differences between CWS in cities and outside cities are presented, as well as among small, medium, and large CWS. In the first case we can notice that compared to the average, in cities it is more common to rely on market streams (54%), while outside cities it is more likely to rely on personal funds and external subsidies (35%), or a mix of the two (33%). While, in the second case we observe that the larger the CWS are, the more they rely on market streams. On the contrary, the smaller the CWS, the more it relies on personal funds and external subsidies.

Table 5: CWS which rely on market streams, personal funds and external subsidies, or a mix of the both, with geographical and size differences.

	Personal funds and External subsidies		Mix		Market streams	
	Freq.	%	Freq.	%	Freq.	%
<b>Cities</b>	30	20	39	26	82	54
<b>Outside cities</b>	38	35	36	33	34	31
<b>Small CWS</b>	28	37	24	32	23	31
<b>Medium CWS</b>	20	27	21	28	34	45
<b>Large CWS</b>	9	13	17	24	45	63
<b>Total</b>	<b>68</b>	<b>26</b>	<b>75</b>	<b>29</b>	<b>116</b>	<b>45</b>

## 2.2. Paid and volunteering labour in CWS

Table 6 shows the number of full-time employees, part-time employees, and volunteers that work in CWS. As we can see, on average there are 3.46 full-time employees, and 1.71 part-time employees, whilst there are 2.48 volunteers operating per CWS. In general, CWS in cities have a higher number of both part-time and full-time employees (1.94 and 4.4 employees respectively, compared to 1.42 and 2.24 outside cities), while CWS outside cities rely slightly more on volunteer labour with an average of 2.79 volunteers, compared to the average in cities of 2.25.

Table 6: CWS's Full-time and Part-time staff, and volunteers.

	Staff	Obs.	Mean ( $\mu$ )	Std. Dev. ( $\sigma$ )	Min	Max
<b>Cities</b>	Full-Time Employees	126	4.40	8.00	0	40
	Part-Time Employees	126	1.94	3.39	0	20
	Volunteers	126	2.25	5.87	0	40
<b>Outside cities</b>	Full-Time Employees	96	2.24	5.86	0	40
	Part-Time Employees	96	1.42	2.58	0	20
	Volunteers	96	2.79	6.20	0	40
<b>Total</b>	Full-Time Employees	222	<b>3.46</b>	7.22	0	40
	Part-Time Employees	222	<b>1.71</b>	3.07	0	20
	Volunteers	222	<b>2.48</b>	6.01	0	40

On average, a volunteer in CWS works roughly 8.68 hours a week. This data has been calculated considering the 109 managers out of 222 who stated to have at least one volunteer operating in their CWS. In Table 7, we can observe the mean weekly working hours for volunteers in cities, outside cities, and according to the size of the CWS. We can notice that in cities (9.52) and large CWS (9.76) the average weekly working hours for volunteers are slightly higher than outside cities (7.83) and small CWS (7.18). Moreover, according to the median, a volunteer works 6 hours a week in both cities and outside cities. In small, medium, and large CWS, the median volunteer works 5, 8, and 10 hours a week, respectively.



Table 7: Weekly working hours per volunteer in cities, outside cities, and according to the size of the CWS.

	<b>Obs.</b>	<b>Mean (<math>\mu</math>)</b>	<b>Std. Dev. (<math>\sigma</math>)</b>	<b>Min</b>	<b>Max</b>
<b>Cities</b>	55	9.52	8.34	1	40
<b>Outside cities</b>	54	7.83	6.10	1	20
<b>Small CWS</b>	41	7.18	6.29	1	32
<b>Medium CWS</b>	34	8.69	6.54	2	25
<b>Large CWS</b>	32	9.76	7.36	1	30
<b>Total</b>	<b>109</b>	<b>8.68</b>	<b>7.33</b>	<b>1</b>	<b>40</b>

Furthermore, Table 8 shows the share of full-time employees, part-time employees, and volunteers compared to the total of the CWS's staff. The share of volunteers compared to the total of staff members is higher outside cities (37% compared to the share in the cities of 21%) and small CWS (38% compared to the share of large CWS of 21%). Hence, the share of full-time employees compared to the total of the staff members is directly proportional to the size of the CWS, and directly proportional to the geographical scale (i.e. it is higher in cities). Conversely, the share of volunteers compared to the total of the staff members is inversely proportional to the size of the CWS, and inversely proportional to the geographical scale (i.e. it is higher outside cities).

Table 8: Share of full-time employees, part-time employees, and volunteers compared to the total of the CWS staff, with geographic and CWS size differences.

	<b>Full-Time Employees</b>	<b>Part-Time Employees</b>	<b>Volunteers</b>
	<b>%</b>	<b>%</b>	<b>%</b>
<b>Cities</b>	54	25	21
<b>Outside cities</b>	38	24	37
<b>Small CWS</b>	44	18	38
<b>Medium CWS</b>	47	26	27
<b>Large CWS</b>	50	29	21
<b>Total</b>	<b>47</b>	<b>25</b>	<b>28</b>

Moreover, we calculated the total weekly working hours for full-time employees, part-time employees, and volunteers, as shown in Table 9, by multiplying the number

of employees or volunteers by the average working hours per week. For the full-time employees we considered 40 hours a week, while for the part-time 20 hours a week. Concerning the volunteers, we directly asked the respondents with a specific question regarding the average working hours per week (which is presented in Table 7). Thus, CWS on average rely on 139 weekly working hours from full-time employees, 34 from part-time employees, and 15 from volunteers. Hence in total, CWS invest on average 188 weekly working hours to take care of all activities, tasks, and events.

Table 9: Total weekly working hours in CWS for full-time employees, part-time employees, and volunteers (given by the multiplication between the number of employees or volunteers and the average working hours per week for the specific category of employee or volunteer).

	<b>Obs.</b>	<b>Mean (<math>\mu</math>)</b>	<b>Std. Dev. (<math>\sigma</math>)</b>	<b>Min</b>	<b>Max</b>
<b>Full-Time Employees</b>	222	138.56	288.66	0	1600
<b>Part-Time Employees</b>	222	34.23	61.38	0	400
<b>Volunteers</b>	222	15.15	35.03	0	300
<b>Total</b>	<b>222</b>	<b>187.94</b>	<b>337.76</b>	<b>2</b>	<b>2200</b>

Then Table 10 shows the percentage of paid labour (full-time and part-time employees) on the total labour in CWS (which includes volunteer labour). Hence, we summed the total weekly working hours of full-time and part-time employees for each CWS, and divided this sum with the total weekly working hours in each CWS for full-time employees, part-time employees, and volunteers. As a result, in cities the share of paid labour on the total labour is 87%, while outside cities it is 72%. Furthermore, the percentage of paid labour is higher in large CWS (87%), and decreases for medium (83%), and small CWS (71%). Thus, small CWS and CWS outside cities have a considerable amount of volunteering labour.

Table 10: Percentage of paid labour in total and according to CWS's main income streams (Market streams, personal funds and external subsidies, or a mix of the both), in cities, outside cities, and according to the CWS's size.

	Personal funds and External subsidies		Mix		Market streams		Total	
	Freq.	%	Freq	%	Freq.	%	Freq.	%
<b>Cities</b>	24	85	32	87	68	87	126	87
<b>Outside cities</b>	32	67	30	74	31	78	96	72
<b>Small CWS</b>	26	69	23	74	21	73	72	71
<b>Medium CWS</b>	19	71	19	85	32	88	71	83
<b>Large CWS</b>	9	95	16	87	43	86	69	87
<b>Total</b>	<b>56</b>	<b>75</b>	<b>62</b>	<b>81</b>	<b>99</b>	<b>84</b>	<b>222</b>	<b>81</b>

We also calculated the share of paid labour according to the main income streams which can be market streams, personal funds and external subsidies or a mix of the two. We observe that in general the share of paid labour is higher for CWS which rely mainly on income streams from the market (84%), while the ones which rely mainly on personal funds and external subsidies have a lower share of paid labour (75%). CWS outside cities which rely mainly on personal funds and external subsidies have a lower percentage of paid labour (67%) than the ones that diversify their income streams (74%), while the share of paid labour for CWS that mainly rely on market streams is 78%. Moreover, the percentage of paid labour is directly proportional to the size of the CWS when the CWS mainly rely on personal funds and external subsidies, as well as in case they rely on a mix of income streams.

### 3. Infrastructure, Users & Accessibility

#### 3.1. Ownership status

As regards the type of ownership or lease, as shown in Table 11, the majority of CWS are located in buildings which are rented from private sources (47%), or from public institutions (11%). A significant share of respondents stated that they own the space (32%). Moreover, 10% of CWS have their space on free of charge loan for use, usually for at least more than 1 year.

Table 11: CWS's types of ownership or lease.

	Cities		Outside cities		Total	
	Freq.	%	Freq.	%	Freq.	%
We rent from private	83	56	35	35	118	47
We own the space	41	28	39	39	80	32
We rent from public institutions	15	10	12	12	27	11
We have it on free of charge loan for use for less than one year	1	0.7	1	1	2	1
We have it on free of charge loan for use for one to five years	2	1	9	9	11	4
We have it on free of charge loan for use for more than five years	7	5	4	4	11	4
Inside university	0	0	1	1	1	0.4
<b>Total</b>	<b>149</b>	<b>100</b>	<b>101</b>	<b>100</b>	<b>250</b>	<b>100</b>

We grouped these types of ownership or lease in three categories: Ownership, rent, and free concession. The first group includes only the ones who answered "We own the space". The second group includes both spaces that are rented from private sources or from public institutions. Finally, the third group includes all the spaces that are offered free of charge loan for use from public institutions.

Table 12 shows the geographical distribution of these three categories for a total of 250 CWS. We observe that outside cities, it is more likely to find CWS that own the space (39% compared to 28% in cities), as well as CWS that are given the space on free of charge loan for use from public institution (15% against 7%). On the contrary, in cities is more common to rent the space, both from public institutions and privates (66% compared to 47%).

Table 12: CWS which are owned, rented, or given for free from public institutions, with geographical and size differences.

	Owned		Rented		Free concession	
	Freq.	%	Freq.	%	Freq.	%
<b>Cities</b>	41	28	98	66	10	7
<b>Outside cities</b>	39	39	47	47	15	15
<b>Total</b>	<b>80</b>	<b>32</b>	<b>145</b>	<b>58</b>	<b>25</b>	<b>10</b>

### 3.2. Capacity, users and occupancy rates

Table 13 shows the maximum number of individuals that can be accommodated in the working areas. On average, the maximum CWS capacity is 82 persons, ranging from a minimum of 2 to a maximum of 1,000 co-workers. Furthermore, in cities the maximum capacity is on average 113 individuals, while outside cities are on average 37 individuals. Nonetheless, by looking at the median the maximum CWS capacity in general is 30 individuals, in cities is 50 individuals, while outside cities is 20 individuals.

Table 13: Maximum number of users that can be accommodated in the working areas.

	Observations	Mean ( $\mu$ )	Std. Dev. ( $\sigma$ )	Min	Max
<b>Cities</b>	152	112.93	196.74	2	1000
<b>Outside cities</b>	110	36.67	44.04	3	300
<b>Total</b>	<b>262</b>	<b>81.91</b>	<b>156.93</b>	<b>2</b>	<b>1000</b>

Table 14 shows the number of daily CWS users. On average, the number of daily CWS users is 35 individuals. In cities the mean is 52 persons, while outside cities it

is 13 individuals. Moreover, by looking at the median the number of daily CWS users is 12 individuals, in cities is 20 persons, while outside cities it is 8 individuals.

Table 14: Number of daily CWS users.

	<b>Observations</b>	<b>Mean (<math>\mu</math>)</b>	<b>Std. Dev. (<math>\sigma</math>)</b>	<b>Min</b>	<b>Max</b>
<b>Cities</b>	154	52.07	111.81	2	1000
<b>Outside cities</b>	111	12.51	15.70	0	95
<b>Total</b>	<b>265</b>	<b>35.50</b>	<b>87.93</b>	<b>0</b>	<b>1000</b>

Then, as shown in Table 15, on average CWS have an occupancy rate of 42%, meaning that on a daily basis, slightly less than half of the working seats are occupied by the users. The occupancy rate in CWS is directly proportional to the CWS size, with an average of 38% in small CWS, and of 46% in large ones. Moreover, CWS in cities are more likely to have a greater occupancy rate (47%), than outside cities (36%).

Moreover, Table 15 presents the percentage of users that are not residents in the municipality of the space. We observe that on average 34% of users are not residing in the municipality of the CWS. Moreover, this percentage is higher when CWS are located outside cities with a share of 41% than in cities, with a share of 28%. Furthermore, small CWS tend to have a greater share of users who are not residents in the municipality of the space (37%), compared to the large ones (31%).

Table 15: Occupancy rate (given by the ratio between users of the space present on a daily basis and maximum number of individuals that can be accommodated in the working areas), and percentage of users that are not residents in the municipality of the space.

	<b>Occupancy rate</b>		<b>Users not residents in the municipality of the CWS</b>	
	<b>Freq.</b>	<b>%</b>	<b>Freq.</b>	<b>%</b>
<b>Cities</b>	148	47	104	28
<b>Outside cities</b>	110	36	93	41
<b>Small CWS</b>	76	38	65	37
<b>Medium CWS</b>	76	42	63	34
<b>Large CWS</b>	70	46	61	31
<b>Total</b>	<b>258</b>	<b>42</b>	<b>197</b>	<b>34</b>

### 3.3. Hard infrastructure

The respondents provided information regarding the type of hard infrastructure present in their space. These have been gathered in the following groups: hot desk, private office, meeting room, event and activity room, social area (cafe, kitchen, break room, etc.), gym, workout area or other social infrastructures, outdoor space. Table 16 presents the data regarding the hard infrastructure. We observe that 93% of CWS provide a meeting room, 89% state that some kind of social area is present (cafe, kitchen, break room), and 77% offer hot desks to its users. In addition, 70% provide an event and activity room, 64% offer private offices, and 57% of them have an outdoor space.

By looking at the geography of CWS, we can observe that outside cities CWS are more likely to provide hot desks (80%), while CWS located in cities usually are more likely to offer private offices and meeting rooms (68% and 97%), event and activity rooms (79%), social areas and workout areas (93% and 17%), and outdoor space (58%).

Table 16: CWS's hard infrastructure in cities, outside cities, and in total (multiple answers).

	Cities		Outside cities		Total	
	Freq.	%	Freq.	%	Freq.	%
Meeting Room	123	97	89	89	212	94
Social Area (cafe, kitchen, break room)	118	93	84	84	202	89
Hot Desk	96	76	80	80	176	78
Event & Activity Room	100	79	60	60	160	70
Private Office	86	68	59	59	145	64
Outdoor Space	74	58	56	56	130	57
Gym, workout area, other social infrastructures	22	17	14	14	36	16
<b>Total CWS</b>	<b>127</b>		<b>100</b>		<b>227</b>	

### 3.4. Accessibility

Table 17 shows the openness of CWS towards members and non-members of the space. We can observe that 6% of the CWS stated that their space is open only to their members, 36% that it is open only to the members, but open to anyone when

public events are hosted, 25% affirmed that only some areas are accessible to non-members, and finally 32% that all areas are fully accessible to non-members. In cities, it is more likely that the CWS are open only to the members, but open to anyone when public events are hosted (42%), or that only some areas are accessible to non-members (32%). Whereas CWS outside cities are more likely to have all areas fully accessible to non-members (44%), or to be open only to members (10%). Thus, CWS in small areas seem to be more open and accessible than the ones in cities.

Table 17: Space openness in cities, outside cities, and in total.

	Cities		Outside cities		Total	
	Freq	%	Freq.	%	Freq	%
It is open only to the members	4	3	10	10	14	6
It is open only to the members, but open to anyone when public events are hosted	53	42	29	30	82	36
Only some areas are accessible to non-members	41	32	16	16	57	25
All areas are fully accessible to non-members	29	23	43	44	72	32
<b>Total</b>	<b>127</b>	<b>100</b>	<b>98</b>	<b>100</b>	<b>225</b>	<b>100</b>



## 5.4. Events & Activities

### 4.1. Social events in CWS

Table 18 illustrates the frequency of certain typologies of social activities organised in CWS. The responses are based on a Likert scale (1-5), where “1” indicates that the specific activity is not organised in the CWS, “2”, “3”, “4”, and “5” indicate that it is organised “rarely”, “sometimes”, “often”, and “very often”, respectively. As shown, community activities (lunches, happy hours, coffees, etc.) are the most common social activities in CWS, with an average of 3.35, followed by inspirational events (creative mornings, pitches, guest speakers, etc.), cultural events and activities (music, theater, arts, etc.), and events, initiatives and projects dealing with environmental topics, with an average of 2.76, 2.39, and 2.38 respectively.

Table 18: CWS’s typologies of social activities using a Likert scale (1-5).

	Obs .	Mean ( $\mu$ )	Std. Dev. ( $\sigma$ )	Mi n	Ma x
Community activities (lunches, happy hours, coffees, etc.)	253	3.35	1.16	1	5
Inspirational events (creative mornings, pitches, guest speakers, etc.)	246	2.76	1.26	1	5
Cultural events and activities (music, theatre, arts, etc.)	250	2.39	1.21	1	5
Events, initiatives and projects dealing with environmental topics	249	2.38	1.10	1	5
Sport and recreational events and activities (yoga, pilates, etc.)	248	2.21	1.27	1	5
Charity events and activities	249	2.02	0.98	1	5
Social events and activities for children	246	1.91	1.11	1	5
Community-Supported Agriculture or agricultural activities	246	1.59	0.91	1	5
Psychological support	246	1.52	0.94	1	5
Childcare services	247	1.19	0.54	1	4

Alternatively, we created dummy variables for the same activities, by considering the answers “never” and “rarely” as “0”, and “sometimes”, “often”, and “very often” as “1”. The results are presented in Table 19. Results are similar to the previous ones. In fact, community activities (lunches, happy hours, coffees, etc.) are the most common social activities, with 77% of CWS organising them. Inspirational events (creative mornings, pitches, guest speakers, etc.), cultural events and activities (music, theatre, arts, etc.), and events, initiatives and projects dealing with environmental topics follow with 58%, 48%, and 47% of CWS, respectively. Childcare services (4%), psychological support (14%), and Community-Supported Agriculture (CSA) or agricultural activities (16%) are the least common social activities organised by the CWS.

Furthermore, we observe that in general CWS in cities offer more social activities than the ones outside cities. Although, CWS located outside cities are more likely to offer CSA or agricultural activities (21% compared to 12% of CWS in cities), and social events and activities for children (31% compared to 26% of CWS in cities). Only few CWS offer childcare services, and this is slightly more likely to be found in CWS outside cities (6% compared to 4% in cities).

Table 19: CWS's typologies of social activities in cities, outside cities, and in total.

	Cities		Outside cities		Total	
	Freq	%	Freq	%	Freq	%
Community activities (lunches, happy hours, coffees, etc.)	119	82	76	70	195	77
Inspirational events (creative mornings, pitches, guest speakers, etc.)	89	64	53	50	142	58
Events, initiatives and projects dealing with environmental topics	74	52	46	43	120	48
Cultural events and activities (music, theater, arts, etc.)	74	52	44	41	118	47
Sport and recreational events and activities (yoga, pilates, etc.)	54	39	40	37	94	38
Charity events and activities	48	34	34	32	82	33
Social events and activities for children	36	26	33	31	69	28
Community-Supported Agriculture or agricultural activities	17	12	23	21	40	16
Psychological support	24	17	10	9	34	14
Childcare services	5	4	6	6	11	4

Table 20 presents the differences in social activities according to the size of CWS. We observe that the larger the CWS, the higher the likelihood to have social activities organised or offered. On the contrary, social events and activities for children are more likely to be organised in small and medium CWS (32% compared to 23% of large CWS).

Table 20: CWS's typologies of social activities in small, medium, and large CWS.

	Small CWS		Medium CWS		Large CWS	
	Freq.	%	Freq.	%	Freq.	%
Community activities (lunches, happy hours, coffees, etc.)	50	65	60	77	62	86
Inspirational events (creative mornings, pitches, guest speakers, etc.)	36	47	49	64	42	62
Events, initiatives and projects dealing with environmental topics	30	38	38	49	39	56
Cultural events and activities (music, theater, arts, etc.)	33	42	39	50	38	54
Sport and recreational events and activities (yoga, pilates, etc.)	26	34	24	31	36	51
Charity events and activities	17	22	29	38	27	38
Social events and activities for children	25	32	25	32	16	23
Community-Supported Agriculture or agricultural activities	11	14	10	13	17	2
Psychological support	5	6	13	17	15	22
Childcare services	3	4	6	8	2	3

In addition, Table 21 shows the relationship between social activities offered in CWS and the main types of income streams of the space. CWS that rely mainly on personal funds and external subsidies are more likely to organise cultural events and activities (59%), initiatives and projects dealing with environmental topics (60%), social events and activities for children (39%), and inspirational events (67%), as well as to offer childcare services (8%), and psychological support (19%). Alternatively, CWS relying on market streams are more likely to organise community activities (85%), and sports and recreational events and activities (44%). Finally, CWS that rely on a mix of the two typologies of income streams generally seem less likely to organise social events. All these show that CWS that are less market-oriented have a broader social focus (organising cultural events or events for a broad and diverse audience, e.g. children), while the ones that are market-oriented organise social activities to support the well-being of their clients (sport and

recreational events, community activities). Interestingly, in most of the types of social activities, CWS that rely on a mix of resources have the lowest numbers.

Table 21: CWS's typologies of social activities in CWS that rely mainly on income streams from the market, from personal funds or external subsidies, or a mix of the two.

	Personal funds and External subsidies		Mix		Market streams	
	Freq.	%	Freq.	%	Freq.	%
Community activities (lunches, happy hours, coffees, etc.)	48	76	46	66	94	85
Inspirational events (creative mornings, pitches, guest speakers, etc.)	41	67	35	51	60	57
Events, initiatives and projects dealing with environmental topics	37	60	29	43	51	47
Cultural events and activities (music, theater, arts, etc.)	37	59	24	35	53	48
Sport and recreational events and activities (yoga, pilates, etc.)	21	34	21	31	48	44
Charity events and activities	20	33	19	28	38	35
Social events and activities for children	24	39	17	25	27	25
Community-Supported Agriculture or agricultural activities	12	20	8	12	19	18
Psychological support	12	19	6	9	16	15
Childcare services	5	8	4	6	2	2

## 4.2. Professional events in CWS

Table 22 shows the frequency of four typologies of professional activities organised in CWS. The responses are based on a Likert scale (1-5), where “1” indicates that the specific activity is not organised in the CWS, “2”, “3”, “4”, and “5” indicate that it is organised “rarely”, “sometimes”, “often”, and “very often”, respectively. As shown, the most common typology of professional activities organised in CWS are the ones to stimulate networking with an average of 3.21 out of 5, followed by training programs for individuals not working in the space with an average of 2.77 out of 5.

Table 22: CWS’s typologies of professional activities using a Likert scale (1-5).

	Obs	Mean	Std.	Mi	Ma
	.	( $\mu$ )	Dev.	n	x
			( $\sigma$ )		
Events to stimulate NETWORKING (among members, organisations, funders, etc.)	252	3.21	1.19	1	5
Training programs for individuals NOT working in the space	251	2.77	1.30	1	5
Training programs and events for members on SOFT SKILLS (communication, marketing, management, transversal and transferable skills)	253	2.58	1.21	1	5
Training programs and events for members on HARD SKILLS (technical and professional-specific skills)	249	2.44	1.18	1	5

Alternatively, we created dummy variables for the same activities, by considering the answers “never” and “rarely” as “0”, and “sometimes”, “often”, and “very often” as “1”. The results are presented in Table 23. These results are similar to the previous ones, with 76% of CWS that organise events to stimulate networking, 61% offer training programs for individuals not working in the space, and 55% offer training and events for members on soft skills, such as communication, marketing, management, transversal and transferable skills. Finally, 51% offer training and events for members on hard skills, such as technical and professional-specific skills. Moreover, CWS in cities are more likely to offer all four types of professional activities, particularly events to stimulate networking (81% compared to 68% outside cities).

Table 23: CWS's typologies of social activities in cities, outside cities, and in total.

	Cities		Outside cities		Total	
	Freq.	%	Freq.	%	Freq.	%
Events to stimulate NETWORKING	118	81	73	68	191	76
Training programs for individuals NOT working in the space	89	62	65	60	154	61
Training programs and events for members on SOFT SKILLS	86	59	54	50	140	55
Training programs and events for members on HARD SKILLS	76	54	50	47	126	51

Table 24 presents the differences in professional activities according to the size of CWS. We observe that medium and larger CWS are more likely to offer professional activities compared to the smaller ones. Moreover, medium CWS are more likely to offer training programs for individuals not working in the space (74%), compared to the large ones (64%), whereas large CWS are more likely to offer events to stimulate networking (89% compared to 79% in medium ones).

Table 24: CWS's typologies of social activities in small, medium, and large CWS.

	Small CWS		Medium CWS		Large CWS	
	Freq.	%	Freq.	%	Freq.	%
Events to stimulate NETWORKING	47	61	62	79	63	89
Training programs for individuals NOT working in the space	42	54	57	74	45	64
Training programs and events for members on SOFT SKILLS	35	45	49	63	44	62
Training programs and events for members on HARD SKILLS	31	40	46	60	40	57

In addition, Table 25 shows the relationship between professional activities offered in CWS and the main types of income streams of the space. CWS that rely mainly on personal funds and external subsidies are more likely to offer training programs

and events for members both on soft skills (65%), and hard skills (65%), as well as training programs for individuals not working in the space (70%), than those that rely on market streams or a mix of resources.

Table 25: CWS's typologies of professional activities in CWS that rely mainly on income streams from the market, from personal funds or external subsidies, or a mix of the two (multiple choice).

	Personal funds and External subsidies		Mix		Market streams	
	Freq.	%	Freq.	%	Freq.	%
Events to stimulate NETWORKING	49	78	51	73	85	78
Training programs for individuals NOT working in the space	44	70	42	61	61	56
Training programs and events for members on SOFT SKILLS	41	65	33	47	62	56
Training programs and events for members on HARD SKILLS	40	65	28	40	57	53



## Discussion and Conclusion

A number of binaries and categorisations assist us in explaining the main demographics and the functions of CWS. Apart from the geographical factor (cities/outside cities), and the size of the CWS (small, medium, large), the streams of income (market, subsidies and personal funds) helped us further distinguish between certain types of CWS, although sometimes the divisions are blurry. On the one hand, large and medium-sized CWS are usually found in large cities and mostly rely on market streams like renting hot desks or private offices and meeting rooms to freelancers and companies, as well as providing educational services to coworkers, but also for other groups (e.g. unemployed). These CWS usually rent the space that they operate and mainly rely on paid labour. They have a market-oriented focus, and they mostly cater for their members, through organizing many professional events for networking and skills development, as well as events that cater mainly for the well-being and the psychological support of their members, and they do not seem that much accessible to the general public.

On the other hand, small and medium-sized CWS, which are located outside cities (in small and medium-sized towns, or even villages), usually own the space. Alternatively, they are likely to receive the space free of charge from the local or regional authorities. Apart from market streams, their income and survival are much dependent on personal savings of the owners and public subsidies. They also rely on paid labour, but this is also very much accompanied by a high presence of volunteering labour. This could be partially explained by the willingness of local inhabitants of towns and villages to actively participate in processes of co-creation for the present and future of their communities. Furthermore, their focus is not only their members, but they are more open to outsiders and this is evident by the organisation of various events that have a broader social focus (e.g. events on environmental topics, events for children, etc).

In between these two broad categories of CWS, we find a number of spaces that have a mixed approach between the market-orientation of the first category and the more social focus of the latter one. CWS seem to have multiple goals and functions and that makes them socio-economic mediums which can serve the entrepreneurial development of freelancers and enterprises. Furthermore, they can have a role to play in the social and cultural organisation in smaller towns, enabling interactions and acting as a social infrastructure or as a focal point.

All the above point to different directions when it comes to consider policy recommendations for supporting the sustainability of CWS and a one-size-fits-all approach does not seem to be the adequate one. Indeed, policy makers should look at these different functions and aims of the CWS and provide the relevant support frameworks. Public support should look at the function of CWS in cities and beyond, as mediums for entrepreneurial growth and innovation that cater for a diverse audience (from freelancers and start-uppers to workers of large companies), as well as for remote workers and digital nomads. On the other end, CWS in smaller cities and towns deserve policy attention to keep functioning as social infrastructure, and as social focal points where people can meet, collaborate, cultivate their social capital, and experiment through diverse projects and events. Moreover, the newly developed role of CWS as education providers should be backed up by relevant support measures, to assist them in processes of up-skilling and re-skilling of the local labour market (especially for the unemployed and vulnerable social groups) and as providers of life-long learning programs.