Cowork4EU:

Coworking Best Practices for European Universities

Insights from academic coworking spaces

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Cowork4EU

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Key Facts

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Seven project team members

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About the project Cowork4EU

The project **Cowork4EU: Coworking Best Practices for European Universities** is part of the Erasmus+ Call 2021. It is a joint initiative of TU Dortmund University (Germany), Prague University of Economics and Business (Czechia), Seeburg Castle Private University (Austria), and Paris School of Business (France). Cowork4EU pursues four main project outcomes:

- Development and execution of a joint course focusing on coworking and the integration of coworking spaces in university teaching.
- Establishing an international network of academic coworking spaces to promote exchange and mobility of students and researchers within Europe.
- Research on coworking spaces in an academic environment and on their users and stakeholders.
- Documentation of the project results and research findings in this best practice report.

Foreword

Academic coworking spaces are essential hubs for interdisciplinary collaboration at universities. These open spaces empower students with hands-on learning, provide scholars with innovative teaching platforms, and connect entrepreneurs to the innovation and research ecosystem. As we face new challenges, these dynamic environments drive creativity and foster meaningful connections across diverse fields.

From my own experiences as an educator and researcher, I know that the right environment can significantly impact the development of new ideas. When I first arrived at TU Dortmund University, one place really sparked my interest: The Center for Entrepreneurship and Transfer (CET). This vibrant hub serves as a meeting point for aspiring entrepreneurs and plays a vital role in fostering our entrepreneurial ecosystem.

I began taking my students to the CET to immerse them in this environment, where they could connect with individuals from various disciplines and get support for their ideas. This open environment often led to unforeseen yet fruitful collaborations, and it became evident that university coworking spaces have immense potential to enhance academic learning and entrepreneurial activities.

Driven by these experiences, I decided to explore academic coworking further, recognising its importance as an emerging phenomenon across universities. This curiosity gave birth to the Cowork4EU project, culminating in our collaborative efforts over the past three years.

In this report, we share our project journey and findings on academic coworking spaces, highlighting their significance within higher education. As these innovative environments continue to flourish across Europe, we hope our insights will inspire further exploration and development of university coworking spaces as essential catalysts for interdisciplinary learning, collaboration, and entrepreneurship.

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Leader of the Cowork4EU Project

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Executive summary

- This best practice report examines the status quo of university coworking with a focus on European universities. It aims to provide university administration, academic coworking space managers, students, researchers, and entrepreneurs with knowledge on how to maximise the full potential of university coworking spaces.
- University coworking spaces have grown in response to the rise of flexible and community-focused work environments, the increasing focus of collaborative learning in university teaching, as well as the growing importance of universities as birthplaces for entrepreneurial ventures that require flexible office space.
- University coworking spaces foster interdisciplinary collaboration, bridging academic, professional, and entrepreneurial spheres.
- Despite slower adoption compared to commercial coworking spaces, universities are beginning to integrate spaces to meet the evolving needs of students and researchers.
- 25.6% of European universities operate coworking spaces, with most coworking spaces being situated in Northern and Western Europe. Percentagewise, universities in Denmark, France, and Ireland have the most coworking spaces. In total, the highest number of university coworking spaces are found in the United Kingdom, France, and Germany.
- University coworking spaces are usually situated at larger-than-average public universities that offer diverse and interdisciplinary academic studies. Further, university coworking spaces are closely connected to entrepreneurial universities and university-run business support programs, with most university coworking spaces being connected to an incubator or accelerator program.
- Five different case studies highlight how contemporary university coworking spaces can be classified into educational, technical, research, and business-focused coworking spaces.
- We present the European Academic Coworking Network that connects academic coworking spaces, their managers, and users via a digital platform, allowing free access to coworking spaces at universities around Europe.
- Based on 27 student reports, we developed four different archetypical university coworking space concepts that are specifically designed to cater to the diverse needs of students. This includes spaces that focus on entrepreneurship, wellness and mental health, artisan and craftsmanship, as well as community and networking.

- Based on data gathered during four interdisciplinary courses that allowed students from our universities to work in coworking spaces, we show the various benefits of coworking spaces as novel teaching and collaboration spaces. This includes, for example, how working in coworking spaces increases the personal attitude towards coworking, innovative work behaviour, resilience, and motivation.
- Based on our findings, we conclude with several recommendations:
    - University coworking space managers should focus on designing flexible and innovative work environments, fostering community to leverage networking and lasting partnerships, and promoting inclusivity to enhance user satisfaction and collaboration.
    - Students should use university coworking spaces to leverage collaboration and networking, as these spaces offer the chance to participate in interdisciplinary projects and networking events. Further, they help adopt structured routines by balancing individual productivity, and collaborative opportunities and fostering informal exchange that enhances creativity and well-being.
    - Scholars can use university coworking space environments to engage in interdisciplinary networking, which fosters scientific collaboration and exchange. Coworking spaces further provide them with the opportunity to engage in innovative teaching methods and engage more closely with their students, as well as entrepreneurs and industry representatives.
    - Coworking researchers should investigate the impact of university coworking spaces on knowledge sharing, collaboration, and networking. Further, they should compare the effectiveness of different coworking space types, as well as test how spatial design, technological advancements, and hybrid coworking models enhance user experiences and benefits.

1.0 Introduction

1.1 WHAT IS THE REPORT ABOUT?

152.9%

growth in the number of coworking spaces between 2018 and 2024.

Since their emergence in the mid-2000s, coworking spaces gained rapid popularity among freelancers, entrepreneurs, corporations, and universities. Globally, their number sharply increased from an estimated 16,599 spaces in 2018 to an estimated 41,975 spaces in 2024, with about 5 million people working in coworking spaces (Coworking Resource & Coworker, 2022; Shortlister, 2024). Coworking spaces are offices where professionals of different backgrounds come together to work, exchange, and collaborate. Originally intended for freelancers, entrepreneurs, and other highly flexible workers, such as gig workers (Orel and Alonso Almeida, 2019) and digital nomads (Hensellek and Puchala, 2021), to access professional and flexible office infrastructure, coworking spaces have gained increasing popularity among established corporations. They balance efficient office space utilisation with increased cooperation between individuals from different departments. By 2030, 30% of all office space is predicted to be flexible (JLL, 2024).

In the university context, coworking spaces offer students, researchers, and nascent startups a space to work on individual and group projects, as well as access professional resources, including 3D printers, podcast studios, or high-tech computers (Bouncken, 2018). Relative to their commercial counterparts, university coworking spaces have yet to gain similar growth momentum (Orel & Bennis, 2020). Yet, their numbers slowly increased, and many universities started to offer flexible workspaces to students and staff (Bouncken, 2018). Despite this increasing growth, no dedicated examination of university coworking spaces exists. As part of the Erasmus+ project *Cowork4EU: Coworking Best Practices for European Universities*, this best practice report provides an in-depth overview of coworking spaces in the university context.

We examine the theoretical backgrounds of university coworking and give a current overview of the university coworking space landscape in Europe. Further, we present in-depth case studies of state-of-the-art university coworking spaces and show how university coworking spaces can collaborate internationally. We show several benefits of university coworking spaces for students, staff, and researchers and give detailed instructions on how university coworking spaces should be designed to meet the needs of these stakeholders. Finally, we close with useful recommendations on university coworking spaces for space managers, scholars, and students and additionally suggest topics for further research in the field of university coworking.

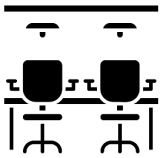
1.2 WHO IS THE REPORT ADDRESSED TO?

While this report aims to provide an in-depth overview of the university coworking space landscape in Europe for all interested audiences, it is particularly useful for the following groups:

- **University leaders and coworking space managers:** This report offers novel insights into university coworking spaces and demonstrates how these spaces can provide an innovative workspace option for students, researchers, and industry professionals to work and collaborate. It serves as a toolbox for space managers to design, manage, and elevate their coworking spaces to the next level.
- **University students:** This report illustrates how students can benefit from working in collaborative coworking spaces instead of traditional classrooms. It demonstrates how coworking spaces can enhance academic performance, develop entrepreneurial skills, and foster connections with professionals from academia and business.
- **University scientific and administrative staff:** By examining the importance of coworking spaces for university-backed startup incubators and accelerators, this report provides university administrative staff with recommendations on why coworking spaces deserve increased public attention and support. It highlights their potential as crucial pivot points within the broader university ecosystem, especially for higher education institutes focusing on innovation and entrepreneurship.
- **Researchers:** To date, little research exists on university coworking. This report not only offers practical insights for students and coworking space managers but also provides an in-depth scientific overview of university coworking spaces. By identifying research gaps in the field, we encourage scientists to explore the dynamics of university coworking at individual, group, and organisational levels.

1.3 WORKING DEFINITIONS

For some readers, especially novices in the field of coworking, certain concepts used in this report will seem unfamiliar. Hence, we provide short working definitions for the most used concepts in this report:



University coworking spaces are shared, collaborative workspaces designed to foster interaction and exchange among students, researchers, and industry professionals. These spaces support a dynamic learning and working environment, encouraging innovation, interdisciplinary collaboration, and entrepreneurship within universities.

Entrepreneurial universities integrate entrepreneurship into their core mission by actively fostering innovation, innovative knowledge transfer, and economic development. They support entrepreneurial activities among students, faculties, and external stakeholders through education, research, and collaboration with industry and society.

Incubators are organised programs or facilities designed to support early-stage startups by providing resources such as office space, mentorship, training, and networking opportunities. Incubators aim to nurture business ideas during their formative stages, helping startups achieve viability and sustainable growth.

Accelerators are short-term, intensive programs that help startups refine their business models, scale operations, and access investment opportunities. They typically involve mentorship, funding, and networking over a fixed period, often culminating in a demo day where startups pitch to mentors and investors.

Makerspaces are collaborative workshops equipped with tools and resources such as 3D printers, laser cutters, and prototyping materials, enabling users to create, design, and innovate. These spaces are open to individuals or groups who want to experiment, learn, and develop hands-on projects.

Traditional classrooms are formal learning environments where instructors deliver structured lessons to students in a physically fixed setting. This setup typically emphasises direct instruction, standardised curricula, and limited interaction compared to more collaborative or flexible learning spaces.

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2.0 The status quo on academic coworking

2.1 THE RISE OF COWORKING: WHERE FLEXIBILITY MEETS COMMUNITY

Coworking spaces have significantly influenced modern office culture. Not only do they provide coworkers with a well-designed and professional office space, but also with various opportunities to connect with like-minded individuals. This enables spontaneous knowledge exchange and collaboration, significantly improving work-life balance and well-being. Before delving into coworking spaces in the academic context, we take a sneak peek into the origins of coworking spaces, their spatial and social features, as well as how they impact collaboration, well-being, and organisational culture.

2.1.1 ORIGINS AND EVOLUTION OF COWORKING SPACES

Coworking spaces emerged in 2005 when freelance programmer Brad Neuberg created the first shared workspace in San Francisco (Spinuzzi et al., 2019). It offered freelancers an alternative to rigid offices and isolated home-based work, prioritising flexibility, community, and collaboration. His vision introduced principles such as accessibility and inclusivity, values that are still important cornerstones of the coworking ethos today (Merkel, 2019). The 2008 financial crisis acted as a catalyst for coworking, with the industry expanding rapidly. Coworking spaces offered affordable and flexible infrastructure and an important community that helped professionals navigate precarious labour markets (Blagoev et al., 2019).

By 2018, coworking had evolved globally, with over 15,000 spaces serving more than one million coworkers (Blagoev et al., 2019; Howell, 2022), mainly working as entrepreneurs and the gig economy (Orel and Alonso Almeida, 2019). Many new providers began to focus less on the community and more on profits, eventually turning into larger corporations. Prominent examples, such as WeWork, epitomised the “neo-corporate” coworking model, prioritising scalability at the expense of the original grassroots ideals of collaboration and community (Gandini & Cossu, 2019; Waters-Lynch & Potts, 2017). While this shift democratised access to coworking spaces, it also raised concerns about the dilution of their original community-centric mission (Bouncken et al., 2020; Vidaillet & Bousalham, 2018).

The adaptability of coworking spaces was tested during the COVID-19 pandemic. Hybrid models emerged, integrating physical and virtual environments to meet the evolving demands of remote work (Mariotti et al., 2022). It also underscored the

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importance of highly flexible forms of work, such as digital nomadism (Hensellek et al., 2024; Orel, 2019) This period also underscored coworking spaces' role as "affective commons," where feelings of isolation are countered by meaningful social connections.

From their grassroots beginnings to their current role as hubs of innovation, coworking spaces have become integral to the evolving dynamics of work. They reflect broader socio-economic shifts while fostering creativity, collaboration, and adaptability (Cnossen & Bencherki, 2019; Gerdenitsch et al., 2016; Howell, 2022).

2.1.2 COMMUNITY AND COLLABORATION IN COWORKING SPACES

A defining characteristic of coworking spaces is their ability to foster community and collaboration among members. Unlike traditional offices that emphasise hierarchical and structured workflows, coworking spaces are designed to increase interaction, knowledge exchange, and mutual support among a diverse range of users. This collaborative ethos remains rooted in the coworking movement's original ideals of openness, inclusivity, and shared aspirations (Spinuzzi et al., 2019). These "affective commons," where shared emotional and professional connections enhance members' well-being and work satisfaction, provide a buffer against the isolation frequently experienced by remote and freelance workers (Waters-Lynch & Potts, 2017). Social interactions within the coworking community, hence often evolve into collaborative projects or partnerships, leveraging the diversity of skills and perspectives within coworking spaces (Gerdenitsch et al., 2016).

Structured opportunities for collaboration, such as networking events and skill-sharing sessions, further differentiate coworking spaces from traditional offices. These activities create what Jakonen and colleagues (2017) term "economies of encounters," where serendipitous meetings spark innovation and problem-solving. However, the effectiveness of these community-building efforts varies depending on their managerial capabilities, organisational structure, and business model. Critics argue that highly commercialised coworking spaces often commodify community as a marketing tool (Waters-Lynch & Potts, 2017). In contrast, community-driven spaces prioritise organic relationships and mutual support.

In essence, coworking spaces function as dynamic ecosystems where individuals connect, share knowledge, and co-create, fostering both individual and collective success.

2.1.3 PHYSICAL AND SPATIAL DESIGN OF COWORKING SPACES

The physical design of coworking spaces plays a pivotal role in shaping user experiences, fostering collaboration, and promoting productivity. Unlike traditional office layouts that emphasise hierarchy and individual work, coworking spaces feature open, flexible, and community-oriented designs. These spaces cater to a broad spectrum of users, balancing functionality with opportunities for interaction (Spinuzzi et al., 2019).

Open-plan layouts encourage spontaneous encounters and knowledge sharing. Carefully curated elements like shared desks, breakout areas, and lounges support informal networking, leading to knowledge sharing and social support, while enclosed offices and soundproof booths ensure privacy if needed (Gerdenitsch et al., 2016; Waters-Lynch & Potts, 2017). This proximity further accelerates innovation cycles and interdisciplinary problem-solving (Roche et al., 2021).

Flexible furniture, modular layouts, and creative aesthetics further enhance functionality and user appeal, blending diverse work styles into cohesive environments (Vidaillet & Bousalham, 2018). Technological infrastructure, including high-speed internet and video conferencing tools, supports hybrid work models and ensures seamless collaboration across physical and virtual environments.

However, commercialisation poses the risk of standardisation, where profitability may overshadow thoughtful design. Larger chains often prioritise uniformity, which can undermine creativity and community dynamics (Gandini & Cossu, 2019).

Overall, the physical and spatial design of coworking spaces is key to their success, enabling collaboration, adaptability, and innovation while supporting diverse user needs.

2.1.4 ORGANISATIONAL IMPACTS OF COWORKING SPACES

Coworking spaces have refined organisational dynamics, fostering flexibility, innovation, and inter-organisational collaboration. Unlike traditional office structures that reinforce hierarchical boundaries, coworking spaces enable horizontal knowledge sharing, allowing diverse professionals to interact and exchange ideas beyond organisational silos (Bouncken et al., 2020; Spinuzzi et al., 2019).

One notable phenomenon is the rise of corporate coworking, where established firms operate or integrate coworking spaces to facilitate innovation. These environments act as “neutral grounds” where corporate employees and external stakeholders, such as startups and entrepreneurs, collaborate informally. This model fosters open innovation and cross-pollination of ideas, bridging rigid corporate cultures with agile startup mindsets (Roche et al., 2021). This interaction also extends to partnerships between startups and established firms. By co-locating in shared spaces, organisations benefit from serendipitous interactions that often translate into formal collaborations, innovative solutions, and shared learning. However, challenges arise when larger organisations dominate coworking resources, diminishing the collaborative spirit and creating imbalances within the ecosystem (Bouncken et al., 2020).

Ultimately, coworking spaces serve as dynamic platforms for inter-organisational innovation, enabling new forms of collaboration, knowledge transfer, and workplace experimentation that traditional office settings often lack.

2.1.5 WELL-BEING AND WORK-LIFE BALANCE IN COWORKING SPACES

Coworking spaces play a significant role in enhancing well-being and work-life balance by reducing isolation, work-life balance, and stress. Unlike traditional offices or home-based work, coworking spaces offer professional work environments while simultaneously fostering social connections and improving mental health and satisfaction (Gerdenitsch et al., 2016).

A key benefit of coworking spaces is their ability to combat social isolation. Freelancers and remote workers, often working independently, face a heightened risk of loneliness and disconnection (Garett et al., 2017). Coworking spaces create a community-oriented atmosphere where individuals can build relationships, receive emotional support, and engage in collaborative networks, improving well-being and job satisfaction.

Coworking spaces also enable better work-life balance through flexibility and autonomy (Gerdenitsch, 2017). Members can tailor their schedules and choose spaces that align with their work needs, whether quiet zones for deep focus or open areas for collaboration. Orel and colleagues (2024) emphasise that these spaces particularly benefit women and parents, helping them to balance professional and personal responsibilities.

Furthermore, coworking spaces provide a structured yet flexible routine that distinguishes professional activities from personal life, reducing burnout commonly associated with home-based work. By fostering supportive environments and offering amenities that enhance productivity, coworking spaces contribute to healthier work habits and improve overall well-being (Spinuzzi et al., 2019).

2.1.6 CHALLENGES AND CRITIQUES OF COWORKING SPACES

While coworking spaces are celebrated for fostering innovation, collaboration, and flexibility, they face several challenges and critiques that impact their effectiveness and core values.

The commodification of the community is a major challenge. As coworking spaces have become increasingly commercialised, large operators prioritise profitability and scalability over the original grassroots principles of community and collaboration. This shift often reduces coworking to transactional environments, diluting the relational dynamics that once defined the coworking ethos (Waters-Lynch & Potts, 2017).

Inclusivity is another significant challenge. High membership costs can exclude freelancers, early-stage entrepreneurs, and underrepresented groups, undermining coworking spaces' social mission. Smaller, community-driven spaces often strive to address this issue but face difficulties competing financially with larger, well-funded chains (Spinuzzi et al., 2019).

The physical design of coworking spaces usually relies on open-plan layouts. While this is significantly fostering interaction, it can be distracting for members who require quiet and privacy for focused work. Social pressures to network and engage may overwhelm introverted individuals, reducing productivity (Gerdenitsch et al., 2016).

Resource imbalances in coworking spaces, particularly when larger organisations or well-funded startups dominate shared facilities. Such dynamics can stifle collaboration and disrupt the equitable use of resources (Bouncken et al., 2020). Hybrid and virtual coworking models, while offering flexibility, often struggle to replicate the spontaneous interactions and deep social connections of physical spaces, requiring innovative solutions to maintain community dynamics (Mariotti et al., 2022).

Addressing these challenges is essential for coworking spaces to sustain their collaborative ethos and adapt effectively to the evolving demands of modern work environments.

2.2 UNIVERSITY COWORKING SPACES

Similar to commercial ones, university coworking spaces can leverage knowledge exchange and collaboration among students, researchers, and university staff across various knowledge domains. Further, they provide students the opportunity to work alongside professionals, including entrepreneurs and corporate employees. This offers dedicated learning opportunities outside the traditional learning environment.

As elaborated in the last chapter, workplace environments experienced substantial changes during the last decades. The shift from enclosed to open-plan offices and coworking spaces has revolutionised collaboration, learning, and creativity at work. These changes are leading us to question if they also influence the design of spaces in higher education institutes. As traditional work offices give way to more flexible and dynamic offices, universities must find ways to change their physical infrastructures to adapt to these changes while still maintaining their core tasks of teaching and research. This question is now more relevant than ever with the rise of remote work, digital collaboration tools, and increasing demands for entrepreneurial skills in graduates. Given the rising integration between education and industry, the erstwhile model of largely discrete spaces for learning, research, and industry collaboration appears increasingly outdated. Sankari et al. (2018) note that community features of spatial environments, such as multipurpose functionality, high accessibility, and attractive workplace design, would make an academic space more user-friendly and universal. Yet, the implementation of these concepts still faces challenges as many universities struggle to balance traditional academic needs and modern collaborative workspace. Hence, the question is how institutions can effectively utilise the dynamic and

collaboration-friendly dynamics of coworking spaces without straying away from their primary objective of education.

With the latter being put under question, the concept of academic coworking spaces represents an innovative approach to fostering entrepreneurship and collaboration while simultaneously fulfilling the educational mission of universities. However, the adoption of coworking in higher education notably lags behind commercial coworking spaces. As Orel and Bennis (2020) observe, while commercial coworking spaces have grown at a fast pace in the business world since the mid-2000s, university coworking spaces remain relatively rare despite universities facing similar shifts toward location-independent work and learning. These spaces are distinct from typical university study areas or departmental resources in that they intentionally bring together unaffiliated individuals—students, faculty, and external entrepreneurs—to work alongside each other based on geographic proximity and shared interests rather than institutional affiliation (Bouncken, 2018; Spinuzzi, 2012).

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While coworking spaces have grown with a fast pace in the business world since the mid-2000s, academic coworking spaces remain relatively rare despite universities facing similar shifts toward location-independent work and learning.

The potential benefits of academic coworking spaces are significant and multifaceted. Lumley (2014) finds that students express a strong interest in working alongside and learning from entrepreneurs, even if they had not previously considered entrepreneurship themselves. University coworking spaces can fulfil this need, as they serve as valuable bridges between the academic and professional worlds. Additionally, they can encourage inter-university and collaboration of both students and scholars, as many university coworking spaces enable external (i.e., non-university members) users to work inside their premises (Orel & Bennis, 2020). Thus, they may be particularly valuable for specialised fields of study where researchers are often geographically isolated from others in their discipline, allowing them to form local communities of practice despite different institutional affiliations (Bilandzic & Foth, 2013).

Implementing successful academic coworking spaces faces several distinct challenges. Managing different user expectations around noise levels and space usage can be problematic (Lumley, 2014). While entrepreneurs often need areas for phone calls and client meetings, students predominantly desire quiet study environments. Additionally, practical concerns like parking permits, Wi-Fi access, and printing privileges for non-university members require significant administrative coordination. Most fundamentally, Orel and Bennis (2020) identify an inherent tension between universities' investment in their own facilities and brand exclusivity versus the need for truly independent, inter-institutional spaces that can foster genuine coworking communities. These challenges help explain the relatively slow adoption of scholarly coworking despite its theoretical (but also empirical – as we’ll learn within the next paragraph) benefits.

One of the first case studies observed within the scholarly debate on academic coworking spaces is the Energy Garage of Aalto University in Finland (Kyrö & Artto, 2015). The case study shows how academic coworking spaces can evolve organically

through different phases of development and stakeholder involvement. The space began as a faculty-driven research initiative focused on energy science but gradually transformed into a student-led coworking and co-learning platform. While the initial vision of the Energy Garage came from faculty seeking to create networking opportunities between researchers and businesses, budget changes in 2013 led to prioritising education over high-impact research. This pivotal moment sparked greater student involvement in space design and operation. Hence, students were gradually integrated into Energy Garage's planning process through workshops and course projects, eventually taking on primary responsibility for managing the space's daily operations.

The outline of this case study opens another question – what is the difference between university coworking spaces that are frequented by students and university coworking spaces that are frequented by scholars? University coworking spaces can be differentiated into two distinct yet complementary models based on their primary user groups and core functions. Scholar-centric university coworking spaces primarily serve as research and collaboration hubs for faculty, researchers, and visiting academics. They focus on fostering interdisciplinary collaboration and knowledge creation. As demonstrated by Orel and Bennis (2020), these spaces emphasise research excellence and business innovation, serving as bridges between academic institutions and industry partners.

In contrast, student-oriented university coworking spaces, as examined by Sankari and colleagues (2018), prioritise social learning, peer collaboration, and the development of entrepreneurial skills. The latter model is particularly focused on creating "learning, networking, and innovation platforms" (Kyrö & Artto, 2015) that facilitate both formal and informal learning experiences. This bifurcation in university coworking reflects the distinct needs and objectives of these user groups: while scholar-centric spaces emphasise research productivity and professional networking, student-oriented spaces focus on educational outcomes and skill development. However, both models share common characteristics, such as the need for community building, flexible space configurations, and high accessibility, though they implement these features differently to serve their respective user groups. These distinctions—as noted in Table 2.1—are vital for universities developing coworking strategies, as it suggests that a one-size-fits-all approach may be less effective than targeted spaces designed for specific academic communities.

As discussed, the adaption of collaborative workspace concepts for higher education settings has high potential but does not come without challenges. When conceptualising such spaces, university management must be able to differentiate between scholar-centric and student-oriented spaces. We provide a useful framework for universities to strategically develop their spatial resources.

	Scholar-centric coworking	Student-centric coworking
Focus	Focus on research excellence and interdisciplinary collaboration	Focus on learning outcomes and skill development
Emphasis	Emphasis on professional networking and industry connections	Emphasis on peer-to-peer learning and mentorship
Forms of collaboration	Formal and structured collaboration patterns	Mix of formal and informal learning interactions
Autonomy	High degree of autonomy in space usage	Guided and facilitated space usage
Activities within space	Research output-oriented activities	Process and learning-oriented activities
Usage pattern	Long-term space occupation patterns	Flexible and short-term usage patterns

Table 2.1: Key differences between scholar-centric and student-centric university coworking spaces.

We further mentioned the potential of university coworking spaces for entrepreneurial learning, collaboration, and networking. In the next chapter, we delve deeper into this topic by examining the role of university coworking spaces in university entrepreneurial ecosystems.

2.3 COWORKING SPACES IN UNIVERSITY ENTREPRENEURIAL ECOSYSTEMS

Coworking spaces at universities are often associated with and embedded within entrepreneurial ecosystems, hosting student startup initiatives and academic spinoffs. They are often found within the university's incubation facilities that promote entrepreneurship and innovation on campus. This chapter explains the role of coworking in the university entrepreneurial ecosystem. Particularly, the role of coworking spaces within incubators and accelerators and how coworking spaces can leverage entrepreneurial education are explored.

The support of public institutions is crucial for the development of entrepreneurial ventures (Kollmann et al., 2023). Especially universities are key hubs for entrepreneurial ecosystems (i.e., a proximate network of individuals, organisations, resources, and cultural elements that collectively foster entrepreneurial activity) (Guerrero et al., 2024), with most entrepreneurs still emerging from academic institutions (Kollmann et al., 2017). Hence, every year, numerous successful student startups and research-based spin-off firms emerge globally, often supported by university-provided education, funding, mentorship, and facilities (Chowdhury & Audretsch, 2024; Kollmann et al.,

2017). Dedicated incubator and accelerator facilities (Kolympiris & Klein, 2017), alongside extensive entrepreneurial education programs (Matlay, 2008), play a crucial role in fostering student entrepreneurship and commercialising scientific outputs from university research (Bouncken, 2018). Thus, especially young early-stage startups value entrepreneurial support from their alma mater (Kollmann et al., 2019).

Although coworking spaces in university settings can take various forms and contribute to several goals, they appear to be particularly important for the universities' entrepreneurial output. They serve as vital hubs for student entrepreneurs and researchers and provide an inspiring workspace for entrepreneurial education outside traditional classroom settings (Orel & Bennis, 2020). Often integrated into university incubators or accelerators, coworking spaces sit at the heart of university entrepreneurial ecosystems, acting as central nodes that connect students, researchers, established corporations, and startups (Bouncken, 2018).

2.3.1 THE ROLE OF COWORKING SPACES FOR UNIVERSITY INCUBATORS AND ACCELERATORS

In the university context, coworking spaces are often embedded in the startup facilities of the respective institution and rarely operate as a single, independent university unit (Bouncken, 2018). Nascent entrepreneurs require affordable and flexible office options, as this early and often highly dynamic phase of their venture is often either marked by explosive growth or rapid failure (Howell, 2022). In the academic context, coworking spaces are almost inseparably tied with university incubator facilities or accelerator programs that aim to advance the entrepreneurial aspirations of both students and researchers (Orel & Bennis, 2020; Sankari et al., 2018). University incubators are established university units that dedicate office space, resources, mentorship programs, and consulting staff to foster academic entrepreneurship (Kollmann et al., 2017; Kolympiris & Klein, 2017). Accelerator programs are structured, time-bound initiatives designed to rapidly scale and support startups through mentorship, networking opportunities, educational workshops, and access to funding (Chowdhury & Audretsch, 2024). In both these cases, university coworking spaces are essential as they house entrepreneurial student teams and founding researchers during these early and often critical venture phases (Bouncken, 2018). Table 2.2 offers an overview of incubators and accelerators, as well as the role of coworking spaces in each.

University coworking spaces are usually free to use or very affordable for university-affiliated startups. This allows startups to allocate more of their limited resources to business-critical sectors, such as product development or marketing activities, instead of office-related expenses (Bouncken, 2018). Both incubators and accelerators often operate their own coworking spaces (Chowdhury & Audretsch, 2024; Sankari et al., 2018), with especially incubators offering long-term usage for startups (Orel & Bennis, 2020).

Category	Incubators	Accelerators
Purpose	Support early-stage ideas and provide resources to nurture concepts into viable business models.	Help startups rapidly grow and scale by refining their business models and preparing them for investment.
Requirements to join	Ranging from simply having a vague business idea to strict application processes.	Typically require startups with a minimally viable product or some market traction.
Duration	Entrepreneurs can join as long as they are members of the university. Some memberships extend after studies.	Structured programs with a fixed timeline (often ranging from a few weeks to a full academic year).
Access to funding	Usually, no direct funding is offered, but access to facilities, mentors, and networks is provided.	Often include seed funding in exchange for equity, combined with access to investors and demo day opportunities.
Benefits for students	Entrepreneurial education, access to mentorship, workshops, office space, networking events, and university resources.	Entrepreneurial education, intense mentoring, pitch practice, funding, business model refinement, and exposure to investors.
Role in the university's entrepreneurial ecosystem	Serve as a low-barrier entry point for entrepreneurial exploration and idea development.	Act as a launchpad for promising ventures to accelerate growth and transition into the market.
Role of coworking spaces	Provides a collaborative space to share ideas, meet peers, and flexibly develop early-stage projects.	Very similar to their role in incubators by providing a hub for networking and collaboration and by hosting mentoring sessions.

Table 2.2: Comparing university incubators and accelerators.

No matter if situated at incubator or accelerator facilities, the aim of the associated coworking spaces is, like non-university coworking spaces, to provide member startups with professional office amenities, such as computers, scanners, and printers (Howell, 2022; Orel & Bennis, 2020). This allows student entrepreneurs, who might not have equivalent equipment otherwise available, to easily tackle their everyday business activities. Further, the coworking space offers meeting spaces for startups to meet up with potential clients, investors, or other partners (Spinuzzi, 2012). Most coworking spaces are also open to users 24 hours a day (or at least until late in the evening) and often operate seven days a week (Howell, 2022). Given that students and researchers often launch their startup as a side business parallel to their studies or research, this is also essential in university coworking spaces, as they often dedicate their free time (i.e., hours in the evening and on the weekends) to their nascent venture.

In addition, university coworking spaces are often purposefully designed to offer entrepreneurs a nice place to work (Sankari et al., 2018). While also offering

professional desks, like university libraries, coworking spaces do not have a “silent policy” but allow informal exchange and conversation within their premises (Parrino, 2015). Further, like regular coworking spaces, they often offer various amenities that are often either missing or scarce in university libraries, such as kitchens, coffee machines, event spaces, or meeting rooms (Kyrö & Artto, 2015). In addition, they boast amenities that aim to allow users to mentally recharge from their work (Bouncken, 2018; Kyrö & Artto, 2015). This includes, for example, team games such as table tennis or football, video game consoles, or sports facilities, such as climbing walls within the space (Kyrö & Artto, 2015). The spatial design of university coworking spaces also aims to boast well-being and creativity. They are often designed very open, with warm colours, little barriers (e.g., walls or shelves), as well as plants and different seating arrangements, such as lounges or couches (Sankari et al., 2018).

Coworking spaces can also serve as the main hub for dedicated exchange among like-minded entrepreneurs from universities (Bouncken, 2018). Startup teams usually work right beside each other in the university coworking space. This spatial proximity, as well as regular, informal chats while waiting for the coffee machine or cooking together in the coworking space’s kitchen, fosters an informal exchange of business ideas, best practices, and challenges during work (Cabral & van Winden, 2016). This frequent and informal communication allows entrepreneurs to build potential synergies (i.e., by offering and receiving informal advice from experts) or even partnerships (i.e., a business partnership) and broadens their entrepreneurial network and skills (Butcher, 2018). Further, it provides entrepreneurs with a dedicated safe haven to talk about their struggles during the startup process and the opportunity to receive valuable advice from fellow, potentially more experienced entrepreneurs.

Coworking facilities are also often chosen to host regular events. Similar to the purpose of events in regular coworking spaces, they provide dedicated room for users to exchange besides the informal interaction occurring during the day-to-day work (Howell, 2022). Further, they provide them with the opportunity to meet with a variety of external stakeholders (Brown, 2017). Innovative business concepts presented by startups during dedicated pitching events may gain the attention of possible partners who attend the event as audience or jury members. These include, for example, investors, mentors, or suppliers. During evening events, entrepreneurs can chat about their business with other external guests, such as potential clients or employees, informally marketing their startup venture and securing potential human capital.

2.3.2 THE ROLE OF COWORKING SPACES IN ENTREPRENEURIAL EDUCATION AT UNIVERSITIES

University coworking spaces provide fertile ground for innovative teaching outside the traditional classroom environment (Bouncken, 2018; Orel & Bennis, 2020). Unlike regular classrooms, which are designed for lecture-style teaching with significant input from lecturers and minimal input from students, coworking spaces encourage teamwork

and collaboration. In these spaces, teachers can provide minimal guidance, allowing students to tackle their course assignments through collaboration, discussion, and the mutual creation of ideas and knowledge (Lumley, 2014).

Moreover, the spatial design of coworking spaces, which often integrates open workspaces, quiet zones, and event areas within a single location, enables students to engage in diverse work modes within close proximity (Kyrö & Artto, 2015). The multi-purpose nature of coworking spaces allows for collaborative project planning during group assignments, focused work on individual work assignments, iterative discussion of assignment progress, and effectual pitching of completed work (Orel & Bennis, 2020; Sankari et al., 2018). By offering a variety of work environments in one place, coworking spaces help students avoid common drawbacks, such as the challenges of doing group work in silent libraries or struggling to focus on individual tasks in busy places like cafeterias (Sankari et al., 2018).

In particular, entrepreneurial education benefits from the use of coworking spaces for teaching (Bouncken, 2018). Dedicated coworking spaces provide students with a variety of professional office equipment that helps them to engage in group work more efficiently (Lumley, 2014). For example, students can use interactive whiteboards, serious games, or media equipment to pitch their ideas to group members and audiences. Further, the use of printers and scanners allows them to create physical documents during their group assignments.

Further, the usage of coworking spaces fosters innovation and entrepreneurial thinking by immersing students in an environment that emphasises independence, collaboration, and openness (Duarte & Mendes, 2016). Unlike traditional classrooms, which often impose rigid structures and hierarchies, coworking spaces encourage the free exchange of ideas and creativity, with only minimal input from teaching staff. This is especially true when these spaces are shared with individuals from diverse fields, such as students from other departments, researchers, or university-affiliated startups, both during the teaching itself as well as follow-up group work. For instance, during group assignments, students can seek informal feedback and ideas from individuals outside their immediate knowledge domain, enriching their work (Lumley, 2014). Additionally, these interactions expose students to real-world problem-solving scenarios, allowing them to observe how entrepreneurs develop, refine, and implement their ideas. Such an environment not only inspires students but also nurtures a mindset oriented toward risk-taking and creativity (Lumley, 2014).

Coworking spaces also offer opportunities for students to develop entrepreneurial skills, such as project management, creative thinking, and interpersonal soft skills, through practical applications and peer-to-peer learning (Lumley, 2014). For example, collaborative work in a shared space with peers from diverse educational and professional backgrounds encourages individuals to manage group dynamics

effectively, delegate tasks, and establish clear lines of communication and collaboration (Bouncken, 2018). These experiences help students cultivate essential skills for entrepreneurial ventures.

2.4 COMMUNITY BUILDING AND NETWORKING IN UNIVERSITIES: THE ROLE OF COWORKING SPACES

By serving as hubs of collaboration and interaction, these spaces could foster vibrant academic and professional communities where students, faculty, and staff come together to exchange ideas, develop relationships, and collaborate on projects. Coworking spaces in universities can promote a sense of belonging by offering inclusive and supportive environments that bridge social and academic divides. Further, they hold the promise of nurturing interdisciplinary engagement, entrepreneurial initiatives, and innovative practices, paving the way for cross-disciplinary collaboration and professional development within higher education institutions.

2.4.1 THE ROLE OF UNIVERSITY COMMUNITY BUILDING FOR STUDENTS

Characterised as the personal experience of being esteemed, included, and embraced within the academic community, the sense of belonging is a foundational element for students' affiliation with their institution and other fellow students (Goodenow, 1993). It reflects how students conceptualise their role within the academic and social frameworks of their university, profoundly influencing their motivation, engagement, and academic performance (Gillen-O'Neel, 2021; Meehan & Howell, 2019; Neel & Fuligni, 2013). For students to thrive, it is essential that they feel like being part of a community without the necessity to adhere to rigid societal norms (Hurtado et al., 2007).

Inclusive institutions that prioritise interpersonal connections not only enhance the student experience but also significantly improve retention rates (Maunder, 2018; Pedler et al., 2022). When students feel integrated into their academic community, they are more likely to engage with campus resources effectively (Strayhorn, 2012; Yeager et al., 2016), further supporting their academic and personal growth. Meaningful social interactions with students and university staff play a central role in cultivating this sense of belonging, fostering a stronger and more cohesive community (Collins, 2021; Watson et al., 2010). Both formal initiatives and informal interactions within inclusive environments can deepen students' sense of belonging (Peacock & Cowan, 2019).

Beyond academic success, a strong sense of belonging is linked to significant mental health benefits, including higher well-being and reduced levels of stress, anxiety, and depression (Baumeister & Leary, 1995; Gopalan et al., 2022; Karaman & Cirak, 2017; Slaten et al., 2016). It contributes to resilience, self-esteem, and the ability to form

healthy relationships (Karaman & Cirak, 2017; Scarf et al., 2016), which might be especially important for first-generation students as they experience higher drop-out rates (Meehan & Howells, 2019).

2.4.2 THE ROLE OF NETWORKING FOR STUDENTS

The presence of a peer network within educational environments, coupled with the absence of feelings of isolation, significantly affects the academic performance of students (Nicpon et al., 2006). Empirical research underscores that interpersonal relationships among peers not only cultivate an enhanced sense of belonging but also markedly bolster academic resilience, enabling students to address challenges with greater efficacy (Frisby et al., 2024). In educational settings characterised by relational connectivity, students engage in collaboration and information sharing (Naslund et al., 2016). Such conditions are instrumental in facilitating academic retention and in nurturing motivation among students (Marley & Wilcox., 2022; Rasco et al., 2023).

Well-structured peer networks yield a multitude of advantages, including enhanced mental well-being and satisfaction with academic endeavours (Carporale-Berkowitz, 2022; Schenkenfelder et al., 2020). Students who participate in such networks exhibit increased comfort in soliciting assistance from both instructors and peers, as well as in engaging in self-directed learning practices (Sidelinger & Booth-Butterfield, 2010; Sidelinger et al., 2015). Collectively, these characteristics amplify their academic advancement and improve graduation rates (Frisby et al., 2024).

2.4.3 COWORKING AS A CATALYST FOR COMMUNITY BUILDING

Community building within coworking environments transpires through both hierarchical and grassroots initiatives (Kim et al., 2024). Community managers assume a crucial function by coordinating events, promoting collaborative principles, and purposefully cultivating relationships among members (Brown, 2017; Merkel, 2015). Their endeavours, including workshops or networking functions, are pivotal in establishing an inclusive and participatory atmosphere (Kim et al., 2024). Concurrently, members themselves engage in community development through informal engagements and shared practices, such as routines and social assemblies, which further enhance their interpersonal connections (Blagoev et al., 2019).

Moreover, the physical design of coworking spaces plays a critical role in fostering community. Informal areas such as lounges and kitchenettes encourage spontaneous interactions, enabling members to connect beyond their professional activities (Bouncken, 2018; Garrett et al., 2017). The impact of a robust community within coworking spaces is substantial, leveraging the camaraderie and belonging that is often missing in solitary work settings (Garrett et al., 2017; Rus & Orel, 2015).

2.4.4 COWORKING AS A HUB FOR NETWORKING

Coworking spaces are known for their strong emphasis on fostering social and professional networks. They are intentionally designed to encourage interaction,

facilitate knowledge sharing, and the development of meaningful relationships (Bouncken & Görmar, 2023). The collaborative spirit inherent in coworking spaces engenders “unlikely encounters” (Hoendervanger et al., 2018) by uniting diverse professionals, thereby enhancing creativity, learning, and promoting knowledge exchange (Bouncken et al., 2018; Cabral & van Winden, 2022). Users frequently identify these avenues for knowledge exchange as the primary rationale for their preference for coworking spaces instead of conventional work settings (Parrino, 2015). This openness to collaboration, combined with the chance to build dependable professional networks, reflects the supportive and cooperative values that underpin the coworking culture (Merkel, 2015).

Coworking spaces further catalyse professional development. The networking opportunities they provide foster referrals and build connections that enhance individual effectiveness and expand career prospects. These environments are especially attractive to professionals because they offer social and professional engagement—a feature that conventional office environments frequently lack (Bueno et al., 2018). Ultimately, coworking spaces transcend mere physical locations—they function as ecosystems where professional and personal relationships thrive.

2.4.5 THE POTENTIAL OF UNIVERSITY COWORKING SPACES FOR FOSTERING COMMUNITY AND NETWORKING

Based on this literature review, we can assert that coworking spaces at universities have the potential to significantly enhance community building and networking. They offer a unique opportunity to break down silos between students, faculty, and external stakeholders. University coworking spaces can create a sense of belonging among individuals from diverse academic and professional backgrounds, which is a key driver for academic achievement (e.g., Neel & Fuligni, 2013; Nicpon et al., 2006).

From a networking perspective, university coworking spaces offer students the chance to engage with diverse individuals. By bringing together students from various disciplines, faculty members, and external professionals—such as alumni and entrepreneurs—these spaces facilitate valuable knowledge exchange and collaboration. The informal nature of coworking environments encourages spontaneous interactions (Garrett et al., 2017), which lead to unexpected partnerships, new ideas, and career opportunities among students.

Moreover, university coworking spaces can play a key role in bridging the gap between academia and industry. By fostering stronger connections between students and professionals, they can create platforms for interdisciplinary projects, entrepreneurial ventures, and collaborative research. This dynamic contributes to the university’s role as a community hub, supporting not just students but also strengthening ties with external organisations and stakeholders. In doing so, universities could position

themselves as centres of innovation and engagement, where academic learning and real-world application meet.

To adequately reflect the current state of university coworking, we conducted a study focusing on key stakeholder groups (Weißwange et al., 2025). The key stakeholder groups include coworking space hosts (n = 7) and academic staff (n = 65) (Students are not included here, we focus on them in chapter 6). Participants from France, Germany, Austria, and Czechia completed surveys to provide insights into the status quo of university coworking in these countries. Our primary goal was to understand the perceived benefits and challenges of coworking. Both groups identified networking and collaboration as key benefits, with coworking space hosts additionally emphasising community-building as an important outcome, aligning with previous findings on the effects of coworking (Gerdenitsch, 2017; Kim et al., 2024). On the other hand, noise and distractions were highlighted as the main challenges, underlining the importance of implementing strategies to mitigate these issues effectively. Additionally, we aimed to explore what academic staff needs to actively integrate coworking spaces into their teaching activities. The most critical factors were a suitable layout and learning environment, followed by access to technical equipment and resources.

According to university coworking space managers, their spaces are "good for networking" and for "getting together with motivated and creative people".

In summary, university coworking spaces present an exciting opportunity to reshape the higher education landscape. By focusing on community building, these spaces could provide a supportive and collaborative environment that benefits students, faculty, and the broader university ecosystem. While the outcomes may vary depending on the specific implementation of these spaces, the potential to enhance student engagement, foster innovation, and bridge gaps between academia and industry is significant. Coworking spaces thus have the potential to create more inclusive, dynamic, and interconnected university communities.

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3.0 University coworking spaces in Europe

3.1 OVERVIEW AND GEOGRAPHICAL DISTRIBUTION OF UNIVERSITY COWORKING SPACES

Universities in Europe have started to acknowledge the benefits of coworking spaces for students, researchers, and the surrounding ecosystem. Hence, many higher education institutes are running or interested in implementing coworking facilities on or near their campus. Yet, large differences exist in their geographical and spatial distribution. Further, the existence of a university coworking space heavily depends on various characteristics of the university. This chapter provides empirical insights into the landscape of university coworking spaces in Europe, including the geographical distribution and university characteristics.

3.1.1 BACKGROUND

To date, no substantial data exists on university coworking spaces at universities in Europe. In the course of the Cowork4EU project, the research team engaged in extensive data collection to accumulate data on coworking spaces at European universities. This enabled the investigation of where in Europe universities are more likely to operate coworking spaces. Further, we collected various data from universities (e.g., specialisation, size, or entrepreneurial focus) to determine which universities are more likely to offer coworking spaces to their students and staff.

3.1.2 SAMPLE OVERVIEW

Data collection began in winter 2022 and concluded in summer 2023. Our team investigated universities across each member state of the European Union. We also chose to include other European countries that are not part of the EU due to their vibrant university ecosystem (e.g., Switzerland and the United Kingdom) or their proximate geographical location (e.g., Norway or Switzerland). Further, we chose to exclude micronations (Andorra, Monaco, Liechtenstein, San Marino, and Vatican City State; many of these nations have no or only a single university).

In total, we investigated 1,084 universities in 33 European countries. We solely focused on research universities (i.e., higher education institutes that have the right to award doctorates). Hence, vocational schools or universities of applied sciences were not included in our dataset. Some institutions were further excluded due to data or language issues. The final sample includes 892 public and 192 private universities, resulting in a large variety of universities and specialisations in our data. Table 3.1 summarises the

universities according to twelve different specialisation profiles and the number of universities per specialisation.

Profile	Description	Number of universities
Research	Little to no specialisation in a specific field, offering a large variety of degrees.	643
Technical	Technical focus, e.g., engineering or IT, also including non-military nautical universities	127
Arts	Focus on arts, e.g., fine and performing arts and music education	69
Business and economics	Focus on business and/or economic education and research	56
Medical	Focus on human medical and dentistry education and research	55
Social sciences	Focus on social sciences other than business and economics or law, e.g., pedagogy or philosophical studies	41
Clerical	Focus on clerical education, including studies on Christianity, Islam, and Judaism.	28
Life sciences	Focus on life sciences, e.g., agricultural or veterinary sciences	24
Military	Focus on education related to the army, air force, and navy	22
Sport sciences	Focus on sports science	10
Public administration	Focus on education of degrees in the public sector, e.g., administration and police	6
Law	Focus on legal education and research.	3
Total	Total number of universities included in the sample	1,084

Table 3.1: The different specialisation profiles and number of universities included in the analysis.

The universities in our sample can further be categorised into small-, medium- and large-sized institutions. They range from seven (*PTH Münster* in Münster, Germany) to 151,840 students (*Open University* in Milton Keynes, United Kingdom), with a median student body of 10,180 (*New Bulgarian University* in Sofia, Bulgaria) and an average of 14,251 students per university.

3.1.3 GEOGRAPHICAL DISTRIBUTION OF UNIVERSITY COWORKING SPACES

Based on our in-depth research of university coworking spaces at European universities, we found that 277 institutions (25.6%) offer a coworking space. Of those, 269 universities operate their own coworking space, six universities cooperate with a coworking space provider, and two coworking spaces are situated in and operated by science parks near universities.

Our data shows that the availability of coworking spaces greatly differs between countries. Figure 3.1 offers an overview of the university-affiliated coworking spaces per country.

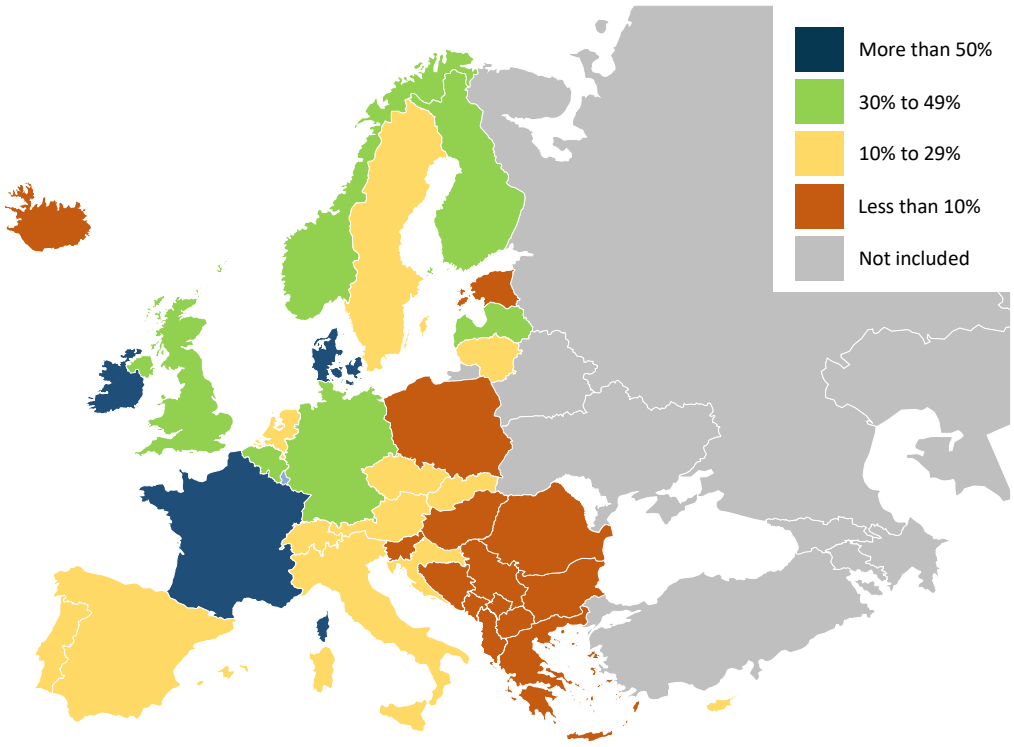

Figure 3.1: Percentage of universities with university coworking spaces

The United Kingdom hosts the most university coworking spaces (66) in absolute numbers, followed by France (53) and Germany (42). Meanwhile, percentage-wise, university coworking spaces are most common in Denmark (5 out of 8 or 63% of universities), France (53 of 88 or 60%), and Ireland (8 of 15 or 53%). We did not find any university coworking spaces in Bosnia and Herzegovina, Bulgaria, Cyprus, Estonia, Iceland, Luxembourg, Montenegro, Serbia, and Slovenia.

Following the 1999 United Nations Statistics Division's (1999) dissection of Europe into Eastern, Northern, Southern, and Western Europe, we see large differences in the total number of university coworking spaces, as well as the percentage of universities with coworking spaces. As shown in Figure 3.2, the total number of universities is equally distributed across the four different UNSD regions.

However, the distribution of university coworking spaces varies greatly, with almost 80% of spaces situated in Western and Northern Europe. Figure 3.3 shows that all countries in which more than 30% of universities offer coworking spaces lie in Western or Northern Europe. In Southern Europe, the countries with the highest percentage of universities with coworking spaces are Spain (28%) and Italy (22%). In Eastern Europe, only Slovakia (16%) and Czechia (13%) have a share of above 10% of universities with coworking spaces. In sum, this data reveals a large disparity between different countries and geographical regions.

79.4%

of university coworking spaces are situated in **Northern** or **Western Europe**.

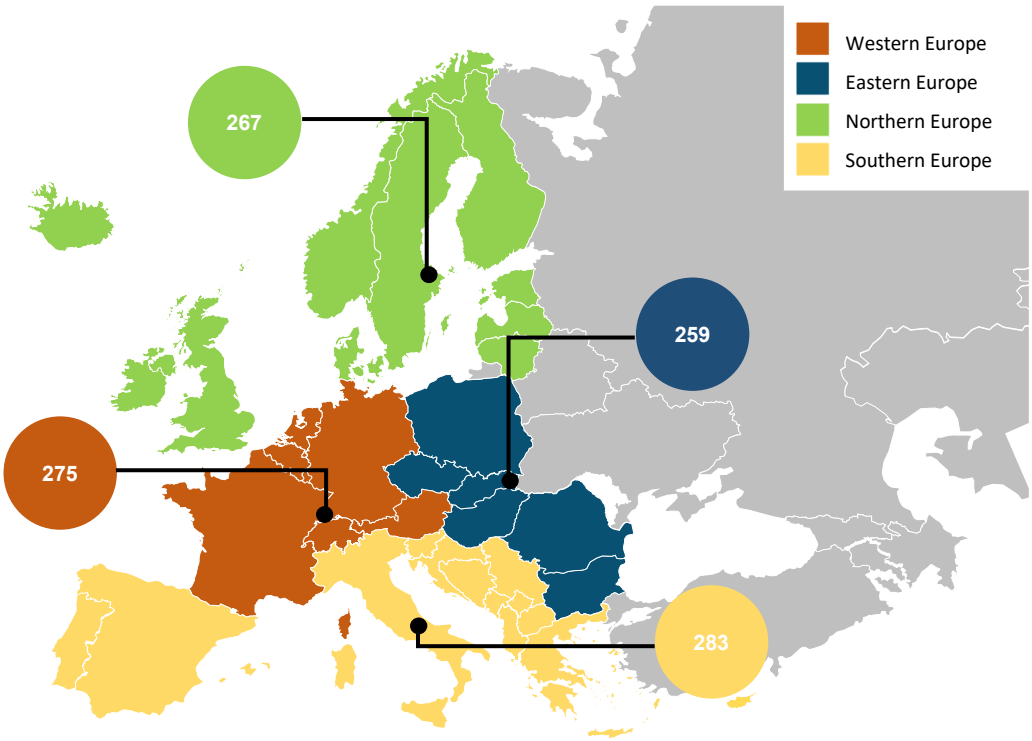

Figure 3.2: European regions and the number of universities per region.

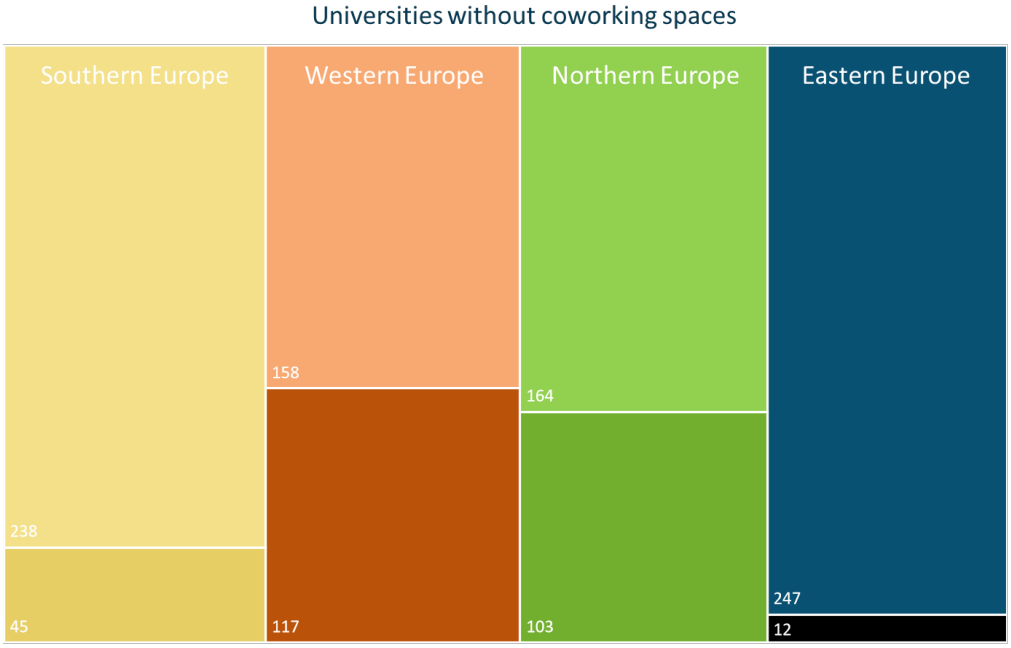

Figure 3.3: Number of universities with and without coworking space per region.

3.2 WHAT KIND OF UNIVERSITIES OFFER COWORKING SPACES?

Not only are there striking differences regarding the number of university coworking spaces per country but also among universities that operate them. The existence of a coworking space at a university depends on certain university characteristics, for example, the university's size, orientation, or profile. Based on our data on university coworking spaces, this chapter provides insights into the characteristics and differences between universities that operate coworking spaces compared to those that do not. Subsequently, we develop a profile of the archetypical university that is most likely to offer a coworking space to its members.

3.2.1 HOW DO UNIVERSITIES WITH COWORKING SPACES DIFFER FROM THOSE WITHOUT?

Our analysis shows that apparent differences exist between universities that offer coworking spaces to their members compared to those without such a space. More specifically, we observed meaningful differences regarding the university's size, specialisation, and type of funding.

Universities with a larger student body are more likely to run coworking spaces. The average student body (full-time students, including PhD students; n = 1,066 universities) of the universities in our dataset is 14,251. While universities that do not offer coworking spaces have an average student body of 11,774, universities with coworking spaces have 1.82 times more students, averaging 21,378. We see similar differences when comparing the number of academic staff (full-time employees, n = 840 universities). While the universities in our dataset have an average academic staff of 1,479 persons, universities without coworking spaces employ 1,247 academics on average, compared to an average of 2,008 academics at universities with coworking spaces. When investigating the average number of students per staff, only negligible differences are shown. With an average student-to-staff ratio of 16.26 (n = 838 universities) in our data, universities with coworking spaces (16.88) and without coworking spaces (16.45) do not differ much.

The likelihood of a coworking space emerging further depends on the specialisation of the respective university. While regular research universities (without a specific specialisation in teaching and research) account for 59% of our dataset, they host 76.9% of all coworking spaces (n = 213), followed by technical universities (10.4%; n = 29) and business schools (3.97%; n = 11). Notably, no military, sports science, or public administration universities in our dataset offer coworking spaces. Figure 3.4 depicts the distribution of coworking spaces based on university specialisation.

1.82x

larger is the average student body of universities with coworking spaces compared to universities without such a space.

Further, coworking spaces are much more likely to be established at public institutions. 29% (259 out of 892) of public universities operate coworking spaces compared to only 9% (19 out of 192) of private universities. Hence, 93.2% of coworking spaces are located at public institutions.

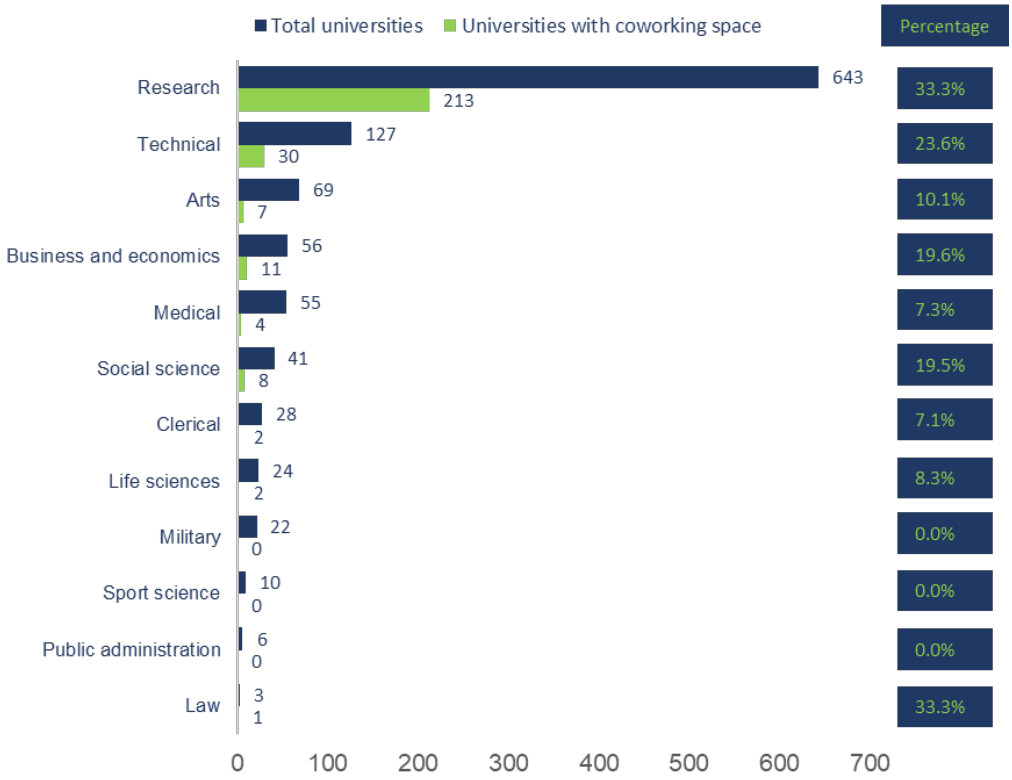

Figure 3.4: University specialisation and the establishment of academic coworking spaces.

3.2.2 THE CONNECTION BETWEEN ENTREPRENEURIAL UNIVERSITIES AND UNIVERSITY COWORKING SPACES.

In addition to the overall specialisation of the university, the entrepreneurial focus of the university is decisive for the establishment of coworking facilities on campus. To measure the entrepreneurial focus of a university, we collected data on the entrepreneurial education of universities in our dataset, either in the form of multiple courses or specific degrees[1]. 609 universities (56.2%) offer either one or both of these to students. Of those universities, 214 (35.1%) also offer coworking spaces to students. In contrast, only 63 universities that have a coworking space do not offer any form of entrepreneurial education to students.

Apart from entrepreneurial education, we investigated the co-existence of university incubators/accelerator programs and university coworking spaces. Incubators and accelerator programs both aim to leverage the entrepreneurial mindset of students by transforming hatching entrepreneurial ideas into viable business plans and startups by offering infrastructure, networking opportunities, consulting, and other support (Kollmann et al., 2019; Kolympiris & Klein, 2017). However, while university incubators assist student entrepreneurs and startups over a longer period of time, academic accelerators are usually shorter, intensive programs that develop and scale business

[1] For simplicity and comparability reasons, we chose to exclude extra-curricular entrepreneurial education, for example in the form of a summer school. Instead, we focused on long-term, in-depth entrepreneurial education, such as specialised degrees or majors.

96.8%

of university coworking spaces are found at universities that also host incubators or offer accelerator programs.

ideas over a certain period and are often aimed at more mature startups (Chowdhury & Audretsch, 2024).

Our data reveals that university coworking spaces and university-backed incubators and accelerator programs are closely connected. Figure 3.5 shows the relationship between university incubators/accelerators and coworking spaces. 96.8% of university coworking spaces are situated at universities with an incubator or accelerator program. More specifically, 499 universities in our dataset (46.8%) offer at least an incubator, accelerator, or even both. Of these universities, 268 (53.7%) also offer coworking spaces to their members. In comparison, only nine universities feature coworking spaces while not offering an incubator or accelerator. Based on our data, we see that the establishment of university coworking spaces is closely connected to the entrepreneurial university, particularly entrepreneurship education and support programs, such as incubators or accelerators. While we cannot draw causal conclusions, this emphasises the idea and importance of universities as entrepreneurial ecosystems with several complementary elements such as curricular entrepreneurship education, implementing accelerators and incubators, and providing open and creative working spaces (Kollmann et al., 2017; 2019; Sánchez, 2013).

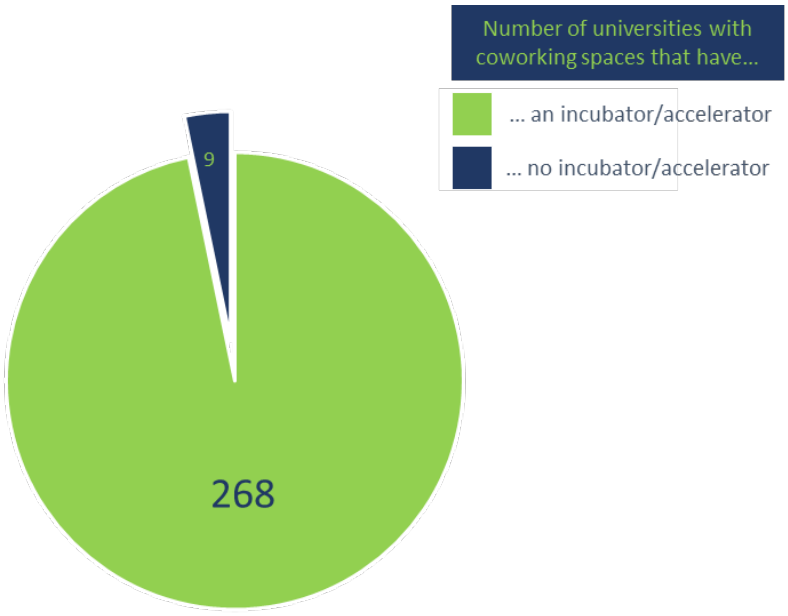

Figure 3.5: The importance of university incubators and accelerator programs for university coworking spaces.

3.2.3 WHAT DOES THE TYPICAL UNIVERSITY THAT HOSTS A COWORKING SPACE LOOK LIKE?

Our data shows that university coworking spaces are usually situated at larger universities that host an above-average number of students and researchers. Similarly, most coworking spaces can be found at universities with a more general focus and little academic specialisation. Hence, coworking spaces not only provide mere physical space for students or academics to work on their projects but also likely offer the opportunity for students and researchers from various departments to exchange knowledge, best practices, and ideas. Central functions such as innovation scouting

and entrepreneurship support can use these central places to reach out to and connect with the diverse student and staff body, sometimes even as a one-stop shop (Center for Entrepreneurship and Transfer, 2025).

The strong connection between coworking spaces and the entrepreneurial university (Guerrero et al., 2024) further signifies the role of coworking spaces as places for students and staff that are not designed for studying (in contrast to, for example, libraries) but to work on (extracurricular) projects and entrepreneurial ideas and connect with others within or outside the university. Students and researchers who aim to develop their entrepreneurial projects in incubator facilities or during accelerator programs use coworking spaces to work on their businesses, meet with their team and discuss business ideas with fellow students, researchers from various departments, or startup coaches. It also provides them with a professional environment to meet potential clients or investors, often at low or no costs for rent and other operating expenses (Bouncken 2018).

Based on our data, we can draw a contemporary blueprint of a university that is most likely to offer a coworking space to its members. Figure 3.6 visualises this prototype.

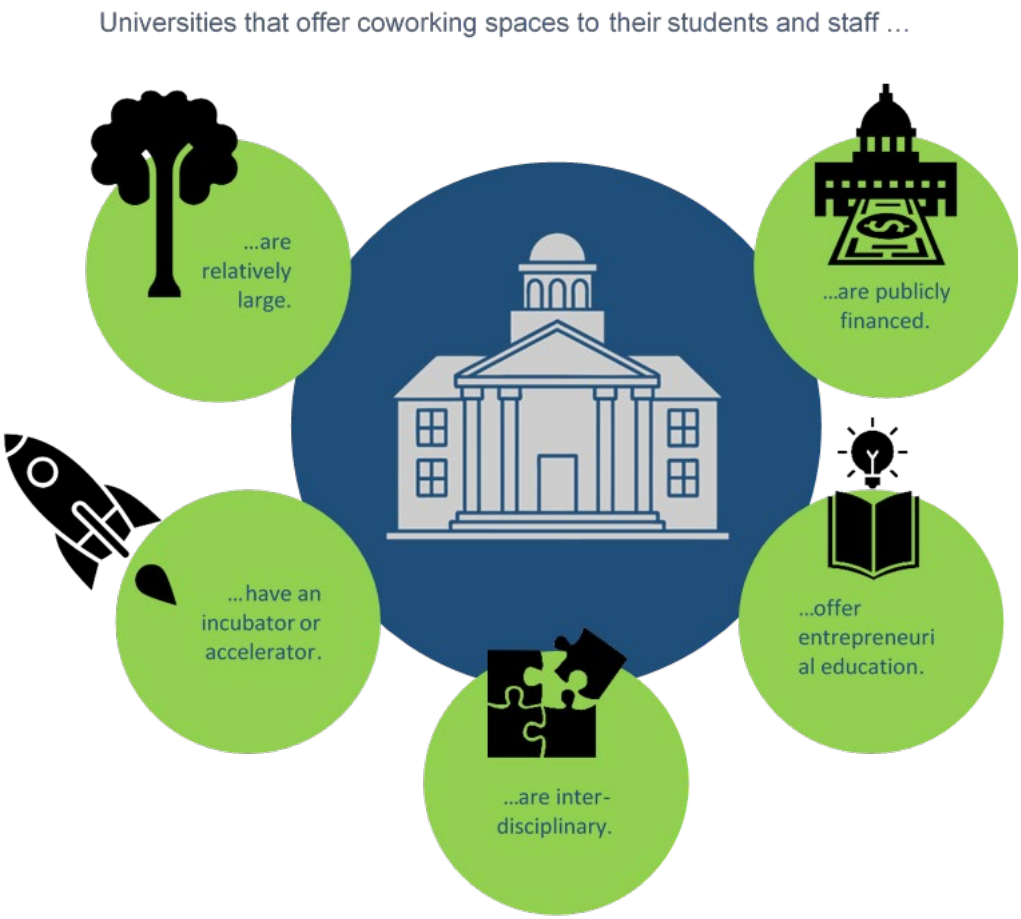

Figure 3.6: The archetypical university to host a coworking space.

This archetypical university is usually larger than an average university, especially in terms of its student and staff body. Further, it has a more general focus, offering a wide range of degrees and subject fields from various disciplines. The university is also likely

publicly funded. In addition, the archetypical university leveraging coworking has a strong entrepreneurial focus by not only offering entrepreneurship degrees and courses to students but also hosting incubator facilities and/or accelerator programs to allow students and researchers to work on entrepreneurial ideas.

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4.0 Case studies

4.1 FOUR DIFFERENT TYPOLOGIES OF UNIVERSITY COWORKING SPACES

University coworking spaces play an important role in advancing innovation and knowledge commercialisation. By exemplifying workspaces at French universities, we develop four different types of university coworking spaces and how they contribute to the entrepreneurial mission of universities, higher education, and the broader academic society.

As established in Chapter 2, university coworking spaces are more than just physical infrastructures. They represent valuable assets that embody the evolving role of universities in society. Coworking spaces are essential tools for fostering innovation, skills development, technology transfer, and knowledge commercialisation, thereby making significant contributions to the entrepreneurial goals of modern higher education institutions. Beyond their entrepreneurial potential, university coworking spaces also play a critical role in advancing innovative teaching methods, facilitating networking opportunities, fostering knowledge creation, and providing convenient resource access. Together, these functions enhance both the educational and societal missions of universities. They also contribute to the educational and societal role of universities.

Our research shows that university coworking spaces can be broadly categorised into four different archetypes: educational, technical, business, and research coworking spaces[2]. Each archetype is characterised by unique attributes that define its primary objectives, target audiences, and operational strategies[3]. By drawing on examples from selected French universities' coworking spaces, we illustrate each of these archetypes reflects a unique approach to integrating entrepreneurship, teaching, and societal mission within higher education. We continue exploring five cases of university coworking spaces from Europe to deepen our understanding of how they contribute to the multifaceted roles of modern universities.

4.1.1 EDUCATIONAL COWORKING SPACES

Educational coworking spaces emphasise innovative education and entrepreneurial skill development. The coworking space of the French inter-institutional program *Pépite* at the University of Grenoble specifically fosters entrepreneurial education by teaching methodologies such as design thinking and business modelling. Participants engage in hands-on activities, receive mentorship from academics and industry professionals, and benefit from various networking events. Further, by making prototyping tools available in collaboration with research laboratories, the space seamlessly integrates theoretical learning and practical application.

[2] Note that these four different types of coworking spaces not necessarily reflect students' imagination of university coworking spaces. We explore how students would design their ideal university coworking space in Chapter 6.

[3] Some university coworking spaces do not necessarily fall into a single category but instead represent a blend of multiple categories. A popular example from our case study is the CET at TU Dortmund University (Chapter 4.3), which serves as both a technical and business-oriented coworking space.

At the coworking space *Ubee Lab* of the University of Bordeaux, the focus expands to include fostering ventures in sustainability and environmental sciences. Through mentorship programs and access to prototyping resources, students and researchers transform innovative ideas into viable startups. Meanwhile, the coworking spaces of the *Institute d'Optique* at the Engineering School of Bordeaux extend the reach of coworking into engineering, offering tailored support for projects that require technical rigour and creativity. Many other coworking spaces further offer dedicated rooms for studying and large meeting rooms for students to tackle group assignments or work on startup projects.

These spaces demonstrate how entrepreneurial training transcends disciplinary boundaries. While *Pépite* highlights a generalist approach to entrepreneurial skill acquisition, *Ubee Lab* and the coworking space at the *Institute d'Optique* centre their activities on specific domains, underscoring the versatility of university coworking models.

4.1.2 TECHNICAL COWORKING SPACES

Technical coworking spaces are deeply rooted in the application of knowledge to solve industrial and societal challenges. The *Coh@bit IUT* at the University of Bordeaux provides cutting-edge tools such as 3D printers and robotics equipment, fostering autonomy in prototyping activities. Through certifications and tailored training, participants develop technical expertise that equips them to address pressing industry needs. Peer-to-peer exchanges and community-building events further enhance the collaborative atmosphere.

The *Lab Boite CY* at the CY Cergy University in Paris aligns technical innovation with regional industrial priorities, enabling students and researchers to co-create solutions with industry partners. Similarly, the *Fab Lab CY* at the same university emphasises community-driven approaches, where collaborative projects are bolstered by access to advanced prototyping tools and regular technical workshops.

At the *Fab Lab MSTIC* of the University of Grenoble Alpes in Grenoble, the focus shifts towards applied sciences and research-driven innovation. Participants utilise advanced prototyping facilities to address challenges in renewable energy, healthcare, and advanced materials. The integration of certification programs with real-world applications ensures that technical training translates into impactful outcomes.

These spaces reflect the shared emphasis on bridging academic expertise with industrial applications. Whether in the context of student projects at *Coh@bit IUT* or large-scale regional collaborations at *Lab Boite CY*, technical coworking spaces create pathways for technical innovation to thrive across diverse contexts.

4.1.3 BUSINESS COWORKING SPACES

Business coworking spaces are designed to commercialise academic expertise and support startup ventures. The *IBRIC* Technological Platform at the University of Bordeaux offers professional incubation services, enabling startups to leverage university-developed tools and expertise. By facilitating partnerships between businesses and academic labs, the platform ensures that innovative solutions are effectively brought to market.

At *La Turbine*, also at CY Cergy University in Paris, the focus broadens to include both deep-tech and general startups, offering a versatile model of incubation and commercialisation.

These spaces illustrate how entrepreneurial universities actively engage with the private sector to maximise the societal impact of their research. By providing structured pathways for commercial success, *IBRIC* and *La Turbine* contribute to economic development while reinforcing the university's role as a knowledge hub.

4.1.4 RESEARCH COWORKING SPACES

Research-focused coworking spaces leverage university research excellence to facilitate technology transfer and deep-tech spin-off firms. For example, the *Biopolis* at the University of Grenoble Alpes supports researchers in translating breakthroughs in molecular biology and pharmaceutical sciences into real-world applications. Equipped with advanced tools and offering specialised training on entrepreneurship, intellectual property, and patenting, the space ensures that innovations are protected and positioned for commercial success.

The AI labs of the Bordeaux Artificial Intelligence Area at the University of Bordeaux focus on artificial intelligence development, fostering collaborations between academic researchers and industry partners. This space provides the resources and environment necessary to create cutting-edge AI solutions, bridging fundamental research with market demands.

These spaces highlight the strategic role of research-focused coworking in turning academic discoveries into societal benefits. While *Biopolis* emphasises life sciences, the AI labs demonstrate how computational advancements can be harnessed for industrial and technological progress.

French university coworking spaces, across all four typologies, exhibit a remarkable ability to adapt to the specific needs of their users and contexts. Educational spaces like *Pépite* and *Ubee Lab* emphasise entrepreneurial skill development, preparing students to tackle challenges across disciplines. Technical spaces such as *Coh@bit IUT* and *Fab Lab MSTIC* emphasise hands-on prototyping and industrial applications, while research spaces like *Biopolis* and the AI labs drive high-level technology transfer. Commercial

spaces such as *IBRIC* and *La Turbine* highlight the commercial potential of university research, bridging the gap between academia and the marketplace.

Together, these coworking spaces form a cohesive ecosystem that advances the entrepreneurial missions of universities. They not only prepare students and researchers to meet contemporary challenges but also position universities as pivotal players in innovation, regional development, and global economic competitiveness. We will now take a closer look at each type of university coworking space through five in-depth case studies from universities in Czechia, Germany, The Netherlands, and Switzerland that we have conducted through a combination of on-site visits, interviews, and questionnaires (see Appendix A for the sample questionnaire).

4.2 EDUCATIONAL SPACE: IDEA FAIR, PRAGUE UNIVERSITY OF ECONOMICS AND BUSINESS, PRAGUE, CZECHIA

The Idea Fair at Prague University of Economics and Business blends thoughtful interior design, multifunctionality, and flexibility by offering students and staff a dedicated space to study, work, and network. Situated right at the heart of the university, Idea Fair provides users with a variety of shared workspaces, meeting rooms, and thoughtful amenities that allow for productive individual and group work. Frequent events allow for vivid exchanges between students, researchers, and industry professionals. This way, it thoughtfully integrates the original coworking principles into an academic environment.

4.2.1 BACKGROUND

Overview. The Idea Fair of the Prague University of Economics and Business (Vysoká škola ekonomická v Praze, VSE) in Prague, Czechia, opened in 2024 and provides modern and collaborative coworking facilities for VSE students, researchers, and staff.

Access. To meet students' needs to work on their school projects or entrepreneurial ventures after classes, the Idea Fair is open from 8:00 am to 9:30 pm from Monday to Friday. It is directly on campus in the heart of VSE and easily accessible for all students. The space is generally open to VSE students and staff, as well as external individuals upon invitation.

Design and physical setup. The Idea Fair is a prime example of the current shifts in educational approaches and workspace dynamics. Hence, it offers a compelling model of how educational institutions can foster innovation through spatial design and dedicated community management. The Idea Fair supports the idea that both individual and collaborative work is particularly effective in academic settings, creating an environment where personal productivity and group collaboration coexist.

Space Insights

Want to learn more about Idea Fair? Here is the link! *coworking.vse.cz/english/*

you can also check out their profile on the EACN and book your visit: *eacn.network/spaces/75*

Hence, the Idea Fair offers multiple zones to users that cater to both individual and group needs, including a main coworking area (Photo 4.1) with single and group desks, as well as dedicated PhD corners (Photo 4.2.) that aim to enhance collaboration and mutual learning and support between the PhD students of VSE.

Photo 4.1: Idea Fair's main coworking area

Most workstations in Idea Fair, except the meeting rooms, are non-reservable, ensuring fair desk allocation and spontaneous interaction. The colour scheme is held in natural, warm colours. Wooden furniture and finishes complement this design and allow coworkers to work in a calming and natural environment.

Photo 4.2: Idea Fair's PhD corner

Key features. Most of Idea Fair's workspace consists of workstations of all kinds (e.g., single desks and group tables, or various seating arrangements such as regular chairs, lounge chairs, sofas, benches, or high chairs. In addition, the meeting rooms host technical equipment, allowing groups to work on mutual assignments or projects and pitch ideas or hold presentations. While designed as a large open space, high curtains

allow students to spatially separate certain areas of Idea Fair. This effectively reduces visual and auditive distraction if the space is highly frequented. Modern vending machines offer students affordable hot and cold drinks, as well as small snacks throughout the day. Additional meeting rooms (Photo 4.3) allow students to work intensively on group assignments.

Photo 4.3: Idea Fair's meeting rooms

4.2.2 SPACE ACTIVITIES

Successful coworking spaces facilitate social learning and knowledge exchange through formal and informal interaction. Idea Fair implements this notion and provides dedicated social events, such as regular evening programs and cultural events, such as book swaps. The openness of the space and Idea Fair's community to newcomers further leads to frequent informal interaction and knowledge sharing. This approach represents a departure from traditional academic spaces, as it actively encourages interaction between different academic constituencies through both spatial design and operational policies.

4.2.3 SUCCESS STORIES

Most significantly, Idea Fair's success in integrating coworking principles within an academic context offers valuable insights for other institutions seeking to enhance their learning environments. The space's regular operational reviews and feedback mechanisms align with research on successful coworking space management (Bouncken, 2023; Cabral & Van Winden, 2016). Through its thoughtful balance of structure and flexibility, individual needs, and community building, Idea Fair exemplifies how universities can create spaces that not only support academic work but actively support it through community engagement and collaborative opportunities—both between students and scholarly personnel.

4.3 TECHNICAL AND BUSINESS SPACE: CENTRE FOR ENTREPRENEURSHIP, TU DORTMUND UNIVERSITY, DORTMUND, GERMANY

The Centre for Entrepreneurship's coworking space at TU Dortmund University is specifically tailored for students and researchers who aim to build a startup or work on their entrepreneurial ideas. Aside from providing dedicated workspace, coworkers have access to a variety of tools and consultation services and can attend regular networking events and workshops to enhance their entrepreneurial space. Later, stage-startups have the opportunity to rent dedicated private offices for their startup team at an affordable rate. This first case study gives an in-depth overview of the Centre for Entrepreneurship and its coworking space.

4.3.1 BACKGROUND

Overview. The coworking space at the Center for Entrepreneurship (CET) at TU Dortmund University in Dortmund, Germany, was established as part of the expansion of the CET in 2019 after being awarded the status of an "Excellence Start-up Center" of the federal government of North-Rhine Westphalia. In the course of this award, the CET received 14.2 million Euros to finance and staff a dedicated startup centre (within five years?). With 34 staff members and about 1,800 sqm of space, the CET offers not only various services, workshops, tools, and machines tailored specifically for startups but also a dedicated coworking space, as well as affordable private team offices for later-stage startups. Its coworking space is, hence, mainly aimed at student or researcher entrepreneurs and startups. Aside from providing workspace, the space also serves as a platform for various workshops during the day and opens its doors to various stakeholders during evening networking events.

4.3.2 SPACE DESIGN AND AMENITIES

Access. The CET's facilities are right on TU Dortmund University campus. It forms the centre of the CET and has extensive opening hours throughout the entire week, allowing students to work weekends on their projects or researchers to spend the afternoon and evening working on their startups.

Design and physical setup. The CET's workspace is roughly divided into two functional zones: The open CoWorkingSpace and the enclosed FocusSpace. The work zone features high-quality single desks and group tables that allow coworkers to work intensely on individual and group work projects. It also features a networking area with lounge areas as well as a coffee corner for coworkers to engage in informal conversation or relax during work. A total of 25 coworkers can work simultaneously within this area. If the CET hosts larger events, the whole coworking space is converted

Space Insights

Learn more about the CET: *cet.tu-dortmund.de/en*

or directly book your visit on the EACN: *eacn.network/spaces/2*

14,200,000

Euros awarded for the status of "Excellence Start-up Centre"

25

seats for coworkers in the CET's CoWorkingSpace

into a large single event space in the case of larger events, for example, pitches or networking evenings. Photos 4.4 and 4.5 depict the CoWorkingSpace within the CommunitySpace.

Photo 4.4: Workplaces within the CoWorkingSpace. The coffee corner and lounge area are seen in the back of the picture.

Photo 4.5: The CoWorkingSpace before an event in the CET. The seating is arranged so that it functions as an event space.

The colour scheme follows the TU Dortmund University primary colours of green and white but also features various black and orange colour nuances. Furniture is mostly crafted out of wood and steel, giving the space a high-quality, modern look and providing users with a warm and welcoming atmosphere. This is particularly present in the FocusSpace (Photo 4.6). In the FocusSpace, coworkers have the chance to work alone or in groups and want to have more privacy compared to the open space, for example, in the case of investor or client meetings or confidential talks on business ideas and technology. Here, a group table with four monitors and docking stations, as well as various office equipment like whiteboards and flip charts, are available.

Photo 4.6: The FocusSpace

Key features. While the main feature of the CommunitySpace is the provision of workspace for nascent entrepreneurs and startups, the coworkers are entitled to use all other amenities of the CET. These amenities include a makerspace with various tools, such as 3D printers and scanners, as well as metal- and wood-cutting tools for physical prototyping. Sewing machines and plotters also allow the processing of textile materials. High-performance computers and VR equipment allow coworkers to engage in digital prototyping. Further, a fully-equipped media studio with cameras, microphones, and multiple computers to edit and cut photos and videos allows students to create image films, product videos, and advertisements for their projects. A podcast studio allows students to record their own podcasts to market their business or just for fun to try out an idea. Photo 4.7 shows the makerspace facilities of the CET. Coworkers further benefit from free coffee, water, and beverages in the shared kitchen facilities. A large open space with standing tables allows them to pitch their business ideas and exchange with like-minded peers.

Photo 4.7: A small glimpse into the makerspace facilities of CET's coworking area.

4.3.3 SPACE ACTIVITIES

Services. As a startup-focused space, CommunitySpace's coworkers have access to a variety of services. The 34 dedicated staff members not only cater to the space but also assist coworkers with intellectual property protection and legal advice. Further, they help entrepreneurial students and researchers find co-founders for their startups. Coworkers further have access to dedicated assistance for finding investors and venture capital, and with the *TU capital GmbH*, the CET can provide funding to support innovative startup ideas and early-stage startups.

Aside from providing dedicated consulting, as well as legal or funding assistance, coworkers have access to various workshops both by CET staff or external trainers. This includes workshops on business modelling, entrepreneurial project management, and training on business-related topics for coworkers with a non-business background. These trainings include marketing, finance, and HR. Further, the CET provides workshops on various soft skills, such as presentation skills and leadership. Various programs further focus on entrepreneurs or industries, including initiatives for female founders and entrepreneurs in the field of architecture and spatial planning.

Events. Specialised networking events in the evening give CommunitySpace's coworkers the opportunity to engage with local corporations and other startups, as well as researchers and students. These events enhance establishing connections to corporations and their support and potential funding, as well as market the coworkers' startup ideas and products. Further, the exchange with researchers and students provides them with fresh input on their ideas and also to recruit potential co-founders or staff. For example, shortly after attending a networking event in the CommunitySpace, students regularly start working as working students at the CET's startup and continue to work there after they have finished their studies.

34

staff members cater to CET startups and coworkers.

4.3.4 IMPACT AND FUTURE PROSPECTS

Success stories. Several startups worked and thrived in CET's CommunitySpace. One prime example is Logistikbude. This startup enables digitalised real-time tracking of reusable carrier materials such as pallets and containers, reducing waste and costs. Logistikbude originated at the Fraunhofer Institute for Material Flow and Logistics IML close to CET's premises and was awarded the "Digital Startup of the Year" award of the German Federal Ministry for Economic Affairs and Climate Action in 2024. The team of Logistikbude frequently uses CET's coworking facilities. Another startup, Valoon, provides efficient communication and documentation tools for building, construction, and management companies in the real estate sector. It is a joint effort of the CET and the Fraunhofer Institute for Software and System Engineering. Valoon was awarded the TU Startup Awards in the CET with prize money granted by the Wilo Foundation in 2023.

Want to learn more about Logistikbude and Valoon?

Find them here:

Logistikbude:
www.logistikbude.com/en

Valoon:
www.valoon.chat/en

Plans for the future. The CommunitySpace, along with other CET facilities, has relocated to a new, more central position on campus in late 2024. This move brings the coworking space closer to students, increasing awareness of CET's facilities and making it easier for student entrepreneurs to access a dedicated workspace immediately after their classes to develop their ventures. In addition, the new venue and its location enable a further deepened connection to the rectorate of the TU Dortmund University due to its physical location nearby.

Looking ahead, CET plans to strengthen collaboration with nearby universities, including Ruhr University Bochum and the University of Duisburg-Essen. Initiatives such as the EACN network aim to provide students from all three partner universities with reciprocal access to each other's coworking spaces, offering them the opportunity to work in diverse environments and benefit from shared resources.

4.4 BUSINESS SPACE: THECO: UNIVERSITY OF ST. GALLEN, ST. GALLEN, SWITZERLAND

TheCO at the University of St. Gallen is a student-driven initiative that provides flexible workspaces and event areas tailored for students and the local community. Beyond the workspace, it hosts community-building events fostering collaboration and networking. TheCO's play an important role in bridging academic and community interests in the local St Gallen community, creating a shared space where students and residents students, industry professionals, researchers, and locals to discuss during podium discussions, learn at research talks, or simply connect during after-work drinks.

4.4.1 BACKGROUND

The coworking space TheCO at St. Gallen University in St. Gallen, Switzerland, is a prime example of a university student-led coworking initiative. The coworking space offers flexible office options and event spaces for university students and the local St. Gallen community, bringing together stakeholders from academia, local businesses, and the public.

4.4.2 SPACE DESIGN AND AMENITIES

Access. Located off-campus but right in the city centre of St. Gallen, it connects university life with the broader local community. Further, it is conveniently accessible by foot and public transport. Open to all students to study or work on group projects, TheCO is accessible from Monday to Friday from 8:00 am to 5:00 pm and extended access from 6:00 am until midnight on all days of the week for students who complete an online introduction course. A front desk is staffed on weekdays during working hours to assist users. However, not many people who have a connection to the university are using it.

Space Insights

You can check out more about theCO here: *infrastructureinitiative.ch/theco*

or check their EACN profile: *eacn.network/spaces/73*

150

people can simultaneously work in TheCo.

Design and physical setup. On 840 square meters, TheCO emphasises a modern and welcoming environment that is adaptable for both individual studies as well as group work and has space for up to 150 students. Large windows provide natural light, and several kinds of workstations meet the different needs of the students. The space is designed to support focus and comfort, and the lounge areas add a casual and social atmosphere. Besides the open space, TheCO has a separate meeting room, which can be reserved upon request. Photo 4.8 shows TheCO's thoughtful workspace design.

Photo 4.8: The design concept of TheCO

Photo 4.9: TheCO's main workspace area

Key features. TheCO offers a range of 13 standard desks designed for groups of up to eight people, six flexible desks, and several high desks, accommodating various work styles and group configurations. For focused individual work, there are eight dedicated single-person workstations, along with a meeting room that seats ten coworkers. The lounge and lunch corner provide a casual space for breaks and informal gatherings, while the fully equipped kitchen, complete with a communal table for ten, adds a warm, community-oriented touch. Photo 4.9 depicts some of TheCO's workspaces and desks.

AfterWorkly

events allow students and coworkers to come together and exchange.

Amenities at TheCO are thoughtfully curated to enhance productivity and comfort. These include a phone booth for privacy, a snack machine, and a terrace for outdoor breaks. Coffee and tea stations are available for convenience, and essential tools such as screens, whiteboards, and printers support both collaborative work and presentations. The lounge and meeting room underscore TheCO's versatility, making it a vibrant hub suited to individual tasks and group interactions alike.

4.4.3 SPACE ACTIVITIES

Events. TheCO hosts a range of events that support learning and community engagement. Regular events include *AfterWorkly* gatherings open to students and coworkers and provide a regular exchange, occasionally based on seasonal events (e.g., Christmas AfterWorkly), as well as *theTALK*, a podium discussion with alumni of St. Gallen University once a semester. These events promote interaction, knowledge sharing, and a collaborative environment.

Collaborations. Partnerships with local businesses and the university provide financial support and amenities, enhancing the coworking experience. For instance, a local partner sponsors drinks for events, and the University of St. Gallen assists with renting out the space's building.

4.4.4 IMPACT AND FUTURE PROSPECTS

Success stories. TheCO is well-regarded by students and provides one of the few campus-affiliated locations open on weekends, making it a valuable resource.

Plans for the future. Looking ahead, plans include adding a second phone booth and expanding to an additional space during exam periods, which will support greater access and accommodate more students during critical study times.

4.5 BUSINESS SPACE: STARTUP COMMUNITY: NHL STENDEN UNIVERSITY OF APPLIED SCIENCES, LEEUWARDEN, THE NETHERLANDS

The Startup Community coworking space at NHL Stenden University of Applied Sciences supports student entrepreneurs in the creative industry by providing a thoughtfully designed environment with flexible access, tailored coaching, and collaborative opportunities. Located in an off-campus business centre, it fosters productivity and creativity through dedicated workspaces, bi-weekly events, and partnerships with entrepreneurial growth but also helps retain talent in the region, with plans for continuous improvement through research and new collaborations.

4.5.1 BACKGROUND

Overview. The Startup Community coworking space, affiliated with the Academy for Media, Commerce, and Entrepreneurship of NHL Stenden University of Applied Sciences, is situated in a vibrant business centre off-campus. This location hosts a mix of media businesses, startups, incubators, and educational initiatives, offering a unique ecosystem for collaboration. The coworking space specifically supports student entrepreneurs in the creative industry during their graduation internships, fostering a symbiotic relationship between academia and entrepreneurship. Photo 4.10 shows students working inside Startup Community's coworking space.

Photo 4.10: Students working in Startup Community of NHL Stenden.

4.5.2 SPACE DESIGN AND AMENITIES

Access. The coworking space is situated in an off-campus business centre. It is available exclusively to selected student entrepreneurs in the creative industry who can use the space to complete their graduation internships for a duration of up to nine months. Regular students or externals cannot use the coworking space, and it is open to the entrepreneurial community of NHL Stenden. Students who were granted access to the space benefit from year-round access from 6:00 am to 10:00 pm, enabling them to work on their entrepreneurial projects full-time and even before and after class.

Physical setup and key features. The Startup Community coworking space spans three offices in total, each designed to meet the various work styles and collaborative needs. An open coworking area offers thirteen desks to students in a 66-square-meter area. They are designed as flex desks, operating after the first-come-first-serve principle. Here, students can work on their projects and also openly exchange ideas or challenges during their work. A quiet room spanning 28 square meters offers another five flex desks to students. Here, students can engage in concentrated work, unbothered by potential noise in the main coworking area. Finally, a community room offers a variety of amenities to students that help them relax during or after work but

123

square meters of total workspace for student entrepreneurs

also allows for informal business meetings. On 48 square meters, student coworkers can find four additional flexible workstations, as well as a lounge area, a meeting table, a fridge and have the option to play table tennis.

Key features. Amenities include complimentary coffee and tea, high-speed Wi-Fi and ethernet connections, and access to a podcast studio upon request. These features enhance the space's appeal for student entrepreneurs. Photo 4.11 shows a typical setup of the workstations of Startup Community; the space's lounge area is depicted in Photo 4.12.

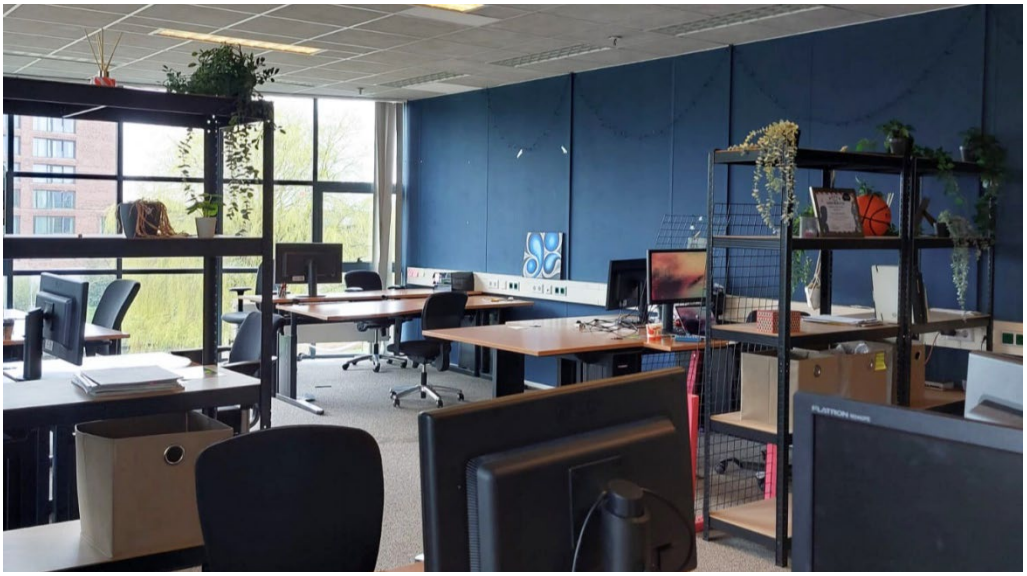

Photo 4.11: Workspaces in the Startup Community.

Photo 4.12: The lounge area of Startup Community.

4.5.3 SPACE ACTIVITIES

Services. The Startup Community provides members with tailored business coaching opportunities as well as sophisticated peer-mentorship sessions. Each student entrepreneur who has access to the space is paired with a business coach who guides him through the 9-month program. Bi-weekly "Meet & Work" sessions facilitate

collaborative problem-solving and knowledge exchange among coworkers, coaches, and externals. These sessions include structured programs featuring mastermind talks, hotseat discussions, and guest speaker events.

Events. Community-building activities are integral to the coworking experience of the Startup Community. The “Meet & Work” events often include shared meals and networking opportunities, fostering a supportive community. Periodic guest lectures and interactive workshops further enrich the entrepreneurial ecosystem. For example, the Startup Community team regularly asks what the tenets would like to learn more about and invite guest speakers based on their wishes. Further, NHL Stenden graduates are regularly invited to talk about their time in the Startup Community, as well as about their successes and challenges. This provides helpful advice to students and inspires them to give their best during their time in the Startup Community.

Collaborations. Startup Community collaborates with *mooiedingenmakers* (Dutch for *makers of pretty things*), a regional network of creative freelancers. This partnership provides student entrepreneurs with access to an online platform to showcase their entrepreneurial projects. The Startup Community’s coworking space is fully supported and funded by NHL Stenden. Both the space’s rent and staff costs are covered solely by university means.

4.5.4 IMPACT AND FUTURE PROSPECTS

Success stories. The Startup Community has successfully combined graduation requirements with entrepreneurial growth, leading to enhanced productivity, creativity, and motivation among its users. Many participants attribute their improved business outcomes to the coworking environment. Additionally, the initiative contributes to regional talent retention by encouraging international students to remain in the area post-graduation.

Plans for the future. Looking ahead, NHL Stenden is committed to enhancing the coworking experience by conducting research and fostering new partnerships. The focus remains on continuous improvement to better support the evolving needs of student entrepreneurs. Additionally, the Startup Community program will be refined with a more structured approach. This will include weekly participant reports to their supervisors and regular meetings to ensure entrepreneurs receive comprehensive and consistent support.

Curious?

Find out more about the startup community here: creativebusinessclub.nl

Or use the EACN to book your visit and drop by: *eacn.network/spaces/5*

4.6 RESEARCH SPACE: BAYWA COWORKING SPACE, TU MUNICH, FREISING-WEIHENSTEPHAN, GERMANY

Established as a dynamic hub for innovation, the BayWa CoWorking Space aligns with the university's mission to cultivate entrepreneurial thinking and interdisciplinary research among students, researchers, and startup founders. It serves as a vibrant community workspace that promotes both academic and entrepreneurial growth, particularly in the life sciences and technologies related to agriculture and food, by uniting creative thinkers from various disciplines, fostering collaboration and idea exchange. By providing access to specialised tools, professional networks, and a diverse range of events, it is poised to become a pivotal player in advancing university-affiliated innovation and developing sustainable solutions to address global challenges.

4.6.1 BACKGROUND

Overview. Launched in July 2023, the BayWa CoWorking Space aims to invigorate innovation and entrepreneurship within the life sciences sector. This vibrant and flexible space is designed to foster collaboration, offering over 35 workstations tailored to the diverse needs of students, researchers, and startups. Thoughtfully integrated into an existing university building, the coworking space embodies sustainable principles while cultivating a "living room" atmosphere where users can work, brainstorm over coffee, utilise whiteboards, or simply connect with each other.

Functioning as a dynamic meeting point, the BayWa CoWorking Space serves as a central hub for the life sciences community of TU Munich (TUM). Recognising a previous lack of foundational startup support, TUM created this area to welcome students, scientists, and early-stage projects. Users now have a dedicated space to develop their ideas, collaborate, and participate in events such as industry workshops and hackathons. The space can also host scientific conferences of up to 100 participants, expanding its role as a platform for interdisciplinary knowledge exchange.

By integrating the coworking space into the broader TUM Venture Labs network—specialised entrepreneurial centres aimed at driving subject-specific innovation—this facility serves as both an introduction to entrepreneurship and a functional workspace for users to pursue their projects. This active environment aligns with TUM's mission to create an engaging ecosystem that nurtures academic and professional innovation, establishing the BayWa CoWorking Space as a cornerstone for sustainable advancements in the life sciences.

Did you know?

BayWa, after which the coworking spaces is named, is a Bavarian company operating in the energy, agricultural, and construction sector. Learn more about it here: www.baywa.com/en

35-40

seats are available for coworkers in the open space.

4.6.2 SPACE DESIGN AND AMENITIES

Access. BayWa CoWorkingSpace is accessible to all TUM students, researchers, and staff, as well as external startups and industry partners, through events and collaborative initiatives. This multi-user setup encourages interaction between university members and professionals, creating opportunities for knowledge-sharing and potential partnerships.

The space's access model is designed for flexibility, with no fees for TUM members and tailored cost arrangements for external users, ensuring an inclusive environment for everyone in the university community. For students, the coworking space presents a unique opportunity to network with industry professionals and fellow entrepreneurs. Researchers, on the other hand, gain exposure to early-stage startups, promoting the cross-pollination of ideas between academia and industry.

Design and physical setup. The BayWa CoWorking Space, situated in a repurposed lecture hall, spanning two floors across approximately 420 square meters, balancing sustainability with functionality. The layout supports a variety of work styles: open-plan desks accommodate individual tasks, while collaborative areas, such as meeting rooms, are ideal for teamwork and group interaction. The open space area of BayWa is depicted in Photo 4.13. To promote privacy and focused discussions, soundproof meeting cabins provide a quieter atmosphere, creating a productive balance between individual concentration and dynamic exchange.

420

square meters of space in the coworking area

Photo 4.13: the open workspace area of BayWa CoWorking Space.

The upper floor features an event area with a bar and coffee station, facilitating both formal events and casual networking. This setup enhances the space's versatility, making it an ideal spot for workshops, presentations, and impromptu gatherings. It also offers a comfortable, welcoming environment that encourages spontaneous interactions and connections. Throughout the space, the use of natural materials and adaptable

furnishings highlights a sustainable and community-oriented design aimed at inspiring creativity and fostering meaningful collaboration.

Key features. Unlike typical university workspaces, which can feel sterile, the BayWa CoWorking Space is intentionally designed to be inviting, vibrant, and visually stimulating. Bright and thoughtfully decorated, the environment fosters creativity and makes the space a genuinely enjoyable place to work. This positive ambience, combined with practical features, flexible layouts, and cosy communal areas, sets the coworking space apart from conventional academic settings.

Key features include flexible desks that can be rearranged to suit individual or group needs, while mobile whiteboards and writable walls promote quick ideation and collaboration. Additionally, “flex offices” provide spaces for smaller groups to work in privacy, allowing uninterrupted focus.

For tasks that require privacy or concentration, the coworking area includes soundproof “mute boxes.” These cabins are ideal for phone calls, virtual meetings, and other tasks that benefit from quiet and privacy, ensuring that both collaborative and individual needs are met.

Situated on an upper level reached by a spiral staircase, lounge areas are designed for informal gatherings and larger community events. With comfortable seating, a coffee station, and beer taps that pay homage to the regional brewing culture, the lounge adds to the space’s unique character. It’s a setting where both planned events and spontaneous meetups happen, fostering a relaxed environment that encourages networking and conversation.

Space Insights

Find out more on BayWa CoWorking Space here: *www.tcf.tum.de/en/facit/baywa-co-working-space/offer/*

4.6.3 SPACE ACTIVITIES

Services. Beyond its versatile workspaces, the coworking space offers users access to TUM's state-of-the-art makerspace, equipped with advanced tools like a 3D printer, laser cutter, and waterjet cutting machine, all designed to support creative processes and technical development for startups. The space also includes three soundproof “mute boxes” for focused, private work and a dedicated “Pitch Area” for pitch preparation and presentations—an ideal setting where teams can refine and showcase their ideas.

Additionally, the coworking space provides strong support through TUM’s startup advisory services, where a dedicated team assists entrepreneurs with business model development, planning, and technology evaluation. Regular events connect startups with industry experts who offer insights and guidance on a wide range of topics, ensuring that users have access to valuable support as they grow their ventures. This combination of cutting-edge resources and expert mentorship creates a dynamic environment for innovation and entrepreneurship at TUM.

Events. A cornerstone of the BayWa Coworking Space is its dynamic event program, crafted to connect students, startups, and industry experts in an atmosphere of

knowledge-sharing and collaboration. These diverse events foster learning and innovation across disciplines.

Designed to ignite creative problem-solving, hackathons bring together multidisciplinary teams to tackle real-world challenges through intensive collaboration. The flexible workspace supports brainstorming, rapid prototyping, and refining of ideas, empowering teams to develop and present innovative solutions.

Further, industry workshops and networking events aimed at bridging academia and industry focus on partnerships with startups and founders to address forward-thinking challenges. Topics like sustainable agriculture and food technology foster cross-disciplinary dialogue, giving students and entrepreneurs direct insights into current trends and industry needs.

These community-oriented events, such as Fab Talks and open house days, invite the public to explore ongoing innovation at TUM, offering a look into research projects, sharing insights, and highlighting the university's contributions to life sciences and technology.

Last, scientific conferences centre on key areas of innovation and emphasise the role of BayWa CoWorkingSpace role as a research-focused coworking space. These conferences connect scientific advancements with practical applications, facilitating meaningful exchanges between researchers and practitioners and driving impactful solutions.

Collaborations. Collaboration forms the foundation of the BayWa Coworking Space, creating an environment where innovative ideas thrive through partnerships across academia, industry, and startups. Actively engaging diverse stakeholders, including research institutions and established companies, the space facilitates impactful projects that drive meaningful progress. Recent collaborations have brought together industry leaders to discuss sustainability in agriculture, offering startups valuable insights and giving established firms a fresh perspective.

4.6.4 IMPACT AND FUTURE PROSPECTS

Success stories. Despite being operational for just a year, the coworking space has already achieved significant engagement, with startups like Koralo Foods emerging as success stories. This sustainable food technology startup is making strides in creating plant-based seafood alternatives using microalgae, aligning with TUM's commitment to promoting sustainable innovations in life sciences. The success of the coworking space has been bolstered by a series of impactful events, including high-profile talks that have attracted industry leaders and experts. For instance, a recent talk by a top executive from Dr. Oetker drew considerable interest, while the space also hosted a notable presentation by Prof. Mark Post, a prominent scientist from the Netherlands known for his pioneering work in cellular agriculture.

Interested in Koralo Foods?

Learn more about them here: koralo-foods.com/

Plans for the future. The BayWa Coworking Space is focused on enhancing accessibility, technology, and user experience to drive collaboration and innovation further. Upcoming developments include the implementation of a digital access system to streamline entry and facilitate easier, secure access for users. In response to feedback, TUM also plans to increase the number of digital workstations, adding more screens and docking stations to meet the growing demand for accessible tech resources. To support focused work and private discussions, additional soundproof "mute boxes" will be introduced, providing quiet spaces amidst the collaborative environment. For improved aesthetic appeal and functionality, the coworking space will undergo enhancements such as soundproofing the main office areas and incorporating decorative elements that contribute to a comfortable and inspiring environment. Notably, a movable maypole centrepiece—symbolising community and growth—will serve as a gathering point, encouraging informal discussions and spontaneous collaborations among users.

To foster engagement and streamline communication, digital touch boards will be added to provide access to startup profiles, enhancing information flow within the space. TUM aims to strengthen the community atmosphere with these upgrades, supporting its mission to create a vibrant, accessible ecosystem where academic and entrepreneurial minds can thrive. As these developments are realised, the coworking space is expected to attract even more users, reinforcing its role as a cornerstone in TUM's commitment to advancing life sciences, food technology, and sustainable agriculture.

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5.0 The European Academic Coworking Network

5.1 ABOUT THE EUROPEAN ACADEMIC COWORKING NETWORK

The European Academic Coworking Network (EACN) aims to connect university coworking spaces in Europe. By joining the EACN, university coworking spaces grant their university's members, for example, students and staff, the possibility to access a workplace in one of the EACN member spaces free of charge. The network thus improves academic mobility and exchange by not only providing a dedicated place to work at universities around Europe but also leveraging inter-university knowledge exchange and collaboration among students, researchers, and other academic staff.

The need for establishing a network connecting university coworking spaces arises from several factors, depicted in Figure 5.1.

Figure 5.1: Factors that lead to the need for the European Academic Coworking Network (EACN).

12

university coworking spaces are already members of the EACN (February 2025). Want to register yours? Sign up at www.eacn.network.

Academic mobility. The increasing importance of academic mobility in education and research (European Commission, 2020) requires universities to provide flexible workplaces not only to their own members but also to visiting students and scholars. As universities strive to internationalise their study programs and research activities, the availability of dedicated yet familiar and easy-to-access work environments across universities becomes crucial.

Tackling complex challenges. Global issues such as climate change, public health crises, political friction between nations, and technological disruptions require collaborative efforts that transcend institutional and national boundaries.

Efficient resource utilisation. Budget constraints in many universities across Europe require optimising the use of physical spaces (Moriset, 2019). Further fuelled by the COVID-19 pandemic that led many universities to shift to a blend of physical and digital learning practices, leading to many physical spaces being less occupied.

Exchanging best practices. A dedicated academic coworking network offers a platform for sharing know-how and best practices in the academic field (Mariotti et al., 2017). An open international network of universities provides a platform for exchanging innovative ideas, studying best practices, as well as successful university-related management strategies.

To address these needs, the EACN was established as part of the project Cowork4EU. The network represents a significant step towards creating a more interconnected and collaborative academic environment across Europe. Its primary objective is to create a workspace network analogous to *eduroam*, the inter-institutional internet service that provides university students with freely accessible Wi-Fi in most universities in Europe and beyond, even if students are not directly affiliated with the respective institution. *Eduroam* has revolutionised internet access for academics across institutions (Klaas & Licia, 2005). Building upon this concept, the EACN aims to enable university members, such as students and researchers, to use physical coworking spaces at EACN member universities free of charge. Hence, the EACN aims to facilitate a seamless experience for academic coworkers across Europe, ultimately transforming the landscape of academic coworking and collaboration.

Previous research by Bouncken and colleagues (2020) has demonstrated that coworking spaces significantly enhance collaboration and knowledge sharing among diverse groups of academics and professionals. Gerdenitsch and colleagues (2016) further posit that such spaces boost productivity and creativity through social support and networking opportunities, for example, among researchers, students, entrepreneurs, and corporate professionals. Moreover, Del Bosco and colleagues (2019) and Orel and Bennis (2020) highlight the potential for academic coworking spaces to serve as incubation facilities for student and faculty entrepreneurship, a function that could be even more enhanced by encompassing the academic coworking

spaces of single universities under an umbrella network, allowing for efficient knowledge flows between coworking spaces and their users.

With all this in mind, the creation of the EACN further aligns with the European Union's goals for academic mobility and collaboration as outlined in the European Education Area initiative (European Commission, 2020). Additionally, it responds to the growing recognition of the importance of *third spaces* in academia—areas that bridge formal and informal learning and working environments (Poutanen et al., 2019). These spaces play a crucial role in fostering innovation ecosystems within university settings, bridging the gap between academia and industry (Rese et al., 2020).

5.2 THE EACN PURPOSE AND STRUCTURE

The EACN is a digital platform to connect university coworking spaces with university members (e.g., students, researchers, or other staff). The platform enables you to view and learn about university coworking spaces in Europe and book a workplace at one of the EACN partner spaces free of charge. Apart from offering free workspaces across Europe, the EACN eases academic mobility and increases knowledge exchange, cultural learning, and collaboration among university members.

The current structure (and ideated plan for further development in the future) of the EACN is based on a decentralised model, where participating institutions retain autonomy over their university coworking spaces while benefiting from the integration into a larger, interconnected network. Hence, the EACN architecture is designed to strike a balance between institutional independence and the collective advantages of network participation. The EACN's nucleus is a central digital platform that functions as the nexus between users (i.e., university students, staff, and researchers) and workspace providers (i.e., university coworking spaces, incubators, and other open-space and managed workspaces at universities).

The digital platform enables users to book a free workspace at selected EACN member spaces around Europe. When a workspace becomes a member, it automatically unlocks the entire EACN network for members of its university. Accordingly, only students, researchers, and staff from universities with an EACN member space can become network users. Each EACN member space must offer at least one seat of their workspace to other EACN users. Despite this limitation, the decentralised nature of the network emphasises the continuing autonomous governance each institution has over its space. This approach aligns with the principles of distributed leadership in higher education, which has been shown to enhance institutional adaptability and innovation (Jones et al., 2012). Each member space thus has the freedom to accept or decline

bookings, establish house rules for space visitors, and pause or revoke its membership at any point in time.

Aside from providing mere workspace for students and staff of EACN member institutions, the network aspires to forge a new paradigm of academic mobility and collaboration across Europe. Through the removal of obstacles between universities and the facilitation of easy access to shared workspaces, the network seeks to foster a more unified and harmonious European academic community. The latter aligns with the concept of "networked internationalisation" in higher education, which emphasises the importance of inter-institutional connections in fostering global academic engagement (de Wit & Altbach, 2021). Over and above that, the EACN is positioned as a catalyst for the evolution of university workspaces. It fosters the interchange of creative ideas on workspace design, management techniques, and the incorporation of coworking principles into academic environments by establishing connections between disparate institutions. This cross-pollination of ideas sparks transformative innovations in how universities conceptualise and utilise their physical spaces, echoing the principles of "learning landscapes" in higher education (Ellis & Goodyear, 2016).

The network aims to put the European Union's objectives for academic mobility and collaboration into practice (European Commission, 2020). With the charted aim of providing the essential physical infrastructure to support mobility, the EACN complements and enhances existing programs such as Erasmus+, contributing significantly to the realisation of a European Education Area. It aligns with the EU's vision of creating a “European University” ecosystem, where seamless mobility and collaboration are the norm rather than the exception (Gunn, 2020). In parallel, the EACN also aims to generate valuable data on patterns of academic mobility and collaboration. This rich dataset could inform policy decisions at both institutional and EU levels, contributing to evidence-based approaches in fostering academic collaboration and mobility. The potential of such data-driven decision-making in higher education policy has been highlighted by recent research, suggesting it can lead to more effective and targeted interventions (Ifenthaler, 2021).

5.3 NETWORK FEATURES AND COMPOSITION

The digital platform of the EACN allows workspaces and users to create their own profiles. Workspaces interested in joining the network can create an in-depth space profile that includes various information on their space. A map depicts university coworking spaces of EACN members as well as non-member spaces. Further, a dedicated booking feature allows for easy and convenient booking processes of a workplace in one of the EACN member spaces.

The digital EACN platform is the pivot point for all network activities, enabling users to seamlessly view and book workspaces at EACN partner universities while empowering workspace managers to efficiently oversee their spaces and process booking requests. The implementation of the EACN incorporates several key features meticulously designed to enhance user experience, ensure robust security, and promote judicious resource management.

One key aspect of the platform is its user registration system (see Photo 5.1). Students, researchers, staff, and workspaces can register using their institutional email addresses, a measure that ensures only affiliated members can access the network, aligning with best practices in academic resource sharing, maintaining the integrity of the network while facilitating broad access (Margolis et al., 2019). The registration process not only serves as a gatekeeper but also as a means of creating a sense of community and shared responsibility among users.

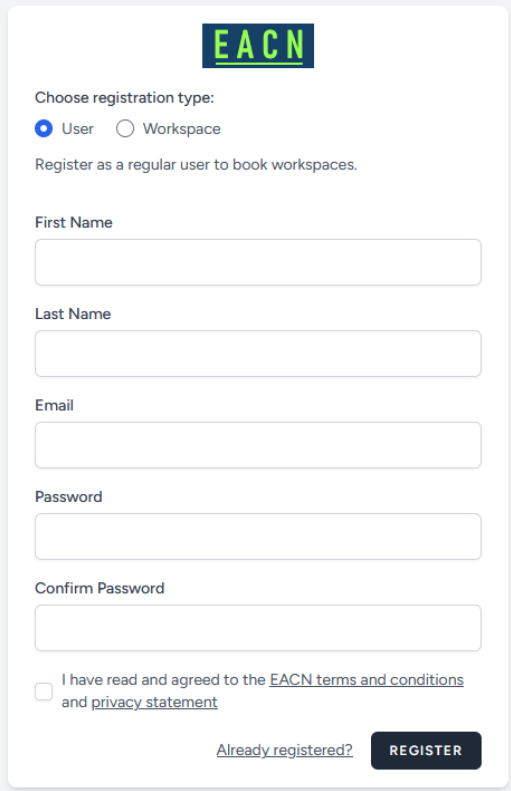

Photo 5.1: The EACN registration form for university members and workspaces.

The workspace listing feature forms another crucial component of the EACN platform. University workspace managers can add their coworking spaces, incubators, and other managed workspaces to the network, providing comprehensive information about amenities, capacity, location, opening hours, address and contact information, a logo, and photos (see Photo 5.2). This detailed listing empowers users to make informed decisions about which workspace best suits their needs, potentially increasing user satisfaction and resource utilisation efficiency (Mariotti et al., 2017). Moreover, this feature serves as a virtual showcase for institutions, potentially fostering a spirit of healthy competition in workspace quality and innovation across the network.

A key technical feature is the addition of e-mail domain endings. This allows coworking space managers to unlock network membership for all individuals, that possess an e-mail with the chosen domains. By adding their university domain, managers hence grant access to the EACN to the university's students, researchers, and staff.

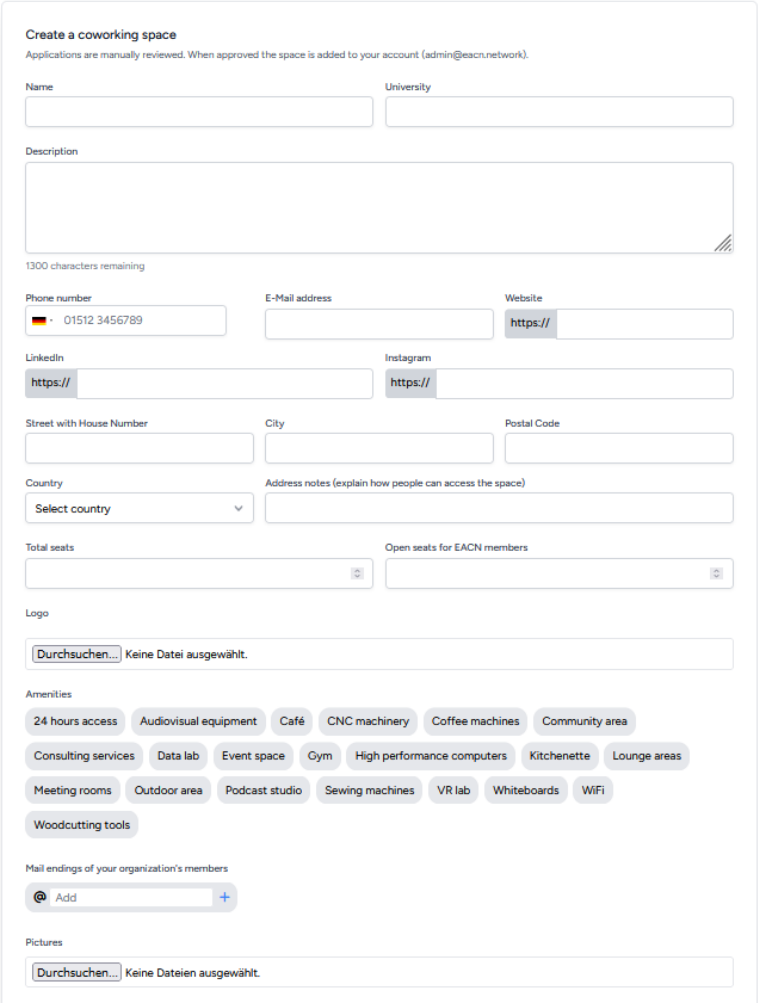

Photo 5.2: Mask which is used by the space managers to provide information about their space.

Upon successful creation and double-checking by the EACN's admin team, the workspace is added to the EACN map that displays all member spaces of the EACN, as well as spaces that are yet to be claimed by the respective space managers (see Photo 5.3).

Users can view EACN member spaces close to their current location and filter coworking spaces depending on their specific needs (e.g., 24/7 access or the existence of a 3D printer). When selecting a coworking space, a short description of the space along with key facts (address, opening hours, description, and amenities) appears. If users want to learn more about the space, a link within this short description redirects them to the detailed page of the space that includes all information previously added by the workspace manager (see Photo 5.4).

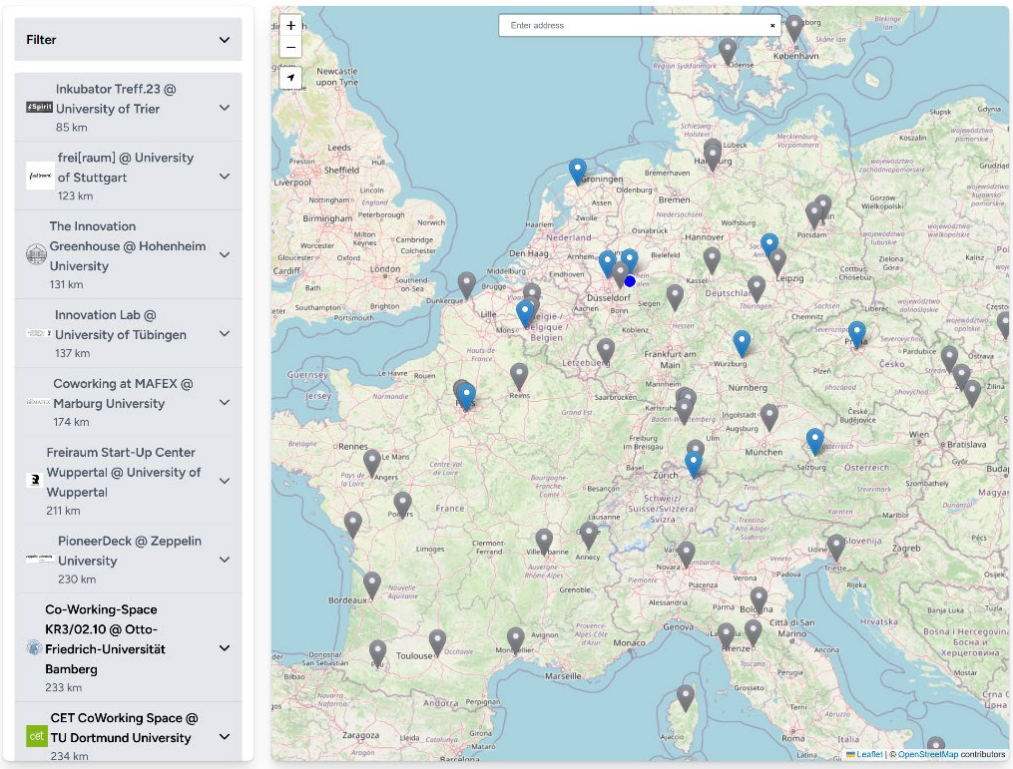

Photo 5.3: Map and list that provides an overview of university coworking spaces, that are either member spaces (blue) or yet unaffiliated spaces (grey).

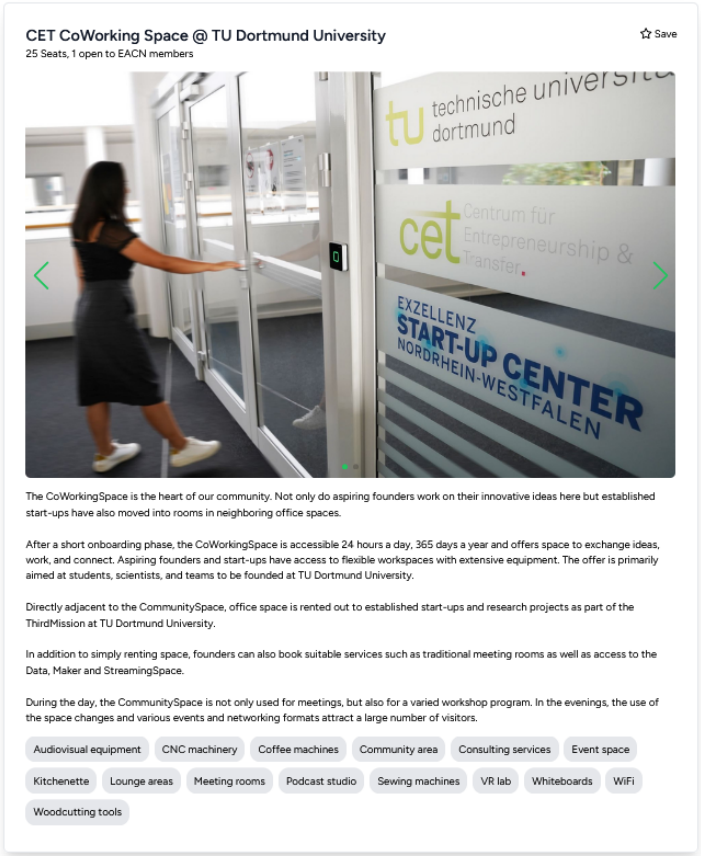

Photo 5.4: Detail page of an EACN member space, here the coworking space of the Centre for Entrepreneurship at TU Dortmund University.

On the detail page of the space, the users can further access the booking system that allows them to select a date and time they wish to access the space and send a booking request to workspace managers (see Photo 5.5.). In turn, the system allows managers granular control over their resources. They can set operating hours, manage closures,

and control the booking approval process. This feature provides the flexibility to accommodate local needs and schedules, which is crucial given the diverse nature of academic institutions across Europe (Moriset, 2014). The ability to tailor workspace availability to institutional needs ensures that the EACN can adapt to the unique rhythms and requirements of each participating university.

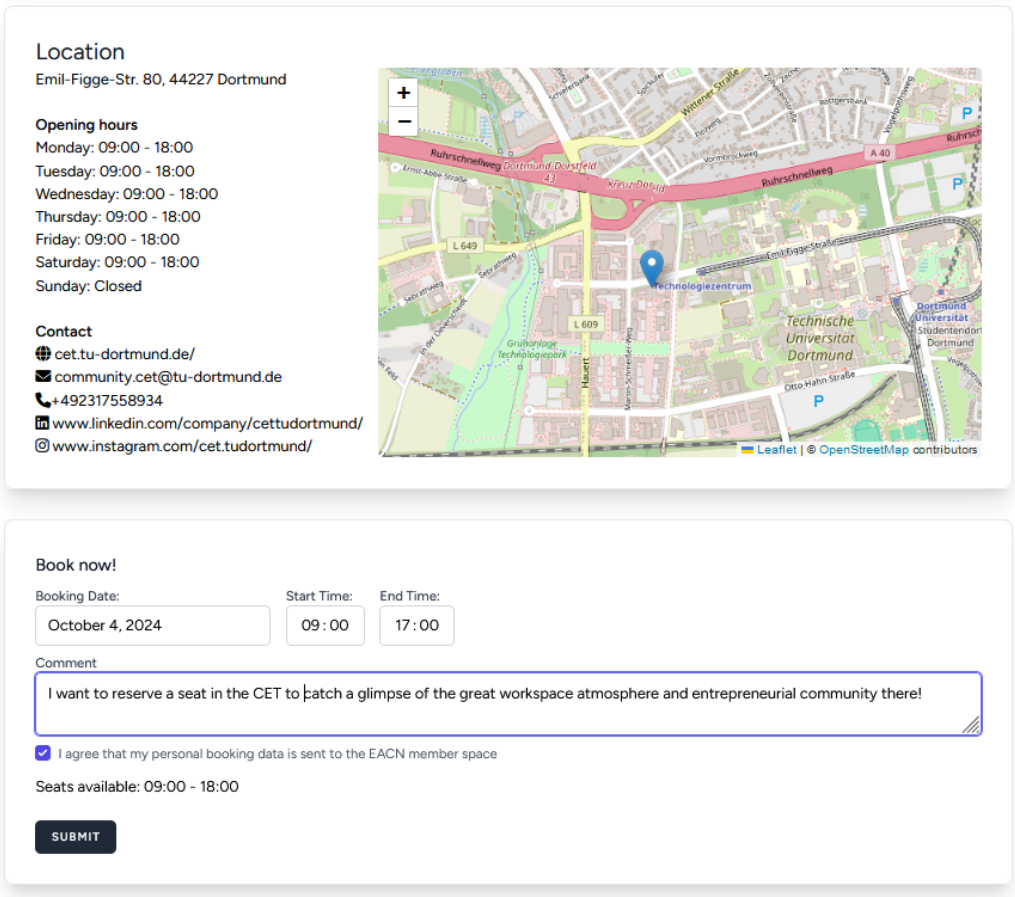

Photo 5.5. Booking a seat at an EACN member space, here the coworking space at the CET at TU Dortmund University.

5.4 PREDICTED OUTCOMES AND CHALLENGES OF THE EACN

The establishment of EACN is anticipated to yield several positive outcomes for the academic community while simultaneously presenting a series of challenges that will need to be addressed as the network evolves. On the one hand, the EACN improves academic mobility across Europe, optimises space utilisation and design, and provides an opportunity to collect data on academic collaboration. On the other hand, network access to less-funded and smaller institutions needs to be ensured. Also, the EACN needs to tackle the rising reliance on digital communication, establish strict guidelines regarding intellectual property, and develop KPIs to measure its success.

5.4.1 PREDICTED OUTCOMES

Enhancement of academic mobility. One of the primary expected benefits of the EACN is the significant enhancement of academic mobility across Europe by reducing barriers to workspace access across universities (European Commission, 2020). This has the potential to foster more diverse collaboration and knowledge exchange in the European academic world. It is essential to acknowledge the widespread use of digital tools (e.g., video conferencing and chat systems) that can largely replace physical mobility (Archibald et al., 2019), raising the question of whether investments and resource allocation to physical infrastructure align with the trajectory of academic collaboration in the digital age. Yet, aside from providing workspaces for academics across Europe, the EACN aims for international exchange, such as the Erasmus+ staff and student mobilities. Thus, it has the potential to initiate fruitful international cooperation, such as novel research collaborations among researchers or alliances among student entrepreneurs.

Efficient utilisation of university spaces and offerings. Another anticipated benefit of the EACN is the efficient utilisation of existing workspace resources within and across institutions (Moriset, 2014). With low-threshold access to shared facilities, universities may experience higher utilisation rates of their spaces, equipment, and other offerings. However, this sharing model could potentially lead to challenges in managing peak demand periods and ensuring that local students and staff are not displaced by visitors (Waters-Lynch & Potts, 2017). Yet, this is efficiently countered by the high autonomy retained by the EACN member spaces, as they can block certain periods from bookings and limit the number of seats available to EACN visitors. Interestingly, EACN pilot member spaces saw an increase in bookings from their own university members, who used the website as a first, easy-to-use touchpoint.

A common standard for academic coworking spaces. The standardisation of academic coworking practices across Europe is another expected outcome of the EACN, potentially leading to improved user experiences and more effective space management (Mariotti et al., 2017) due to increased transparency and visibility. However, the pursuit of standardisation must be balanced against the risk of stifling local innovations or failing to account for specific institutional or cultural needs. The network will aim to balance between establishing common standards and allowing for local adaptations to ensure its success across diverse academic contexts.

Data collection and analysis. Finally, the data generated by the EACN could provide valuable insights into patterns of academic mobility and collaboration, informing future policy decisions (Gandini, 2015). As this data collection and analysis raises important ethical considerations regarding privacy and the appropriate use of such information in academic settings, the EACN will need to establish clear guidelines and robust safeguards to protect user privacy while still leveraging the data for beneficial purposes.

5.4.2 PREDICTED CHALLENGES

Ensuring network access to smaller and less-funded institutions. One significant hurdle will be ensuring equitable access and participation across institutions of varying sizes and resource levels. Smaller or less well-funded institutions may struggle to provide comparable facilities or to support their members' participation in the network, potentially exacerbating existing inequalities in the academic landscape (Czaika & Toma, 2017). To address this challenge, the EACN might consider implementing a tiered membership system or a resource-sharing model. This could involve larger institutions partnering with smaller proximate ones to provide access to facilities or the development of a centralised fund to support participation from less-resourced institutions. Additionally, virtual participation (think of virtual coworking) options could be explored to reduce the financial burden of physical travel and accommodation.

Handling the increased reliance on digital communication. Adapting to the rapidly evolving nature of work and collaboration in academia is another challenge faced by the EACN. The COVID-19 pandemic has accelerated trends towards remote work and virtual collaboration, and the EACN will need to continuously reassess its value proposition in this changing environment. This may involve integrating digital collaboration tools alongside physical spaces or developing hybrid models that can accommodate both in-person and remote participants. To address the challenge of integrating remote and in-person collaboration, the EACN could adopt a pragmatic "hybrid-light" approach. This would involve equipping each physical coworking space with basic, cost-effective video conferencing tools such as a large screen, webcam, and microphone, enabling remote participants to easily join in-person meetings. Complementing this hardware solution, the network could develop a simple, user-friendly web portal that aggregates existing collaboration tools and resources. This portal would serve as a central hub for scheduling, resource sharing, and communication, making use of virtual conference tools that are already used in many institutions. By focusing on these accessible and immediately implementable solutions, the EACN can create an inclusive environment that bridges the gap between physical and virtual collaboration without requiring significant upfront investment.

Establishing strict guidelines on intellectual property rights. The EACN will further need to navigate the complex landscape of intellectual property rights and knowledge sharing across institutions. As researchers from different universities collaborate within shared spaces, clear guidelines are necessary to manage the ownership and dissemination of research outputs. To address these concerns, the EACN could develop a comprehensive intellectual property framework that outlines clear guidelines for collaborative work. This might include the use of Creative Commons licenses, the establishment of joint ownership agreements, or the creation of a neutral "collaboration space" where intellectual property is shared equally among participants. The network

could also provide training and resources on intellectual property management to ensure all participants are well-informed about their rights and responsibilities.

Measuring the success of the EACN. Finally, the long-term sustainability of the EACN will depend on demonstrating tangible benefits to participating institutions and securing ongoing funding. This will require robust evaluation mechanisms to measure the network's impact on academic productivity, collaboration, and innovation (Cabral & van Winden, 2016). To ensure long-term viability, the EACN could implement a multi-faceted evaluation framework that captures both quantitative and qualitative impacts. This might include tracking the number and quality of collaborative research outputs, measuring increases in grant funding for participating institutions, and assessing improvements in student and faculty mobility. The network could also conduct regular surveys and interviews to gather rich, qualitative data on the experiences of participants. Furthermore, the EACN could explore diverse funding models, including public-private partnerships, membership fees, and grant applications, to ensure financial stability.

5.5 WHAT LIES AHEAD FOR THE EUROPEAN ACADEMIC COWORKING NETWORK?

The EACN is a young and continuously evolving network of university coworking spaces. It has the potential to strongly impact the mobility of students, researchers, and university staff across Europe. For this to happen, however, the EACN needs to continue to accrue partner coworking spaces at universities all across the continent. Further, it needs to be strongly promoted both at partner institutions and in the broad public and has to ensure positive user experiences when using the EACN platform and during visits of EACN users at partner spaces.

5.5.1 THE FUTURE OF THE EUROPEAN ACADEMIC COWORKING NETWORK

A pivotal element in the network's future is the number and diversity of participating institutions. The EACN's value proposition is directly tied to the breadth and depth of its network, necessitating a critical mass of participating universities to provide sufficient coverage and options for users across Europe. This involves achieving a balanced geographic distribution, including a mix of institution types, and implementing proactive strategies to encourage wider participation. As the network grows, its value to each member increases, potentially creating a virtuous cycle of growth. However, this also means that early growth is crucial and potentially challenging.

Equally important is the rate of user adoption and engagement. The network's success ultimately depends on active use by students, researchers, and staff. This requires developing and monitoring key performance indicators, implementing regular feedback mechanisms, and creating strategies to encourage ongoing use. It's crucial to identify

and address factors that might hinder adoption, such as lack of awareness, technical difficulties, or cultural barriers. Recognising that different user groups may have different needs and usage patterns is also essential, allowing for tailored engagement strategies.

Maintaining a consistent, high-quality user experience across diverse institutions is another critical factor for the network's success and reputation. This involves developing and implementing network-wide standards for workspace quality, conducting periodic quality audits, and facilitating the exchange of knowledge and best practices among workspace managers. A system for continuous improvement based on user feedback and emerging trends in workspace design and management should be implemented. While maintaining consistency, some flexibility should be allowed to accommodate local institutional and cultural norms.

The technical reliability and user-friendliness of the booking platform are vital. This encompasses ensuring robust infrastructure to handle peak loads and minimise downtime, prioritising intuitive, user-friendly design across all devices, and conducting regular technical audits and user experience studies. Given the international nature of the network, the platform should support multiple languages and consider integration capabilities with other systems to enhance user convenience. Implementing robust data collection and analysis capabilities will be crucial to inform decision-making and demonstrate the network's value to stakeholders.

Consistency in workspace quality across the network presents a unique challenge, given the diverse nature of participating institutions. Regular quality assessments will be necessary, but these must be balanced with respect for institutional autonomy and local practices. Facilitating knowledge sharing among workspace managers could help in establishing and maintaining consistent standards while allowing for local adaptations.

5.5.2 CONCLUDING THOUGHTS

The EACN represents a significant leap forward in connecting academic workspaces across Europe. By facilitating free access to university coworking spaces at partner universities, the EACN has the potential to revolutionise academic mobility, foster unprecedented cross-institutional collaboration, and optimise the use of workspace resources in ways previously unimaginable. As the network grows and matures, continuous evaluation of its impact and effectiveness is crucial to achieving these ambitious goals. The potential benefits of the EACN are multi-faceted. For example, a doctoral student from Barcelona could seamlessly find a dedicated workspace to continue her research while on travels in Amsterdam without the need to navigate unfamiliar administrative processes or incur additional costs of renting a desk in a commercial coworking space. Similarly, a student entrepreneur from Lisbon could emerge in the local start-up scene of the coworking space of a university incubator in Munich and foster knowledge exchange and even potential collaboration.

To fully understand and maximise the benefits of the EACN, studies on the network's effects are necessary. Such studies could provide invaluable insights into the network's impact on academic collaboration, mobility, and resource utilisation. For example, quantitative analysis of booking data can reveal fascinating patterns of academic movement across Europe, potentially identifying emerging hubs of collaboration or highlighting underutilised resources. Qualitative research involving interviews and focus groups with users and workspace managers is equally crucial. These studies could uncover the nuanced experiences of academics using the network, revealing unexpected benefits or challenges. Bibliometric studies could provide concrete evidence of the EACN's impact on cross-institutional collaborations and publications. In contrast, economic analysis would be essential to evaluate the impact on resource utilisation and potential cost savings for institutions by optimising the use of existing workspaces and reducing the need for redundant facilities.

As we look to the future of the EACN, it's clear that its potential extends far beyond simply providing shared workspaces. The network can reshape academic culture, foster innovation, and drive the internationalisation of European higher education. It could play a crucial role in breaking down institutional silos, promoting knowledge exchange, and creating a truly integrated *European Research Area*. However, realising this potential will require ongoing commitment, adaptation, and innovation from all stakeholders involved. The EACN must remain responsive to the evolving needs of the academic community, continuously refining its offerings and expanding its reach. It should and must also navigate the complex landscape of European higher education, balancing the diverse needs and expectations of institutions across different countries and cultures.

As we conclude, we are left with a profound question that will shape the future of this ambitious initiative: How can the EACN not only meet the current needs of the academic community but also anticipate and drive the future of academic work and collaboration in an increasingly interconnected world?

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6.0 Academic coworking from the students' point of view

6.1 THE JOINT COWORKING COURSE

The coworking course is one of the four project outcomes of Cowork4EU. The course teaches students the concept of coworking while enhancing their entrepreneurial skills, tasking them to develop a coworking space concept specifically designed for universities. The course ran for four terms in the academic years of 2023 and 2024. The highlight of each course edition was a two-day trip to a project partner university's city. There, students of each partner university met in a coworking space and worked in international groups on their coworking space concepts and presented them in front of a diverse audience consisting of students, lecturers, coworking space managers, and coworkers. In this chapter, the contents of the coworking course are presented, and a short overview of each course edition is given.

6.1.1 AIMS OF THE JOINT COWORKING COURSE

Cowork4EU's joint coworking course aimed to provide students with the opportunity to engage in innovative learning activities outside the regular classroom, as well as give them the chance to engage in international teamwork. Further, the course emphasised the real-world application of entrepreneurial methods and innovative thinking by allowing students to design an innovative coworking space concept. Key objectives of the course included:

Fostering interdisciplinary and international collaboration. By working in mixed international teams, students from diverse cultural and academic backgrounds developed vital cross-cultural communication and teamwork skills essential for the global economy.

Promoting experiential learning. The course provided students with opportunities to explore real-world coworking spaces, interact with stakeholders, and engage in collaborative projects. This approach helped bridge the gap between academic learning and practical application.

Developing entrepreneurial and creative competencies. Through designing coworking spaces tailored to academic contexts, students honed their skills in business modelling, creative problem-solving, and innovation management.

Encouraging the use and acceptance of university coworking spaces. A key aim was to increase students' awareness and utilisation of university coworking spaces, showcasing their potential as hubs for creativity, collaboration, and entrepreneurship.

6.1.2 COURSE DESIGN AND PROCEDURE

The coworking course was designed to teach students the dynamic structures of coworking spaces, as well as strengthen their skills in physical and virtual international teamwork, business modelling, as well as presenting, and academic writing. To adequately address all course aims, the course consisted of three main phases that are depicted in Figure 6.1.

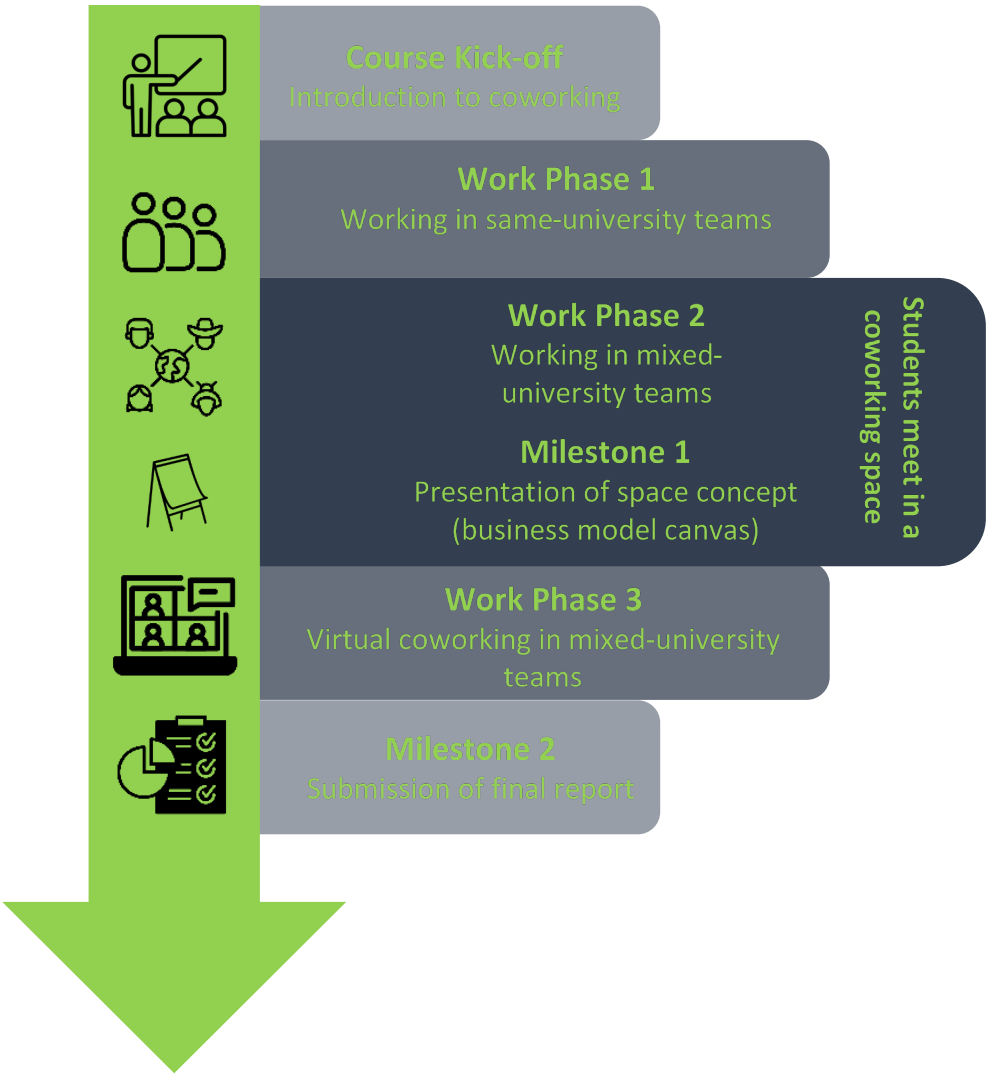

Figure 6.1: Procedure of the coworking course.

After an initial kick-off that served as a short introduction to the historical and theoretical background of coworking, as well as provided a detailed overview of the course procedure, the first course phase began. It had two objectives. First, digital online lessons in the form of narrated videos taught students the theoretical backgrounds of coworking, virtual collaboration, business modelling, and multicultural teamwork. Second, students needed to conduct short, informative interviews with coworking space managers from both commercial providers and, if available, university coworking

spaces. The collected information was transcribed and summarised to be presented in the second course phase.

The second phase started with two intense on-site days where students from all four partner universities met in a coworking space in one of the partner universities' (neighbouring) cities. This travel activity was financially supported by Erasmus+ travel grants. The presence days were marked by highly intense group work. After forming new international teams, students presented their findings from the interviews from the first group phase. Equipped with these insights on coworking, as well as the knowledge gained through the teaching videos, students developed a concept of an ideal coworking space in an academic environment based on the business model canvas (Osterwalder & Pigneur, 2010). They needed to include all fields of the business model canvas and address five guiding questions:

GQ1: What is the overall strategy of your coworking space, and how should it be designed?

GQ2: How will the space be financed and staffed?

GQ3: How will you manage the space itself, the community of users, and other stakeholders?

GQ4: How could the space be integrated into a network of academic coworking spaces?

GQ5: To which of the United Nations Sustainable Development Goals (UN SDGs) could the space contribute? How could the space and network achieve these goals?

The concepts were presented in front of a diverse audience, including students, professors, coworking space managers, and coworkers. These presentations regularly accounted for 50% of the course grade.

After returning to their home countries, students continued to work virtually in their international teams and created an in-depth report on their coworking space concept. To do this, they made heavy use of virtual communication tools, as well as worked together in dedicated virtual coworking spaces. Hence, students gained the experience of both physical and virtual coworking. The student reports were submitted online and accounted for the other 50% of the course grade.

Space Insights

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6.1.3 THE COURSE EDITIONS DURING THE COWORK4EU PROJECT

1st Edition: Prague, Czechia (April to May 2023). The first course took place in the summer term of 2023. After the initial teamwork in teams from the same universities and the virtual learning phase, 40 students from the partner universities met in Prague in the coworking space *Pracovna* on April 24th and 25th. Czech for "study room", *Pracovna* is a small space situated right in the city centre of Prague. It is connected to a café and provides ca. 30 workplaces across two stories for its coworkers. It also features an event space, a small outdoor terrace, and a podcast studio.

The students used an interactive game to form eight international teams and started working on their business models for the ideal academic coworking space, inspired by the open and collaborative work atmosphere of *Pracovna*. The results were presented in front of the Cowork4EU team, as well as the host and some coworkers of Pracovna. The international teams continued to work virtually after returning to their home countries. Using the information from the presentation and feedback from the audience, they crafted in-depth reports that elaborated their business model for a university coworking space.

Photo 6.1: Group picture from the first Cowork4EU *course edition in Prague, April to May 2023.*

The student concepts included coworking spaces with a focus on well-being and mental health that are designed to be a safe space that can be used by students to talk about their feelings and struggles, for example, during their studies. Other teams focused on innovation, drafting spaces that are equipped with various machines and tools that are used by the students to create prototypes and models, and sharing design and business ideas. Another team presented a franchise solution for university coworking spaces across Europe that aimed to provide a common coworking space standard for university members (similar to Fab Labs) that are connected by a network, allowing for free entry for all network members (similar to Cowork4EU's EACN).

Space Insights

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www.bluebird.space

2nd Edition: Salzburg, Austria (October to November 2023) In October and November 2023, the second edition of the course took place. After working in the first course phase at the respective home universities, 34 students met in Salzburg in *bluebird.space* in Salzburg, Austria, from November 2nd to November 4th. *Bluebird.space* is a high-end coworking space near Salzburg's startup hub, *Panzerhalle*. Across two stories, it features high-end private offices, as well as fixed and flex desks, a workshop room, two modern kitchens, and a rooftop terrace, allowing for panoramic views of the Austrian Alps. Among freelancers and employees of regular companies, it also serves as the company office of multiple small and medium-sized enterprises, as well as the Austrian satellite location for international companies.

The coworking course kicked off on the evening of November 2nd with a get-together of the students, the Cowork4EU team, and the management of *bluebird.space*. In a relaxed atmosphere, students formed their teams for the upcoming days. On November 3rd, seven student teams worked on their university coworking space business concepts, making use of *bluebird.space*'s amenities and office equipment. The day ended with a mutual self-paid dinner in a restaurant in Salzburg city centre. On the morning of November 4th, students presented the first drafts of their business model concepts in front of the team and the space management. As in the first course edition, students used the content from the teamwork, and the feedback from the team to draft detailed case study reports in the following virtual team phase.

Photo 6.2: Participants of the second Cowork4EU course edition in Salzburg, October to November 2023.

In the second round of the Cowork4EU course, the coworking space concepts included micro coworking concepts in central downtown locations that provide students with places to work not only on their campus but also near their residences. Students also created business models for coworking spaces with a focus on collaboration between corporations, startups, and students that aims to span the boundaries across organisations and ecosystems. Further, students designed hybrid coworking spaces

Success Stories

After participating in the course a student from Seeburg Castle Private University started working in the management team of bluebird.space!

Photo 6.3: TU Dortmund University students (+ supervisor) on the rooftop terrace of bluebird.space.

Curios?

Curios about Agora? A workspace there is bookable for free for EACN members!
eacn.network/spaces/3

Photo 6.4: Students of the third edition of the coworking course on the outdoor terrace of Paris School of Business's Agora in April 2024.

that offer coworkers the opportunity to work both in the real and virtual worlds. A team developed a virtual coworking space for this purpose.

3rd Edition: Paris, France (April to May 2024) The third coworking course took place in April and May 2024, peaking in the presence days at the coworking space *Agora* at the campus of Paris School of Business. *Agora* is situated right in the middle of the Paris School of Business, serving as a pivot point for students to study or work on their projects. Apart from workstations for individual and group work, the space includes a café and kitchenette, lounge areas, an event space, an outdoor area, and recreational facilities such as video games and table tennis.

After forming teams on the morning of April 24th, 32 students worked together in seven teams using the workstations and amenities of Agora. Again, they created concepts for ideal coworking spaces at universities. The initial concepts were presented to the Cowork4EU team and selected PSB faculty on April 25th. Students continued to work together virtually (see Photo 6.5), making use of the virtual coworking space that was created by a team of the second course edition in Salzburg.

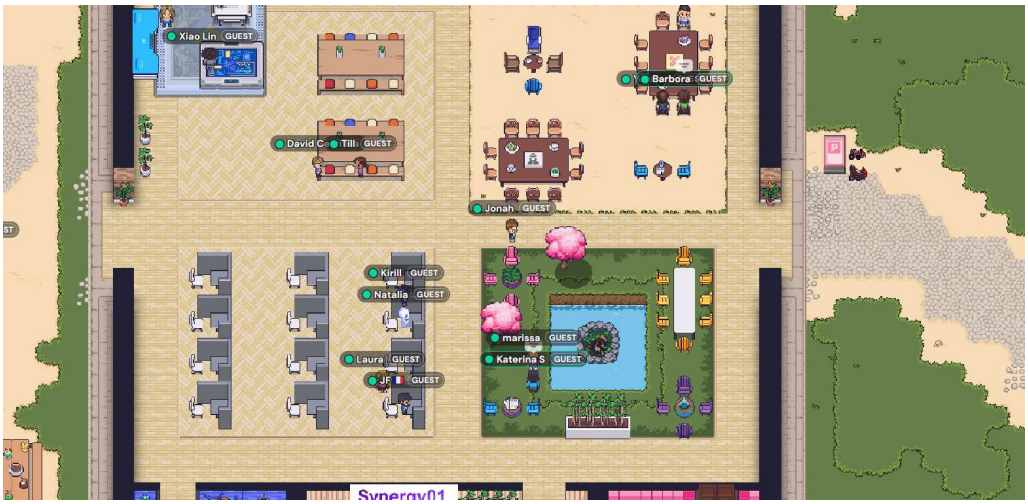

Photo 6.5: Students engaging in virtual coworking in the digital coworking space Synergy01.

The student concepts particularly focused on the well-being and comfort of coworkers and how coworking spaces can create a pleasant and inclusive working environment that promotes productive and meaningful work.

4th Edition: Bochum, Germany. The fourth and last coworking course took place in October and November 2024. All 36 students met during the presence days in the *World Factory*, the startup-focused coworking space of Ruhr University Bochum. Featuring two large stories with coworking areas, makerspace facilities, and event spaces, *World Factory* served as an ideal location for the course participants to develop their coworking concepts while working in an inspiring and collaborative environment.

Photo 6.6: Students of the fourth edition of the coworking course in the World Factory in Bochum, November 2024.

Similar to previous courses, students worked in international teams and developed innovative coworking concepts for universities, which were presented to the teaching team, as well as the manager and some users of *World Factory,* on the afternoon of the second presence day. Back in their home countries, the students continued to work digitally together using the virtual coworking space developed in previous courses. The coworking concepts of the fourth course round particularly focused on flexible office environments that enabled a balance between childcare and work, coworking spaces

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that focused on physical and mental health, and spaces that offered coworkers a wide range of different machines and tools.

6.2 THE IDEAL COWORKING SPACE FOR UNIVERSITY STUDENTS

The student reports that were part of the coworking course assignment allowed us to dive deeper into how students would design coworking spaces for their universities. Based on qualitative analysis of the reports, this chapter presents the most important elements, features, and offers of university coworking spaces. Further, we developed four different types of university coworking spaces specifically tailored for different user groups.

6.2.1 ABOUT THE STUDENT REPORTS

142

students participated in the four course editions.

As a main output of the course, 142 students in 27 groups over the course of four semesters created case studies about how they imagined the ideal coworking space for students. As elaborated in the previous section, student teams used the business model canvas after Osterwalder and Pigneur (2010) as their framework. Each team elaborated on the potential users of their space, which key amenities, events, and offerings an academic coworking space should offer to users, how this space is financed and staffed, as well as discussed potential partners and collaborators. The Cowork4EU project team analysed these reports to determine how students imagine ideal coworking spaces for universities.

6.2.2 DATA ANALYSIS OF THE STUDENT REPORTS

489

pages compromised the 27 student reports.

To evaluate which offerings students would like to have in university coworking spaces, as well as how coworking spaces would best be integrated into a university setting, our team qualitatively analysed the submitted student reports from all four coworking course rounds. In total, our team analysed 27 reports, totalling 489 pages. Most reports followed the same structure by using the nine fields of the business model canvas as respective chapters of the report.

We used thematic analysis to analyse the student data. As a first step, we generated initial codes from the reports by repeatedly scanning the data for recurrent patterns. This was done by multiple members of the team. The team members met frequently to discuss and solve any discrepancies in the data interpretation. We then aggregated the identified codes into overarching themes. In total, we identified six themes encompassing 31 recurring codes. In the following section, we will elaborate on each of the themes.

6.2.3 RESULTS: WHAT WOULD STUDENTS LIKE TO HAVE IN ACADEMIC COWORKING SPACES?

Figure 6.2 summarises the themes and related sub-themes identified in the student reports.

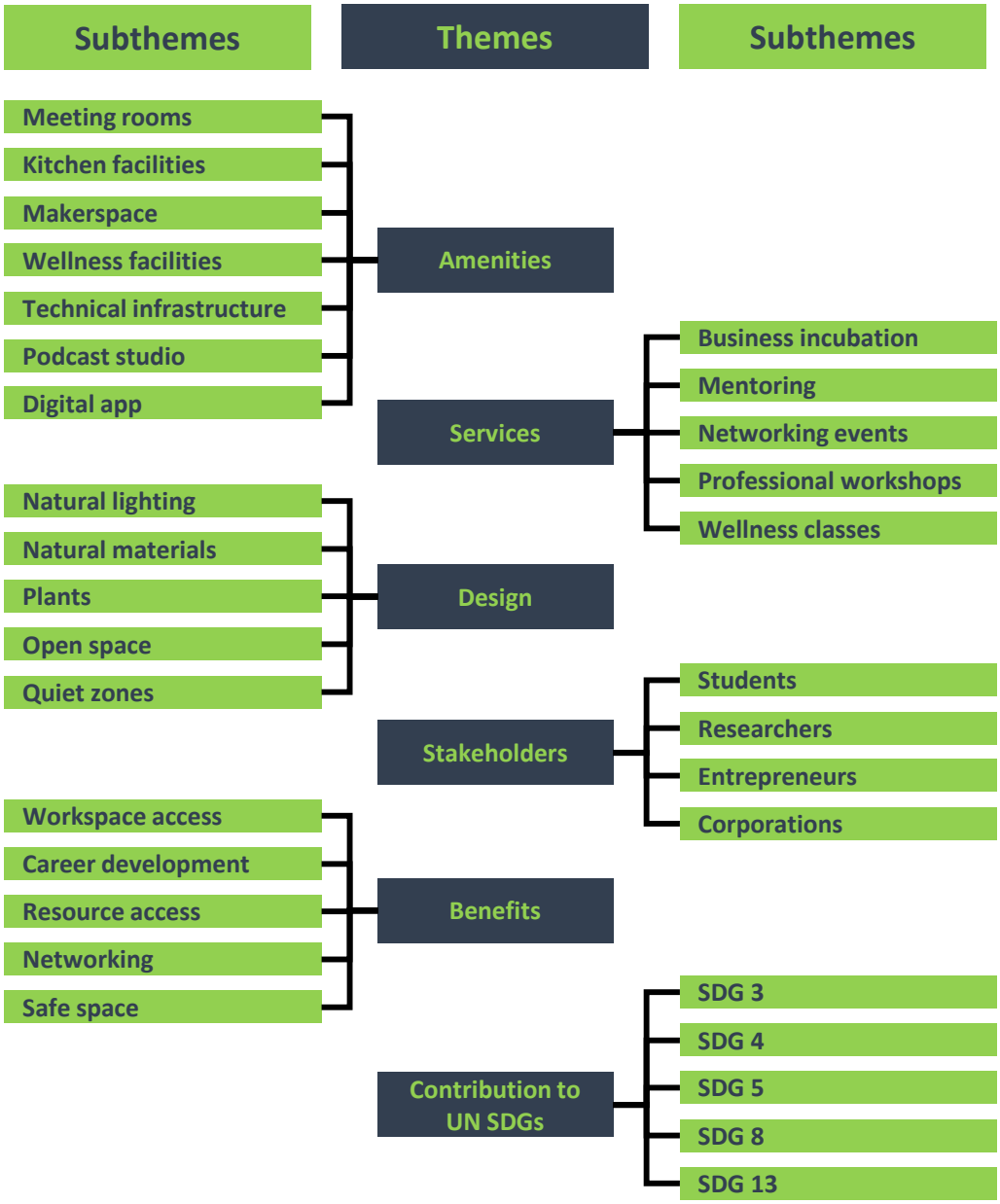

Figure 6.2: The resulting themes and sub-themes based on the analysis of the student report data that were created during the coworking course.

Our team identified a total of six themes, including university coworking space amenities and services, design, stakeholders, benefits for students, and contribution to the UN SDGs. The following section presents each of these themes and underlying codes in dedicated tables.

Amenities. The reports revealed seven amenities that students wish to have in a coworking space. They include various features that allow users to work inside a professional office environment. Other features enable users to work on their technical or computational skills, or give them the opportunity to take a break from work and engage in relaxational activities and networking. Finally, dedicated technical amenities

enable users to remotely engage with the coworking space and the coworking community.

Code	Explanation	Example Quote
Meeting rooms	Students want to use meeting rooms to work together on projects.	*Meeting rooms equipped with advanced audio-visual technology will support student group projects and presentations, which are integral to collaborative learning.* (WINSPIRE, winter term 2024 in Bochum)
Kitchen facilities	Self-service kitchen facilities and related amenities (e.g., a coffee machine) provide the students with food and drink.	*The coworkers can spend their breaks in the Community Kitchen. Either warming up a prepared meal or fresh cooking, everything is possible.* (Uni-Co, summer term 2024 in Paris)
Makerspace	A makerspace provides the students with a variety of tools, such as 3D printers or woodcutting tools.	*For example, in our makerspace, ideas can become reality by providing a wide range of tools. This gives the co-workers their first successes and new motivation and allows them to really see and touch what they have created, for example by using a 3D printer or a sewing machine.* (Co-Station, summer term 2024 in Paris)
Wellness facilities	Students would like to have wellness facilities such as lounges, quiet rooms, or sports areas.	*Transitioning to the wellness area, approximately 30 square meters have been thoughtfully designed as a sanctuary for relaxation and balance. The yoga corner offers ample space for yoga mats and a mirrored wall to facilitate yoga or stretching exercises. An inviting enclave with plush sofas or beanbags provides the perfect setting for rejuvenating breaks or casual conversation.* (Work Oasis, winter term 2023 in Salzburg)
Technical infrastructure	Computers, printers, and scanners should be at students' disposal.	*Workspaces will be equipped with high-quality computers, printers, scanners and other hardware for the members to use. High-speed Wi-Fi will also be offered so that members can work efficiently.* (The Hive, summer term 2023 in Prague).
Podcast studio	A podcast studio offered to coworkers allows them to record their own podcasts and other audio projects.	*UCO.Space offers a podcast studio as part of their amenities, which can be rented out by members or non-members. By charging a fee for the usage of the studio, UCO.Space can generate additional revenue and provide a valuable service for podcasters.* (UCO.Space, summer term 2023 in Prague).
Digital app	A dedicated app helps students check the availability of the space, book services in advance, and communicate with the community.	*Harmony Hub offers a networking application designed to facilitate connections among our members. The app combines elements of platforms like LinkedIn and Tinder, allowing users to create personalized profiles that showcase their professional expertise and personal interests. This solution addresses a common issue in traditional coworking spaces, where individuals often feel hesitant or shy about initiating conversations.* (Harmony Hub, winter term 2024 in Bochum)

Table 6.1: Seven amenities that are most important in a coworking space for students.

Services. We identified five services that university coworking spaces should offer to their students. As our students had various interests, including entrepreneurship or mental health and well-being, these services ranged from dedicated incubation and mentoring programs to boost entrepreneurship and teach students valuable skills, to dedicated services that cater to psychological needs and mental health aspects. Further, various services aimed to connect students and researchers with one-another, as well as representatives from business or entrepreneurship.

Code	Explanation	Example Quote
Business incubation	The university coworking space should offer services that support student startups.	*We are offering whole courses and mentoring programs for startups, and students who have an idea, but need help on the path to create a business model or found a startup.* (UCO.Space, summer term 2023 in Prague)
Mentoring	Internal or external mentors can offer consultation on a variety of topics in the coworking space.	*We aim to make our coworking spaces visible to a large number of experienced professionals and business owners who can serve as mentors, thus making our workspace an ideal environment for those who want to start a successful venture.* (Th(P)hink-Bank, summer term 2023 in Prague)
Networking events	Dedicated events should offer students the ability to connect with the community, corporations, startups, or business investors.	*The coworking space offers many opportunities for members to network, collaborate and support each other. We regularly organize networking events, community meetings and informal hangouts to encourage sharing and social interaction.* (Calmhustle, winter term 2023 in Salzburg.
Professional workshops	The coworking space should host regular workshops on a variety of topics to advance the students' skills.	*In the area of knowledge transfer, the focus is on offering workshops for student startups that support the founding process with know-how and methodological expertise. In addition, panel discussions will be offered that use the synergy effects of a university-related coworking space and combine research with practice.* (CoMotion, summer term 2023 in Prague).
Wellness classes	Regular classes on wellness, e.g., yoga courses or mental health workshops contribute to the students' well-being.	*Workshops on mindfulness, mental health, and work-life integration provide members with tools to manage stress and maintain a balanced lifestyle.* (FamNetwork, winter term 2024 in Bochum).

Table 6.2: Five services that are most important in a coworking space for students.

Design. According to our student reports, five design elements and aspects should always be present in a university coworking space. For instance, many teams stressed the importance of working inside a well-designed and nature-inspired coworking space. This also included a variety of plants and the inclusion of natural design elements. In addition, a mixture of different zones that are specifically designed for certain forms of work was seen as very important. It was important for students that a university coworking space simultaneously supports individual and group work.

Code	Explanation	Example Quote
Natural lighting	The university coworking space should feature natural light in all areas.	*Spark Space designates its coworking space with glass ceiling and large windows to maximize the natural light sources and while minimizing the usage of energy.* (Spark Spot, summer term 2024 in Paris)
Natural materials	Natural materials such as wooden design elements create a warm and welcoming atmosphere in the space.	*The natural wood finish creates a warm and inviting atmosphere while emphasising environmental awareness.* (Co Culture Connect, winter term 2023 in Salzburg)
Plants	A variety of plants adds to the welcoming atmosphere of the space.	*Another key characteristic of the Green Hub is its vast greenery, producing fresh and clean oxygen and helping to relax the nervous system of the space's users.* (Green Hub, winter term 2024 in Bochum).
Open space	Open space areas in the coworking space provide students with room to exchange and engage in group work projects.	*The large and open spaces, such as the open kitchen, encourage members to interact directly. The coworking space is designed to break down barriers and make interactions easy.* (The Hive, summer term 2023 in Prague).
Quiet zones	Quiet zones allow students to focus on their individual work or study assignments.	*A quiet focus area will be provided for those who need to concentrate on their individual work.* (Calmhustle, summer term 2023 in Prague)

Table 6.3: Five design elements that students would like to have in a university coworking space.

Stakeholders. Our analysis of the student reports identified four important stakeholder groups of university coworking spaces.

Code	Explanation	Example Quote
Students	The coworking space provides a room for students to study, work on projects and get in touch with other stakeholders.	*University students can use our coworking facilities to study alone or working together in groups with their fellow students on projects while using workshop rooms.* (UCO.Space, summer term 2023 in Prague)
Researchers	Researchers can use the coworking space to work and collaborate with partners from industry or other universities.	*Researchers, PhD candidates, professors, and tutors can enter with a discount to work on their projects in a nice atmosphere near their university.* (Space2Grow, summer term 2023 in Prague)
Entrepreneurs	Entrepreneurs use the space to access office space and network with other entrepreneurs and business partners.	*LibertyHub's community is built around entrepreneurs and creatives. These individuals and teams look for inspiring spaces with the tools and resources they need to turn their ideas into reality.* (LibertyHub, winter term 2024 in Bochum)
Corporate employees	Employees mainly use the space to gain access to the university network and connect with students, researchers, and startups.	*Synergy01 extends an earnest invitation to large companies and SMEs seeking transformative methodologies. Our strategic focus converges on established companies from traditional industries, discerning their unique exigencies for innovative strategies.* (Snyergy01, winter term 2023 in Salzburg).

Table 6.4: Four stakeholder groups that can benefit most from using university coworking spaces.

Benefits. University coworking space offers five different ways how students can benefit from using them.

Code	Explanation	Example Quote
Workspace access	The coworking space offers students access to a dedicated workspace.	*Our aim is to create the healthiest workplace for students, enabling a diverse community to develop both professionally and personally.* (Calmhustle, summer term 2023 in Prague)
Career development	A university coworking space boosts student careers.	*To support continuous learning and professional development, we provide a range of educational materials. These include resources for our workshops, training sessions, seminars, and e-library aimed at enhancing skills and knowledge across various areas and industries.* (SPARK, summer term 2024 in Paris)
Resource access	University coworking spaces grant access to resources often unavailable to students.	*Space2Grow offers access to a professional and supportive workspace with resources for personal and professional development, an incubator for startups, and a platform for networking with other students, professionals, and companies.* (Space2Grow, summer term 2023 in Prague)
Networking	The coworking space provides a platform for students to connect with industry and research.	*Networking events and business collaborations, such as pitch nights and innovation fairs, connect members with businesses, investors, and collaborators, solidifying "The Future's" role as a hub for entrepreneurship.* (The Future, winter term 2024 in Bochum)
Safe space	In a university coworking space, students have room to share their concerns and connect with like-minded peers.	*Besides all that benefits, our coworking space "Work Oasis" helps to create a supportive community. These environments promote social interactions, mental health, and the exchange of ideas, which helps to improve overall well-being.* (Work Oasis, winter term 2023 in Salzburg).

Table 6.5: The five most important benefits of university coworking spaces according to the student reports.

Contribution to UN Sustainable Development Goals. Last, university coworking spaces should mainly contribute to five of the 17 UN SDGs. Recognising that coworking space cannot solve important problems on sanitation, poverty, or nutrition, our students focused on issues related to mental health, education and learning, as well as challenges regarding climate change and fair working conditions.

In conclusion, our analysis shows that university coworking spaces have various benefits for students. Coworking spaces provide students with a dedicated and welcoming workspace that allows them to work, either individually or collectively, on their university projects. University coworking spaces often differ substantially from university libraries, as they consist of more flexible workspaces that are often better designed and offer greater freedom to users. Further, they offer valuable resources to student entrepreneurs, can offer a safe space for students who struggle during their studies and offer a dedicated platform for students to connect with other students and

researchers from their university and get in touch with entrepreneurs and corporate employees.

Code	Explanation	Example Quote
SDG 3	Good health and well-being	*Contributing to the SDG 3, The Climbers offers ergonomic workspaces with adjustable chairs, height-adjustable tables, and a Fit Lab to reduce physical strain and ensure comfort during long study sessions. Additionally, there are relaxation areas and a small kitchen stocked with healthy snacks to encourage members to take breaks.* (The Climbers, summer term 2024 in Paris)
SDG 4	Quality education	*SDG 4, Quality Education, can be integrated that our coworking space offers workshops, training programs, or educational initiatives as it contributes to continuous learning and skill development opportunities.* (Balance Base, summer term 2024 in Paris)
SDG 5	Gender Equality	*SDG 5 recognizes the pervasive disparities in leadership roles, economic opportunities, and work-life balance that continue to affect women and non-binary individuals. FamNetwork addresses these inequalities through mentorship programs, skill-building workshops, and leadership training designed specifically to empower women professionals.* (FamNetwork, winter term 2024 in Bochum)
SDG 8	Decent work and economic growth	*UniCow's alignment with Sustainable Development Goal (SDG) 8: Decent Work and Economic Growth, particularly with targets 8.3 and 8.5, is instrumental in driving sustainable and inclusive economic development. (*UniCow, winter term 2023 in Salzburg)
SDG 13	Climate action	*The coworking space can reduce their environmental impact by implementing practices such as recycling and reducing waste. By implementing sustainable practices, we can contribute to the goal by reducing their carbon footprint and promoting sustainable infrastructure.* (Th(P)ink-Bank, summer term 2023 in Prague)

Table 6.6: Four UN SDGs that are impacted by university coworking spaces according to the student report data.

6.2.4 FOUR IDEAL UNIVERSITY COWORKING SPACE CONCEPTS FOR STUDENTS

In contrast to the four different types of coworking spaces that were classified in Chapter 4, our analysis reveals that students prefer slightly different types of university coworking spaces. As emphasised by previous scholars (e.g., Kyrö & Artto, 2015), student involvement in university coworking space conceptualisation and management is important. We analysed the student report data to draft four different archetypes of university coworking spaces that are specifically tailored to the needs and desires of students. The differentiation into four space types is important because our reports showed that there is no “one-size-fits-all” coworking space for universities. Figure 6.3 visualises the four different types of coworking spaces.

Figure 6.3: Visual depiction of each of the four coworking space types that were developed based on the student report analysis (AI-generated with Dall-E).

The Startup Space. This space is catered to the specific needs of students who are working on a business idea, student entrepreneurs who have recently founded a business, and university spin-offs who commercialise knowledge created during research. The space primarily offers workstations to users, such as fixed and flex desks, private offices for established startups, a small variety of tools to develop prototypes, as well as film and audio studios to create marketing content, such as product videos or podcasts. It also offers basic amenities such as a shared kitchen and meeting rooms to have meetings with potential investors and customers. The focus of the space, however, is on its value-added services. Early-stage entrepreneurs can participate in incubation and acceleration programs that aim to provide them with entrepreneurial skills and business education basics to aid them in their entrepreneurial journey. Further, dedicated consulting services (e.g., by university staff or external tutors) that are accessible directly within the coworking space, help the coworkers tackle specific entrepreneurial problems and receive tips from experienced startup coaches and fellow entrepreneurs. Regular networking events enable coworkers to connect with potential business partners, investors, customers, and suppliers.

The Wellness Space. Students further emphasised the need for a space that offers them a place to relax, gain some energy, and share their concerns regarding university, work, or life in general. Aside from inviting and well-designed desks for coworkers to

work, it offers sports and meditation facilities to relax and relieve stress. Catering facilities such as a café offer students with healthy drinks, snacks, and a seating area to relax. The coworking space staff includes coaches and counsellors who help students cope with mental difficulties or struggles they have in university. Further, externals such as yoga teachers, provide regular classes for the students to attend. While not hosting networking events, the coworking space also offers regular get-togethers that aim to be a safe space for students to share their thoughts and struggles with like-minded. The space further operates as a hub for various student associations and makes it easy for students to engage with them. Last, the space also offers dedicated support for students with children. Specialised work zones combine workspace with child-care facilities, including toy corners, small indoor playgrounds, or diaper-changing rooms. This allows student parents to benefit to focus on their individual work, while also having access to take care of their children while also benefiting from potential exchange with other parents who simultaneously use the coworking space.

The Artisan Space. This space type focuses on providing resources that are normally not available to students. More a makerspace than a coworking space, it offers various tools to coworkers, such as 3D printers, woodcutting tools, and CNC drilling machines. This not only allows entrepreneurs to craft prototypes but also allows interested students to experiment and engage in hands-on learning. Further, high-performance technical equipment provides them with the opportunity to conduct large-scale data analysis or create high-quality videos and imagery using in-house cameras and a photo studio. Traditional crafting instruments such as sewing machines, pottery equipment, painting material, and a well-equipped kitchen further allow students to unleash their creativity in fine and culinary arts. Staff includes well-trained experts who help students with the machinery and tools and show them how to use them properly. These experts also hold regular workshops (e.g., on 3D printing or video editing) for students to learn new skills or refine them. Thus, the events held in the space are mostly workshops and classes, focussing on skill development rather than social gathering.

The Networking Space. This space type focuses on connecting students with each other but also with researchers, industry partners, entrepreneurs, and other universities. The space features an open area with workstations that promote collaboration and exchange. Large open event areas provide room for regular social gatherings, presentations (think Ted Talks), and debates. This gives entrepreneurs and corporations to share their work and connect with local students to gather fresh ideas or acquire business partners or employees. Further, it provides room for researchers to showcase their latest research. The space further closely works with other coworking spaces around the world in a dedicated network (similar to Cowork4EU's EACN) to strengthen international relationships with other coworking spaces and universities. The staff hosts regular events but also serves as a mediator for students to help them connect with like-minded students or the industry if they are looking for practical

experience or a job after graduation. As the name implies, the space hosts regular social gatherings and other events that bring different stakeholders together to create new synergies.

6.3 THE IMPACT OF THE JOINT COWORKING COURSE

This chapter examines the key aspects of the coworking course, focusing on the experiences of working in international teams, developing business ideas, and engaging with coworking spaces. First, it highlights the dynamics of international teamwork, including its benefits, challenges, and the strategies employed to foster collaboration. Second, it explores how participants developed their own business ideas, drawing on diverse perspectives and innovative problem-solving approaches. Third, it details the participants' hands-on experiences in coworking spaces, emphasising how these environments inspired creativity and practical learning. Together, these sections provide a comprehensive overview of the course's impact on participants' professional and personal growth.

Over the course of four semesters, a total of 142 students participated in the course, with slightly fewer than 40 students per semester due to occasional last-minute cancellations caused by issues such as illness, academic constraints, or travel issues. Participants included 36 students from the Prague University of Economics and Business, 34 from Seeburg Castle Private University, 30 from the Paris School of Business, and 42 from TU Dortmund University.

Our 142 participating students were…

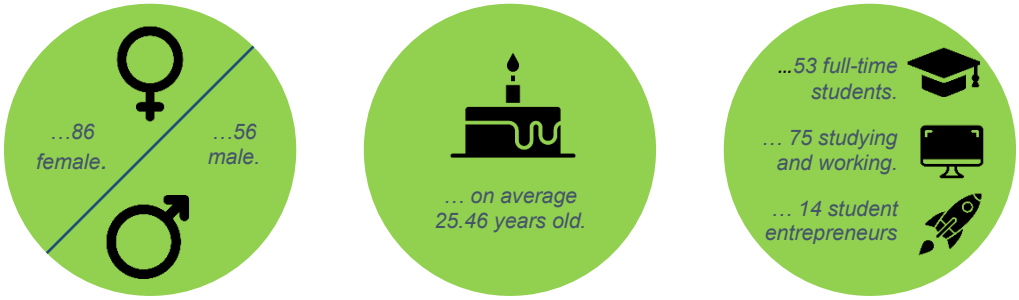

Figure 6.4: Sample characteristics of the survey participants.

Before the start of the course, participants were also asked about their experience with coworking spaces, including how many days they had worked in one over the past six months, with the average amount being 8.12 days (ranging from 0 to 126 days). They were also asked how much they would be willing to pay per day for a coworking space, with the mean amount being 19.09 € (ranging from 0 to 99 €). These responses provided

valuable context for understanding the participants' familiarity with and perceptions of coworking environments.

6.3.1 WORKING IN INTERNATIONAL TEAMS

The globalisation of the workforce has led to a surge in the formation of international teams (Sparrow, 2012). Research highlights both the opportunities and challenges of working in such settings. On the positive side, international teams benefit from increased creativity, innovation, and satisfaction (Stahl et al., 2010; Yousef, 2024). However, challenges such as communication barriers, differing work styles, and potential conflicts arising from cultural misunderstandings are common (Hinds et al., 2011). To address these challenges, successful international teams often employ strategies such as developing one's cultural intelligence (Earley & Mosakowski, 2004). This strategy not only mitigates potential conflicts but also enhances the overall performance of the team (Caputo et al., 2018; Schlaegel et al., 2021). Understanding the dynamics of international teams is, therefore, critical for fostering effective collaboration and maximising their potential.

The course provided an opportunity for students from multiple universities to collaborate in international teams, with each team typically consisting of four to six students from different cultural and academic backgrounds. The intention was to foster an environment where students could experience first-hand the dynamics of working in international teams, thereby improving their cultural competence and collaborative skills. To ensure diversity, each team was designed to include at least one participant from every university involved in the course. We hoped that this would lead to enriched discussions, creative problem-solving, and the development of more comprehensive and innovative solutions.

Overall, the teams worked very well together, and only a few minor complaints arose. The different levels of knowledge among the participants were successfully combined, leading to a rich exchange of ideas. A key component of the project was conducting interviews, where teams initially worked within their own universities to gather specific information. In the next phase, the collected knowledge was shared, allowing the teams to benefit from the various perspectives and approaches of each group.

However, the course also revealed some challenges typical of international teamwork. Differences in grading systems between the universities led to some students not receiving a grade for their contributions, which caused frustration and discrepancies in engagement levels. Some students with no formal assessment found it difficult to stay motivated, while others who were being graded felt a greater sense of responsibility. This lack of uniformity in how achievements were recognised led to occasional disengagement or unequal participation. Additionally, differing academic cultures and expectations around work style—such as approach to deadlines, communication frequency, and task ownership—resulted in misunderstandings and misalignments.

Despite these challenges, the course highlighted the importance of clear communication, mutual respect, and adaptable strategies for managing cultural differences, underscoring the need for intentional efforts in structuring international teams for successful collaboration.

Furthermore, the coworking course promoted personal growth as participants learned to step outside of their comfort zones and engage with individuals from different cultural and educational contexts. The collaborative nature of the work helped foster stronger interpersonal relationships and encouraged the development of a supportive network of peers from different universities. Ultimately, the course demonstrated that with the right strategies and commitment, international teams can harness their diversity to achieve significant success, turning challenges into opportunities for growth and innovation.

6.3.2 DEVELOPING OWN BUSINESS IDEAS

Developing innovative business ideas is a multifaceted process that combines creativity, critical thinking, and strategic planning. Research highlights the importance of cognitive flexibility and entrepreneurial self-efficacy in fostering entrepreneurial creativity and innovative behaviour (Wei et al., 2020; Yu et al., 2023). Structured frameworks such as the Business Model Canvas (Osterwalder & Pigneur, 2010) and Design Thinking methodologies (Bender-Salazar, 2023) are frequently employed to guide entrepreneurs from abstract concepts to actionable plans.

In the coworking course, students engaged in a hands-on activity using the Business Model Canvas to conceptualise and develop best practices for a university coworking space. Through this exercise, they worked in teams to identify the key components of a functional coworking space, including value propositions, customer segments, and revenue streams. They explored how such a space could cater specifically to the needs of students, providing both academic and professional support. By mapping out the various elements of their coworking space idea, students gained practical experience in strategic planning and critical evaluation. They discussed how to create a welcoming and inclusive environment that fosters collaboration among users with diverse needs and backgrounds. Additionally, they learned to align their ideas with the operational realities of managing a coworking space, such as resource allocation, sustainability considerations, and integrating digital tools for efficiency. Students reflected on how to effectively combine physical infrastructure with community-building efforts to enhance the overall coworking experience. This activity deepened their understanding of the challenges and opportunities inherent in creating collaborative environments, equipping them with valuable skills for entrepreneurial and project development contexts.

6.3.3 EXPERIENCE COWORKING SPACES

Coworking spaces have emerged as dynamic environments fostering collaboration, innovation, and productivity among diverse individuals and organisations (Bouncken et al., 2018; Bueno et al., 2018; Spinuzzi, 2012). These shared workspaces offer more

than just physical infrastructure; they provide a community-centric ecosystem where members can network, share knowledge, and co-create (Spinuzzi, 2012). As such, coworking spaces represent an intersection of community, creativity, and professional growth, offering unique benefits for individuals and teams alike.

In this coworking course, students had the opportunity to visit coworking spaces and gain first-hand experience of these dynamic environments. They were able to engage in conversations with coworkers, allowing them to understand diverse perspectives on the benefits and challenges of coworking. This exchange highlighted the importance of networking and community within these spaces. Besides, students were granted access to various tools and equipment provided by the coworking space, such as prototyping devices, collaborative software, and ergonomic workstations, offering a glimpse into the resources available to coworkers. They were also familiarised with the rules governing coworking spaces and learned about the daily routines and dynamics of shared work environments. Furthermore, students explored the different types of rooms available within these spaces—from shared meeting rooms ideal for brainstorming sessions to quiet zones designed for focused, individual work—and understood how the choice of space could align with specific work processes.

By spending time in the coworking spaces, students observed how the open-plan layout encouraged spontaneous interactions, fostering a sense of collaboration and creativity. They experienced the energy of a shared workspace, where individuals and teams worked side by side, sharing ideas and providing informal feedback. Additionally, students gained insights into the balance between autonomy and community that defines coworking, seeing how coworkers manage their schedules and workflow while benefiting from the shared resources and support. This immersion allowed students to witness first-hand the blend of flexibility, professionalism, and social engagement that Characterises coworking, equipping them with a deeper understanding of its practical and cultural significance in modern work environments.

The coworking course’s impact on participating students was quantitively assessed through three surveys conducted before, during (at the time of the presence days), and after (following the submission of reports) the course. The survey assessed how students’ knowledge about coworking (self-developed), attitudes towards coworking (partly after Kunz et al., 2011), and innovative work behaviour (Janssen, 2000) changed throughout the seminar (sample survey items are reported in Appendix B). Detailed mean values for these findings are presented in Figure 6.5.

Results indicated a significant increase in participants’ knowledge about coworking across all three points in time, reflecting the seminar's educational value. Participants' attitudes toward coworking, initially high—likely due to their interest in the topic as evidenced by their enrolment in the course—also improved over time. However, these attitudes slightly decreased by the third time point, coinciding with the participants no

longer actively working in a coworking space. Furthermore, innovative work behaviour increased from the first to the second measurement point, reflecting the coworking course's positive impact on developing practical skills for dynamic and collaborative work environments. A slight decrease was observed from the second to the third measurement point, which may be again attributed to the participants' reduced direct engagement with coworking spaces during that phase. Both results indicate that continuous work in coworking spaces is needed to increase attitude towards coworking, as well as a likely boost in innovative work behaviour is needed.

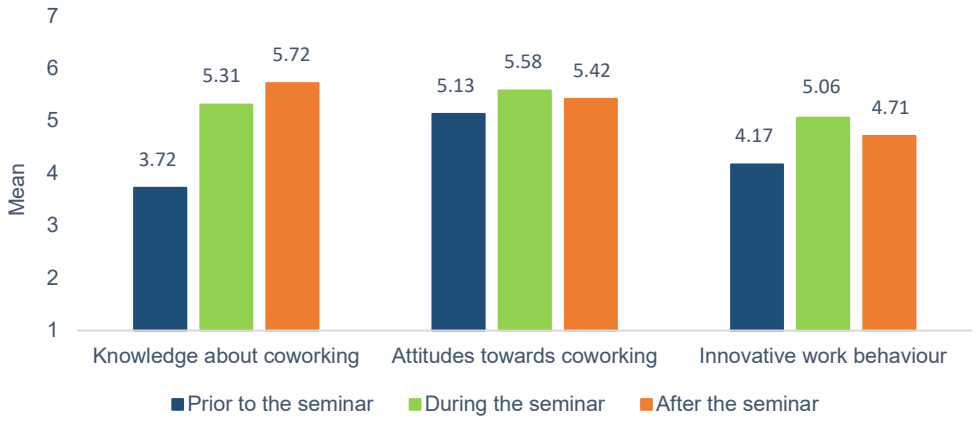

Figure 6.5: Changes in students' knowledge about coworking, attitude towards coworking, and innovative work behaviour over the course of the seminar.

Note: *Knowledge about coworking: Scale ranging from 1 (none) to 7 (superior). Attitudes towards coworking: Scale ranging from 1 (strongly disagree) to 7 (strongly agree). Innovative work behaviour: Scale ranging from 1 (never) to 7 (always).*

We additionally assessed students' emotional responses toward coworking using the Behavioural Inhibition System (BIS) (Agroskin et al., 2016; Reiss et al., 2020) and Behavioural Activation System (BAS) (Greenway et al., 2018; Reiss et al., 2020) scales before, during, and after the coworking course. Figure 6.6. provides mean values for both scales. Sample survey items are found in Appendix B.

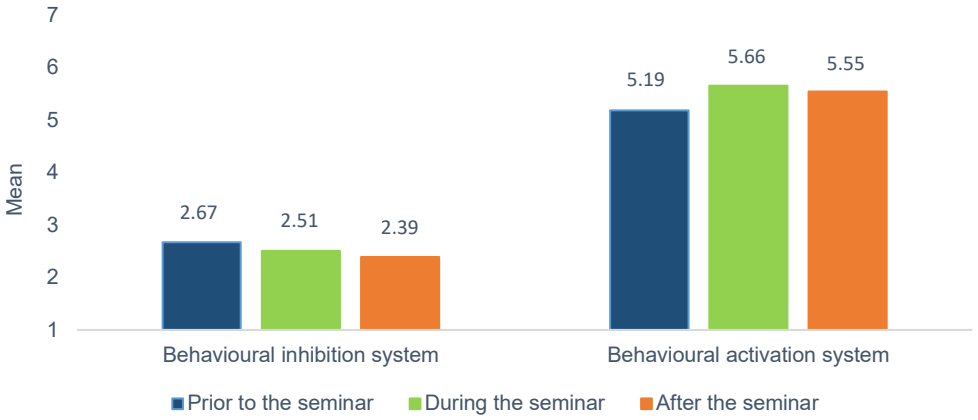

Figure 6.6: Changes of students' emotional responses towards coworking over the course of the seminar using the BIS and BAS constructs.

Note: *Behavioural inhibition system: Scale ranging from 1 (strongly disagree) to 7 (strongly agree). Behavioural activation system: Scale ranging from 1 (strongly disagree) to 7 (strongly agree).*

BIS, which reflects sensitivity to potential threats or negative outcomes, was highest prior to the course and then steadily declined. However, a significant difference was only observed between the measurements taken prior to and after the course. In

contrast, BAS, associated with motivation and approach behaviour, was initially at its lowest level before the course, peaked during the course, and then slightly decreased after it. Significant differences were found between the measurements taken before and during the course, as well as before and after it, but not between during and after. These patterns suggest that while initial apprehensions about coworking diminished over time, motivation and engagement increased during active participation in the coworking course.

6.3.4 AWARDS FOR THE COWORKING COURSE

The coworking course received widespread appraisal for its innovative concept, the opportunity to bring students from different universities, countries, and cultures together, and its blend of traditional (transfer of theoretical knowledge), practical (hands-on learning of entrepreneurial methods), and hybrid (blend of physical and virtual teamwork) teaching methods within a non-classroom environment (physical and virtual coworking spaces). Consequently, the Cowork4EU team is proud of having received two teaching awards for the course during the project.

3

teaching prizes and prize nominations were awarded to the joint coworking course.

First, the Cowork4EU course received the *Teaching Innovation Award 2023/2024* from TU Dortmund University in the category *Internationalisation*. Each academic year, the award honours teaching formats that significantly contribute to innovative teaching in the fields of practical relevance, internationalisation, or digital learning. In early 2024, the coworking course received the award for its important contribution to international exchange and multicultural teamwork by allowing students to travel abroad and engage in teamwork with international students, leveraging cultural understanding and fostering long-lasting connections between European countries. Learn more about the award here.

Second, the course was awarded the *2024 Pedagogical Innovation Prize* of the Paris School of Business. Annually, the prize awards revolutionary course concepts that significantly contribute to innovative teaching and employ creative pedagogical techniques. The coworking course was chosen for its contribution to collaborative and immersive learning, as well as international teamwork in higher education. The award further recognises the innovative blend of face-to-face, virtual, and on-demand education. You can learn more about the award here.

In addition, the joint coworking course was nominated for the 2024/2025 Profformance Higher Education Teacher Award. The Profformance Award is a joint initiative of universities from Austria, Croatia, Czechia, Georgia, Hungary, and Serbia. It aims to identify and recognise excellent teaching practices to provide opportunities for sharing the best examples of teaching in higher education and ignite cross-country collaboration. Winners of the 2024/2025 nominees are announced in April, so stay tuned on how the course faired at the awards right here.

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7.0 Recommendations

7.1 RECOMMENDATIONS FOR UNIVERSITY COWORKING SPACE MANAGERS

Our report provides valuable recommendations for managers of university coworking spaces. By transferring (at least some) of our recommendations into practice, university coworking space managers to refine their coworking spaces for their users. Among other things, this includes encouraging interdisciplinary networking and collaboration, as well as implementing thoughtful space design to enhance user experiences and reap the benefits of their coworking spaces.

Managing a university coworking space requires a nuanced understanding of the dynamic interplay between physical infrastructure, community dynamics, and evolving student needs. While the fundamental principles of space management (i.e., providing functional workspaces, fostering collaboration, and maintaining operational efficiency) remain consistent, the unique context of academic environments demands careful attention to specific user expectations and behavioural patterns. University coworking space managers must navigate the complexities of serving diverse stakeholder groups, from undergraduate students seeking collaborative study spaces to doctoral researchers requiring focused work environments. Further, they must create a professional working environment that promotes innovation and boosts entrepreneurial activities. This multifaceted role requires a strategic yet adaptable approach that balances structured management with the flexibility to accommodate changing usage patterns and the diverse needs of the academic community. Based on the insights gathered during this report, we provide guidance for effectively managing university coworking spaces while maintaining their core mission of supporting academic excellence, collaborative learning environments, and entrepreneurial endeavours.

Table 7.1 provides a framework of these key recommendations for managing university coworking spaces alongside their anticipated outcomes and potential implementation challenges while setting up the space, as well as during its ongoing management activities. It includes eight core management areas, ranging from spatial design considerations to community-building initiatives, each offering specific, actionable insights while acknowledging practical limitations and obstacles. This structured approach enables coworking space managers to strategically plan and implement improvements while maintaining awareness of potential hurdles that may arise during execution.

Recommendation	Expected Outputs	Potential Challenges
Design Flexible and Multi-Purpose Spaces	• Higher user satisfaction • Improved collaboration • Supported adaptability • Increased space utilisation rates	• High initial investment costs • Technical requirements • Different user needs • Space limitations
Integrate Technology and Digital Solutions	• Streamlined booking processes • Better resource management • Enhanced user experience • Data-driven decision making	• Technical requirements • User adoption resistance • Integration with existing university systems • Cybersecurity concerns
Foster Community Building Through Programmed Activities	• Stronger user engagement • Increased networking opportunities • Enhanced knowledge sharing • Improved retention rates	• Resource intensity • Varying participation levels • Scheduling conflicts • Maintaining consistent quality
Establish Clear Governance and Usage Policies	• Improved space management • Reduced conflicts • Clear user expectations • Efficient resource allocation	• Balancing flexibility with structure • Enforcement challenges • Regular policy updates needed • User resistance to rules
Leverage Strategic Partnerships	• Enhanced resource access • Expanded service offerings • Additional funding opportunities • Increased visibility	• Complex stakeholder management • Administrative overhead • Partnership sustainability
Implement Sustainable Operations	• Reduced operational costs • Environmental impact reduction • Enhanced reputation • Long-term viability	• Initial implementation costs • Measuring impact • Behavioural change requirements
Monitor and Adapt to User Needs	• Improved user satisfaction • Data-driven improvements • Better resource allocation • Enhanced service quality	• Data collection complexity • Resource requirements • Analysis expertise needed • Implementation time
Address Accessibility, Inclusivity and Mental Health	• Broader user participation • Enhanced community diversity • Improved inclusion	• Infrastructure adaptation costs • Balancing diverse needs • Training requirements • Resource allocation

Table 7.1: Recommendations for university coworking space managers on how to manage their space.

Understanding these relationships between recommendations, outcomes, and challenges is crucial for developing effective management strategies that align with institutional goals and user needs. Hence, we now discuss each recommendation in detail.

7.1.1 DESIGN FLEXIBLE AND MULTI-PURPOSE SPACES

Universities should create adaptable spaces that serve diverse user needs while maintaining core functionality. For example, the BayWa Coworking Space at TU Munich successfully implements moveable furniture and modular workstations that can be reconfigured for different purposes, including individual work and group collaboration.

To ensure little distraction caused by group discussions, managers should think of installing sound-dampening elements, such as acoustic panels, phone booths, meeting rooms, and soundproof furniture. Further designated quiet zones, as demonstrated by VSE's Idea Fair, which uses high curtains to create temporary spatial separations, can help individuals to focus on concentrated individual work.

7.1.2 INTEGRATE TECHNOLOGY AND DIGITAL SOLUTIONS

Managers should consider implementing robust digital infrastructure alongside physical amenities. TheCO at the University of St. Gallen exemplifies this by offering a user-friendly booking system and high-speed internet connectivity. A dedicated mobile application for space management, resource booking, and community engagement further leverages the coworking experience for users. This digital integration should include features like real-time occupancy monitoring and automated access control systems to enable convenient access to the coworking space. Further, certain meeting rooms could be equipped with state-of-the-art video conferencing technology to enable hybrid meetings of, for example, startup teams. This enables coworkers to interact with their team, even if not physically present within the space. Last, lively virtual interaction tools, such as Slack or Discord channels, enable space management to easily inform coworkers of relevant news or updates on the coworking space, for example, upcoming closure times and community events. They also allow the coworking community's members to interact with each other, even if not physically present within the space itself.

7.1.3 FOSTER COMMUNITY BUILDING THROUGH PROGRAMMED ACTIVITIES

Regular events and activities are crucial for building an active community. The CommunitySpace at TU Dortmund University demonstrates effective practice by hosting a mix of professional workshops, networking events, and informal gatherings. This is further emphasised by the importance of both forms of events identified by the students of our coworking course. Hence, by offering both structured activities (like skill-sharing workshops or entrepreneurial pitches) and informal events (such as community lunches and bar nights), managers can create multiple touchpoints for interaction among the members of their community. Last, our gathered data on coworking spaces in Europe shows that coworking spaces are very often affiliated with university-backed incubators (such as CET's CommunitySpace at TU Dortmund University or TUM Ventures Labs' BayWa CoWorkingSpace at TU Munich).

While we acknowledge the importance of coworking for entrepreneurship, we want to emphasise that coworking spaces also benefit non-entrepreneurial students and researchers through interdisciplinary exchange and collaboration. While this collaboration might not always spark entrepreneurial endeavours, we still recommend more strongly integrating these non-startup-focused user groups into the space. Aside from creating a more inclusive environment, allowing other non-entrepreneurial user

groups into the space also gives startups valuable expert feedback and come into contact with potential employers.

7.1.4 ESTABLISH CLEAR GOVERNANCE AND USAGE POLICIES

Managers need to provide transparent policies that balance accessibility with resource management. For instance, NHL Stenden's Startup Community implements a structured application process for long-term users while maintaining flexible access for short-term needs. Managers should further make sure that new coworkers receive a detailed onboarding, either through space management or onboarding events, when starting to work in the coworking space. This gives the manager to inform new arrivals on the house rules and usage policies (let's be honest, few people ever read usage policies plastered on some small wall with microscopic font size).

Further, dedicated onboarding activities allow managers to introduce new members to the community, providing room for initial exchange. While clear guidelines for space usage, booking procedures, and community conduct are important, managers should still keep in mind the diverse needs of their coworkers' and remain flexible enough to accommodate them.

7.1.5 LEVERAGE STRATEGIC PARTNERSHIPS

Building relationships with both internal university departments, as well as external organisations, such as other universities and industry partners, is an effective way to leverage networking effects for coworking spaces, as well as their diverse user groups. For example, the BayWa CoWorkingSpace successfully partners with industry players to provide additional resources and opportunities for users. This way, university startups can pitch their business model to potential investors or strategic corporate partners. Further, students have the opportunity to engage with firm representatives in an informal environment and learn more about potential internship or employment opportunities. Encouraging students and researchers from different departments further helps to leverage the interdisciplinary networking effect of coworking spaces.

As shown in our literature review, coworking spaces have the ability to foster interdisciplinary collaboration among coworkers. In a university context, this means that the physical proximity of heterogeneous users bolsters knowledge exchange, leading to mutual learning and cross-departmental collaboration in teaching and initiating interdisciplinary projects for large-scale research projects.

The students from our coworking course further frequently emphasised the benefit of an international network that connects university coworking spaces. Joining these dedicated networks, such as the EACN, allows coworkers to access other university coworking spaces and interact with local communities. This has the potential to foster academic and entrepreneurial collaboration across universities and allows users to access dedicated coworking spaces while travelling. Hence, managers should consider not only leveraging space-internal collaboration, but also building lasting relationships

with industry partners, their institution's departments, and other universities to expand the value proposition of your space.

7.1.6 IMPLEMENT SUSTAINABLE OPERATIONS

Incorporating sustainability into both physical infrastructure and operations Is important to contribute to institution-wide efforts to reduce garbage production and energy consumption. This includes energy-efficient lighting systems, garbage reduction programs, and sustainable furniture choices. Especially students highlighted the need for sustainable work environments. For example, the student concept of *The WorkOasis* demonstrates how spaces can integrate green initiatives while maintaining functionality, such as using natural lighting and incorporating plants for improved air quality and aesthetics. By sharing resources, such as workstations, desks and meeting rooms, but also technical equipment, such as 3D printers or CNC machines and social infrastructure, such as kitchenettes and lounges, universities can maximise the usage of various amenities they want to offer their students. Especially in large institutions, departments operate largely independently, including the procurement of tools and infrastructure, leading to potential resource redundancy across the whole university. Coworking spaces thus have the ability to reduce this redundancy by offering shared amenities for the entire university body. This not only reduces unsustainable resource utilisation but also overall cost.

7.1.7 MONITOR AND ADAPT TO USER NEEDS

Coworking space managers should further establish feedback mechanisms and regularly assess space utilisation. TheCO of the University of St. Gallen exemplifies this through regular user surveys and usage pattern analysis. Implementation of both quantitative metrics (e.g., occupancy rates and event attendance) and qualitative feedback (e.g., user satisfaction surveys and focus groups) is important to inform the continuous improvement of the space.

7.1.8 ADDRESS ACCESSIBILITY, INCLUSIVITY AND MENTAL HEALTH

University coworking spaces should be open to all (university-affiliated) users. This includes physical accessibility features, flexible opening hours, and inclusive pricing models. The Idea Fair at Prague University demonstrates good practice by offering extended operating hours and various workspace options to accommodate different working styles and needs.

As we have learned from our student reports, coworking spaces should not only spatially combine users from various disciplines. They also have an important social mission, as they bring together individuals from various genders, ages, and cultural backgrounds. Hence, space managers should account for this by organising social events that do not specifically focus on pure professionalism but also cultural events (such as an Erasmus+ evening or events that allow students to showcase their country's culture) or

events that thematise social inclusion (for example workshops focused on women entrepreneurship or events with student political groups or autonomous committees).

In addition, nearly all student reports additionally emphasised the importance of university coworking spaces as inclusive hubs that provide students with a safe environment to exchange with like-minded peers and talk openly about potential struggles or concerns during their studies. Especially the potential of university coworking spaces to tackle mental health challenges of students was highlighted in many reports. By offering a safe space for students to express their concerns, as well as hosting workshops on mental health and rooming psychological consultants, coworking spaces not only cater to professional needs but also engage as inclusive hubs for students to exchange their struggles and feelings. Managers should account for this important but mostly unknown ability of coworking spaces and should think of implementing events that focus on inclusivity (such as mental health workshops) or organise counselling (e.g., by cooperating with student support centres or coaches).

7.2 RECOMMENDATIONS FOR STUDENTS

This chapter offers practical recommendations to help students fully leverage the potential of university coworking spaces. While the focus is primarily on full-time university students, these recommendations also apply to student entrepreneurs and external participants, emphasising the inclusive and collaborative nature of these environments. By following these guidelines, users can optimise their experience and contribute to the dynamic ecosystem these spaces aim to foster.

7.2.1 ENGAGE ACTIVELY IN COLLABORATIVE SPACES

University coworking spaces are designed to facilitate collaboration across disciplines and interests. We recommend that students take advantage of the opportunities offered by university coworking spaces. Collaborating with peers on projects or engaging in informal brainstorming sessions can help generate new perspectives, encourage interdisciplinary thinking, and strengthen problem-solving skills. For student entrepreneurs, the diversity of users in coworking spaces is a valuable resource for idea generation, testing concepts, or receiving constructive feedback. External users can enrich this dynamic by bringing real-world insights, industry expertise, and professional connections. By participating in collaborative activities, students can build networks that may extend beyond the academic setting, creating long-term professional and social benefits.

7.2.2 MAXIMISE THE USE OF AVAILABLE RESOURCES

Coworking spaces often provide a range of tools, programs, and facilities designed to support productivity and innovation. As depicted in the case studies in Chapter 4, such

offers include workshops or mentorship sessions. Students are encouraged to use those offers and actively participate. These opportunities can enhance their academic learning while helping them develop essential skills like teamwork and communication. Entrepreneurs may benefit from business-focused resources such as prototyping equipment, funding opportunities, or startup incubators. Externals can explore avenues to engage with cutting-edge technology, connect with talent, or host joint events. Fully utilising these resources ensures that users gain a well-rounded experience and maximise the return on their participation.

7.2.3 ESTABLISH A STRUCTURED WORK ROUTINE

Creating a routine tailored to the coworking environment can help users balance individual productivity with collaborative efforts. Students should allocate specific times for individual study, group projects, and informal networking. Making deliberate use of the designated zones within the coworking spaces, such as quiet areas for focused work or open lounges for collaborative tasks, can further optimise this workflow. For entrepreneurs and external users, structured time management helps in aligning coworking activities with external commitments, ensuring efficient use of time and resources. By incorporating short breaks and informal interactions into their work routine, users enhance their well-being and avoid burnout. Thus, students should take micro-breaks of up to 10 minutes to engage in informal interaction, significantly boosting their well-being and work performance (Albulescu et al., 2022). Additionally, university coworking spaces help foster high-quality relationships with other students, which helps to increase self-determined motivation and decrease the risk of burnout (Fernet et al., 2010).

FOSTER A CULTURE OF KNOWLEDGE SHARING

The success of coworking spaces depends significantly on the willingness of users to actively share knowledge, skills, and expertise with others. It is essential that university coworking spaces are perceived as opportunities for idea exchange, feedback, and collaborative problem-solving. This exchange also cultivates a deeper sense of community and shared purpose, which enhances the overall experience for all participants.

Meanwhile, entrepreneurs and external users play a crucial role in enriching this ecosystem. They can contribute by mentoring students, offering valuable industry insights, or collaborating on joint projects and initiatives. External users also benefit from fresh ideas and innovative approaches brought forth by the academic community, creating a mutually beneficial relationship.

Fostering a culture of reciprocity within coworking spaces ensures that the environment becomes more than just a collection of individual efforts. It evolves into a vibrant and inclusive community where diverse perspectives converge and creativity thrives. This culture of openness not only enhances individual user experiences but also strengthens

the collective potential of the coworking space, making it a hub for meaningful connections, interdisciplinary collaboration, and sustained innovation.

7.2.4 LEVERAGE TECHNOLOGY TO ENHANCE EXPERIENCES

Many university coworking spaces are equipped with advanced technology to support innovative work. Students should explore these tools to experiment with new methods of learning, prototyping, or collaboration. Digital platforms such as virtual collaboration tools and apps can help users connect and coordinate their activities effectively. Especially student entrepreneurs benefit from easy access to specialised technologies, such as 3D printers or market analysis software, to refine their projects and presentations. Externals can use these resources to enhance their productivity or demonstrate new approaches to professional challenges. Engaging with these tools might not only boost individual performance but also showcase the capabilities of coworking spaces to potential collaborators and stakeholders.

7.2.5 PARTICIPATE IN NETWORKING OPPORTUNITIES

Public universities are crucial for supporting both scientific and entrepreneurial endeavours by connecting academia, industry, and entrepreneurship within a single ecosystem (Chowdhury and Audretsch, 2024; Kollmann et al., 2023). Acting as spatial nodes within this network, university coworking spaces are dynamic hubs that bridge these three spheres. As described in our case studies in Chapter 4 many university coworking spaces regularly host different kinds of events like networking sessions, workshops, and hackathons. These events aim to bring people from diverse backgrounds together and offer students a chance to expand both their social and professional networks by getting involved. Building connections at such events can consequently lead to knowledge gains and career opportunities. These connections can lead to important career milestones for students, such as internships, job offers, research collaborations, or entrepreneurial partnerships. Moreover, the informal setting of coworking spaces encourages organic conversations, where ideas can be exchanged freely, often sparking innovative projects or collaborations.

Student entrepreneurs can also benefit from networking opportunities. They can, for example, pitch their ideas to potential investors, recruit talented students as team members, or identify clients who resonate with their vision. This cross-pollination of ideas between entrepreneurial minds and academic talent can result in ground-breaking solutions and startups. For external participants, such as industry representatives or professionals from various sectors, university coworking spaces provide a unique opportunity to tap into cutting-edge research, collaborate with academic institutions, or explore partnerships with innovative startups. These interactions help drive professional goals while also connecting theoretical knowledge with practical use.

7.3 RECOMMENDATIONS FOR SCHOLARS

Whether lecturers, researchers, or visiting academics, scholars can utilise university coworking spaces to connect for interdisciplinary collaboration, refine their pedagogical approaches, and elevate their research. In this chapter, we present how scholars can leverage the dynamics of university coworking spaces in their daily work.

7.3.1 BREAKING DISCIPLINARY BOUNDARIES: A GATEWAY TO INNOVATION

University coworking spaces provide a fertile ground for cross-disciplinary collaboration. Scholars should proactively seek interactions with colleagues from diverse fields to gain fresh insights, develop hybrid methodologies, and tackle complex global challenges. By engaging in interdisciplinary working groups, research clusters, or collaborative funding proposals, they can lead to significant academic breakthroughs and novel theoretical frameworks.

A key strategy is to integrate interdisciplinary perspectives into existing research projects. In coworking spaces, informal discussions or casual cross-disciplinary peer reviews happen organically. This not only enhances methodological rigour but also reveals new angles for investigation. By immersing in the intellectually diverse environment of coworking spaces dedicated to academia, scholars can generate unique research questions and establish innovative collaborations.

7.3.2 HARNESSING INSTITUTIONAL RESOURCES TO STRENGTHEN RESEARCH AND TEACHING

University coworking spaces further frequently provide access to cutting-edge resources, including state-of-the-art technology, digital archives, data visualisation tools, and high-performance computers. Scholars should take full advantage of these assets to streamline research processes, conduct sophisticated data analyses, and enhance the quality of their work.

Beyond research, these resources can serve as dynamic pedagogical platforms for integrating technology into teaching. Whether hands-on learning workshops, virtual prototyping projects, or computation of large-scale data sets, integrating tools in a coworking space into university teaching can combine smooth transitions between learning about theoretical concepts and directly applying them to real-world problem-solving projects.

7.3.3 REDEFINING PEDAGOGY: CREATING EXPERIENTIAL LEARNING ENVIRONMENTS

University coworking spaces offer an ideal setting for rethinking traditional pedagogical approaches. Scholars should leverage these spaces to design courses that emphasise

collaborative learning, industry engagement, and experiential education. By incorporating coworking environments into their teaching models, educators can provide students with hands-on, research-driven learning experiences.

For example, project-based learning modules can encourage students to work in teams, develop critical problem-solving skills, and engage with real-world stakeholders. Additionally, integrating hackathons, co-creation workshops, and community engagement initiatives can expose students to interdisciplinary challenges and prepare them for future careers in academia and industry alike.

Moreover, coworking spaces provide opportunities to experiment with flipped classroom models and hybrid teaching formats, allowing for more interactive, student-centred education. Scholars should embrace these possibilities to make their teaching more dynamic, engaging, and aligned with contemporary academic and professional demands.

7.3.4 CRAFTING EFFICIENT AND PURPOSE-DRIVEN WORKFLOWS

Balancing research, teaching, and collaboration is crucial for academic productivity. Scholars should implement structured work habits within coworking spaces to maintain focus and efficiency. Establishing designated writing hours, setting clear goals for collaborative projects, and utilising coworking zones strategically—such as reserving quiet areas for focused research and open spaces for discussion—can significantly enhance productivity.

One effective approach is to create accountability groups where scholars regularly meet to discuss research progress, provide peer feedback, and set professional development milestones. By fostering an environment of shared motivation, coworking spaces can become accelerators for scholarly output and impactful contributions.

7.3.5 FOSTERING AN ECOSYSTEM OF KNOWLEDGE EXCHANGE

Academic coworking spaces thrive when scholars actively contribute to a culture of intellectual generosity. By organising research colloquia, knowledge-sharing sessions, and informal discussion forums, scholars can create platforms for continuous learning and peer engagement.

In addition to structured events, scholars should cultivate an open-door policy, welcoming spontaneous exchanges of ideas, feedback, and mentoring opportunities. Encouraging early-career researchers and graduate students to participate in collaborative discussions can strengthen the next generation of scholars and reinforce an inclusive academic community.

Furthermore, coworking spaces can facilitate collaborations beyond academia by connecting scholars with practitioners, policymakers, and industry leaders. These interactions can enrich research applicability and enhance the real-world impact of academic work.

7.3.6 INTEGRATING ADVANCED TECHNOLOGY FOR RESEARCH SYNERGY

Many university coworking spaces are equipped with advanced technological tools designed to facilitate remote collaboration, high-level data analysis, and knowledge dissemination. Scholars should integrate these technologies into their workflow to enhance efficiency, expand collaborative networks, and streamline project management.

Cloud-based research platforms, shared digital repositories, and video conferencing tools allow for seamless communication and resource-sharing among geographically dispersed teams. Additionally, scholars working in data-intensive fields can benefit from high-performance computing resources, artificial intelligence-driven analysis tools, and virtual simulation technologies available in coworking spaces. By leveraging these digital tools, researchers can transcend geographical constraints, engage in global collaborations, and increase the visibility and accessibility of their work.

7.3.7 BUILDING STRATEGIC NETWORKS AND STRENGTHENING COMMUNITY ENGAGEMENT

Coworking spaces frequently serve as hubs for networking and professional growth. Scholars should take advantage of the regular networking events, symposiums, and industry meet-ups hosted in these spaces to establish meaningful professional relationships.

Participating in interdisciplinary journal clubs, grant-writing workshops, and policy roundtables can help scholars gain exposure to different academic perspectives and funding opportunities. Engaging with external stakeholders, such as industry representatives and governmental organisations, can open doors for applied research projects and collaborative initiatives that extend beyond traditional academic boundaries. By actively immersing themselves in the coworking community, scholars can create synergies that lead to long-term academic partnerships, funding opportunities, and impactful research collaborations.

7.4 RECOMMENDATIONS FOR FURTHER RESEARCH ON UNIVERSITY COWORKING

Aside from providing scholars with the opportunity to advance interdisciplinary collaboration, teaching, and research, university coworking spaces remain a relatively underexplored area for research in various fields. This opens up various opportunities for future research activities. In this chapter, we present key research directions, methodological approaches, and considerations for deepening our understanding of the role and effectiveness of university coworking spaces.

7.4.1 QUANTIFYING THE ACTUAL IMPACTS OF UNIVERSITY COWORKING SPACES

A primary focus of research should be the evaluation of the real-world impacts of university coworking spaces on their users. Previous studies using qualitative approaches have already suggested the potential effects of working at a coworking space on knowledge sharing (e.g., Bednář et al., 2023). However, there is still a lack of quantitative studies, especially in the context of university coworking spaces. The student reports developed as part of the coworking course in Chapter 6 have outlined visions for ideal university coworking spaces, highlighting hypothesised benefits such as enhanced knowledge sharing, improved networking opportunities, and increased collaboration. The reports have also emphasised the potential for physical space design to influence these outcomes. Empirical research could test these assumptions, for example, by using observational methods to analyse the frequency and nature of knowledge exchange within university coworking spaces. Social network analysis could further map interactions and uncover patterns of information flow among users. Additionally, studies could explore how the physical design of these spaces correlates with the level of knowledge sharing and assess its role in fostering collaboration.

Talking of collaboration, the role of university coworking spaces in facilitating networking across faculties, universities, as well as within the broader university ecosystem is another fruitful research direction. Dedicated surveys could help determine the extent to which university coworking spaces enable new connections and collaborative projects. Comparative studies can assess the networking outcomes of university coworking space users compared to those who work in traditional university environments, such as libraries. In the context of collaboration within the university ecosystem, such as startups, industry partners or scientific institutes, researchers could also examine the long-term impact of university coworking spaces on academic and professional trajectories and resulting synergies.

7.4.2 COMPARING ARCHETYPES OF UNIVERSITY COWORKING SPACES

As described in Chapter 4.1 our research has identified four archetypes of university coworking spaces: educational, technical, research, and business coworking spaces. Each archetype reflects distinct purposes, resources, and user groups. Future studies could investigate the actual effectiveness of these four different archetypes. Besides, comparative studies could analyse user experiences, satisfaction levels, and outcomes across these different coworking space types to determine which archetypes are most effective in fostering interdisciplinary research, promoting entrepreneurial ventures, or supporting technical innovation and education. Additionally, qualitative interviews could capture users' nuanced perspectives on the strengths and limitations of each archetype, while observational methods and surveys could provide quantitative insights into their impact. Such research would be invaluable in aligning the design and functionality of university coworking spaces with the needs and expectations of their users.

7.4.3 QUALITATIVE RESEARCH ON USER EXPERIENCES

Initial qualitative data of stakeholders of university coworking spaces have provided early insights into the expected benefits and challenges of these environments. However, further research focusing on students who actively use university coworking spaces is needed to gain a deeper understanding. For example, in-depth interviews could be employed to explore perceived benefits from the perspective of users. Focus group methods enable researchers to examine collective perceptions and shared experiences. Adding such qualitative methods could provide a deeper understanding of how university coworking spaces operate, revealing nuanced insights that quantitative approaches might overlook. This approach can provide a richer and more nuanced understanding of how these spaces operate and how they might be better tailored to meet the needs of their users. This depth of insight is essential for designing spaces that align closely with user expectations and institutional goals, ultimately enhancing their effectiveness.

7.4.4 DESIGNING EXPERIMENTAL INTERVENTIONS

Researchers could design and test interventions to optimise university coworking spaces. For example, experiments could explore how changes in spatial configuration, furniture, and technology impact user behaviour and outcomes. Prior to the implementation of new concepts, they could be tested through pilot projects, offering the opportunity for evaluation and refinement. The effectiveness of different types of events, workshops, and programming could also be tested, with participation rates, user satisfaction, and follow-up outcomes serving as indicators of success. The role of digital tools, such as coworking space management apps and virtual collaboration platforms, could be studied to determine how technology enhances user experiences. Hybrid coworking models that combine physical and virtual elements might be particularly relevant in this context.

7.4.5 LONGITUDINAL STUDIES

The dynamic and evolving nature of coworking spaces makes longitudinal studies essential for understanding their long-term impacts and adaptability. By tracking users over extended periods, researchers can assess how coworking spaces influence key outcomes such as academic performance, career development, innovation, and interdisciplinary collaboration. Unlike cross-sectional studies, which provide only a snapshot in time, longitudinal research captures changes and patterns as they unfold, offering a deeper understanding of causal relationships and the sustained effects of coworking spaces on their users.

Moreover, longitudinal studies allow researchers to examine how coworking spaces respond to shifting user needs, technological advancements, and institutional priorities. This is particularly significant in the context of university coworking spaces, where user demographics and institutional objectives can evolve rapidly. Such research could

illuminate how these spaces support users during pivotal transitions, such as moving from student to entrepreneur or from academic to practitioner. These methods are especially suited for assessing dynamic processes in environments where outcomes depend on shifting behaviours, relationships, and contexts (Taris & Kompier, 2003). Applied to university coworking spaces, longitudinal studies could reveal trends in user engagement, the growth of collaborative networks, and the long-term success of initiatives launched within these environments. By providing insights into both immediate impacts and ongoing evolution, longitudinal research offers a robust foundation for designing coworking spaces that remain adaptable, sustainable, and aligned with user needs over time.

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Cowork4EU project partners

TU DORTMUND UNIVERSITY, GERMANY

TU Dortmund University is located in Dortmund, Germany. With 17 faculties ranging from natural and engineering sciences to cultural and social studies, the university has a wide variety of educational disciplines. 29,693 students, including 5,800 internationals, study at TU Dortmund University, making it a multicultural and globally connected university.

TU Dortmund University has a strong focus on innovation and entrepreneurship. Since 2012, 125 new start-ups have been launched with the support of the university. The Centre for Entrepreneurship and Transfer (CET), founded in 2017, further supports academic entrepreneurship. In 2019, the CET was awarded the status of Excellence Start-up Center by the NRW Ministry of Economic Affairs. You can find more about TU Dortmund University right here.

Prof. Dr. Simon Hensellek

Simon holds the Junior Professorship of Entrepreneurship and Digitalization at TU Dortmund University and is an entrepreneur himself. His research interests lie in the fields of (digital) entrepreneurship, leadership, innovation, and strategic management. His work has been published in renowned journals such as Entrepreneurship Theory and Practice, Strategic Management Journal, and Academy of Management Discoveries, among others. His research received multiple awards at conferences such as the European Academy of Management Meeting and the Australian Centre for Entrepreneurship and Research Exchange Conference. Simon also co-authored the German and European Startup Monitors, which offer a comprehensive display of the German and European startup landscape. He further published a book about digital business model generation. Find more about his research here.

Jonah Weißwange, M.Sc.

Jonah studied business and economics at TU Dortmund University with a focus on finance, taxation and entrepreneurial economics. He spent a semester abroad at ESC Amiens in Amiens, France, during his bachelor's studies. Jonah gained first experience in the tax and finance sectors. He is Cowork4EU's project manager and is pursuing a PhD in business and economics at TU Dortmund University. Find more of his work here.

PRAGUE UNIVERSITY OF ECONOMICS AND BUSINESS, CZECHIA

Prague University of Economics and Business (VŠE), founded in 1953, is the biggest public university in the fields of economics and business in Czechia. VŠE has six faculties offering a broad spectrum of study programs. The Faculty of Business Administration is EQUIS accredited, which ranks the faculty among the top 1% of business schools in the world. VŠE is ranked by the Financial Times annually and has already been appraised for several years by the Eduniversal Ranking project as one of the best business schools in Central and Eastern Europe.

VŠE has various international cooperations. The university cooperates with more than 250 partner universities worldwide. There are ca. 1,000 outgoing students annually, with even more students from abroad. VŠE is a member of numerous international networks, such as the International Global Alliance in Management Education and the Partnership in International Management. Find more about VŠE here.

Prof. Marko Orel, PhD

Marko is an organisational sociologist who works as an associate professor and a head of the Centre for Workplace Research at the VŠE. He specialises in exploring the changing nature of the workplace and transformation of work. He recently guest-edited a special issue on workplace transformation at Emerald's Journal of Corporate Real Estate, edited a volume on flexible workplaces of Springer Nature, and has published several chapters and research papers in journals such as World Leisure Journal, Mobile Networks & Applications, Review of Managerial Science and others. Find more about his work here.

Prof. Lukáš Válek, PhD

Lukáš holds a PhD in the field of Information and Knowledge Management from the University of Hradec Kralove. He has been active in the non-profit, non-governmental sphere since 2010 and focuses on relations between NGOs and businesses. Since 2012, he has been involved in projects of the program Erasmus+ in various roles, including consultant for the Czech National Agency. His publishing activities are related mainly to non-mainstream complementary economic systems and further to migration and entrepreneurship. In the Cowork4EU project, he is in charge of the finances and project management at VŠE. You can find more about his research right here.

SEEBURG CASTLE PRIVATE UNIVERSITY, SEEKIRCHEN AM WALLERSEE

Seeburg Castle University (SCU) is a private university located in Seekirchen/Salzburg, Austria. It offers graduate, postgraduate and doctoral programs in management and business studies, as well as graduate and postgraduate programs in business administration and business psychology, a graduate program in sports and event management, as well as a doctorate program in innovation and creativity management.

SCU supports ca. 1,000 students to develop competencies in the fields of management, innovation, leadership, and entrepreneurship to establish own firms or take leading roles in existing businesses. Entrepreneurial thinking and the conceptualisation and implementation of creative solutions are at the core of SCU teaching. SCU emphasises connecting students and partners from science and business. Similarly, SCU aims to translate research findings into solutions that bridge the gap between scientific knowledge and real-world implementation. Find more about the SCU here (in German).

Prof. Dr. Sandra J. Diller

Sandra is a Professor at Seeburg Castle University, a Research Affiliate at Harvard Medical School's Institute of Coaching, and an Affiliate at Ludwig Maximilian University of Munich's Center for Leadership and People Management. She researches personnel and leadership development and social interactions in organisations. Sandra further leads the MBA in Coaching at SCU and has published several peer-reviewed papers and books, such as the *Digital and AI Coaches Handbook*. Find her publications, projects, and cooperations here (in German).

Magdalena Weber, M.Sc.

Magdalena studied psychology at the University of Vienna, specialising in organisational and social psychology. She is involved in several projects related to workplace dynamics and contributes to the Cowork4EU project as a research associate at Seeburg Castle Private University. For her PhD, Magdalena focuses on academic research exploring remote work and coworking spaces within the broader context of work and organisational behaviour. Find out more about her work here.

PARIS SCHOOL OF BUSINESS, PARIS

Paris School of Business is a leading European Grande École of management that blends academic rigour, international exposure, and hands-on professional experience. Established in 1974, it operates as a private French business school within the framework of the French education system and is part of Galileo Global Education (GGE), the largest private higher education provider in Europe and the second-largest worldwide.

The newPIC Chair, hosted at Paris School of Business, has been at the forefront of research on collaborative spaces in urban, peri-urban, and rural areas for nearly a decade. Its researchers have produced numerous academic articles, white papers, and research reports on innovation and work practices in these spaces. The chair specialises in exploring the micro-foundations of innovation and creativity, focusing on how new ideas emerge, are appropriated by stakeholders, and contribute to the broader process of value creation. Find more about PSB here.

Prof. Ignasi Capdevila, PhD

Ignasi is a researcher specialising in innovation, creativity, and collaborative spaces. His work examines how physical, cognitive, and virtual contexts contribute to the emergence of communities, particularly within collaborative environments. He has explored topics such as the dynamics of new working spaces, the role of materiality in evaluating novel ideas, and the innovative capacity of cities. His research has been published in journals like the *Academy of Management Discoveries*, *R&D Management*, and *Journal of Economic Geography*. Find his full bibliography here.

Appendices

APPENDIX A

Cowork4EU Best Practice Report: Case Study Questionnaire for Coworking Spaces

Space Design and Amenities

Access

Where is your coworking space situated (e.g., on-campus and off-campus)?
Who can use it (e.g., only students)?
When is it accessible (e.g., 24/7 or only on working days)?

Design

What are the key design highlights of your space?
How large is your space?
How many and what kind of workstations do you offer (e.g., flex desks, fixed desks, etc.)

Key features

What kind of amenities do you offer (e.g., 3D printers, podcast studios, etc.)?

Space activities

Services and events

What kind of services do you offer (e.g., startup coaching or consulting)?
Do you host community events? If yes, which kind (e.g., community lunches, bar nights)?
Do you host professional workshops? If yes, which kind (e.g., business coaching, hackathons)?

Collaborations

Do you have collaborations with corporations or public institutions?
How do these collaborations look like (e.g., financial support, hosting mutual events)?

Impact and future

What are some success stories of your space (e.g., successful startups)?

What are your plans for the future?

Anything else? ☺

What else would you like to tell us to be included in the case study?

APPENDIX B

Overview of sample survey items used in the student surveys

Knowledge about Coworking

Self-developed single-item scale ranging from 1 (*none*) to 7 (*superior*): “How would you rate your knowledge about coworking and coworking spaces?”

Attitude towards Coworking

Measured with a combination of self-developed items (e.g., “Working inside a coworking space is enjoyable.”) and adapted items from Kunz et al., (2011; original item: e.g., “The company is dynamic.”; adapted item: e.g., “Working inside a coworking space is dynamic.”) on a scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). In total, the scale consisted of ten items.

Innovative Work Behaviour

Measured with the Innovative Work Behaviour Scale from Janssen (2000; nine items; e.g., “Creating new ideas for difficult issues” on a scale ranging from 1 (*never*) to 7 (*always*).

Behavioural Inhibition System

Measured with items that were used by both Reiss et al. (2020) and Agroskin et al. (2016; e.g., “nervous” on a scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*).

Behavioural Activation System

Measured with a combination of items from Greenaway et al. (2018; e.g., “relaxed”) and Reiss et al. (2020; e.g., “goal-oriented”) on a scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*).

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