Collaborative Capability in Coworking Spaces: Convenience Sharing or Community Building?

Marcelo F. Castilho and Carlos O. Quandt

> *"It is not about a business transaction, it is about social support... needing and being needed."*
>
> Andrew Jones
> Coworker, Singapore Impact Hub

This study explores the development of collaborative capability in coworking spaces. It is based on the perception of collaboration among 31 coworking founders, community managers, and coworkers of those spaces. In-depth interviews around the meaning of collaboration and its challenges were conducted in 14 coworking spaces located in six Asian countries. A set of factors was identified and a model was proposed based on a set of four dimensions: enabling knowledge sharing, enhancing a creative field, enhancing an individual action for the collective, and supporting a collective action to an effective execution. The "Convenience Sharing" and "Community Building" coworking types based on Capdevila (2014) suggest different conditions under which collaborative capability develops. Convenience Sharing coworking spaces tend to foster collaborative capability through knowledge sharing and effective execution, whereas Community Building coworking spaces tend to foster collaborative capability by enhancing a creative field and individual action for the collective. Overall, this study contributes to a theoretical model for coworking spaces to help coworking founders and community managers make strategic decisions. The findings suggest that collaborative capability in coworking spaces depends on the interlacing of a set of factors along four dimensions that relate in varying degrees of intensity to a two-fold coworking space typology.

Introduction

Coworking spaces are gaining strength worldwide as a collaborative phenomenon in a network economy in which competitiveness is based on knowledge and continuous innovation. The emergence and rapid expansion of those spaces (Ross & Ressia, 2015) stem from interconnected factors, such as technological changes, new generation lifestyles, the increased complexity of globalized business, and the increasing isolation of people. Together, these factors sharply restrict opportunities for collaboration and networking, and they reduce the ability to build trust and relationships with others, leading to the emergence of values related to a shared economy culture (Spinuzzi, 2012).

Coworking spaces have multiple popular definitions, and they could be viewed basically as shared offices that offer mostly operational efficiency (Stumpf, 2013). In that sense, coworking as an activity is a promise of sharing, where a space means a physical structure able to promote personal benefits among its participants (Moriset, 2013). But it may also present the opportunity to build an innovation ecosystem of mutual benefits (Spinuzzi, 2012). Thus, in a broader sense, coworking spaces offer the promise of a collaboration capability that generates benefits in terms of firm competitiveness. For the purposes of this study, a coworking space is not defined simply as a service or platform for those who want to share resources (Gandini, 2016), but as an organization that hosts and promotes a collaborative capability, defined as the ability to build and manage relationships, linked to a broader social complex phenomenon (Blomqvist & Levy, 2006).

The theoretical study of capabilities is in an early phase – there is no consensus on their key concepts or how they should be operationalized (Blomqvist & Levy, 2006), and the same applies to collaboration as a capability (Allred et al., 2011). Thus, this research might con-

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tribute to this effort through the identification of specific collaboration factors that characterize this capability in coworking spaces. Hence, this article aims to explore the development of collaborative capability in coworking spaces, as a conceptual framework that might help investors, coworking founders, and community managers with their strategic decisions in order to achieve more sustainable firm competitiveness.

This research is exploratory. It uses semi-structured interviews with key stakeholders and is based on a multidimensional intra-organizational collaboration model proposed by Quandt and Castilho (2017). The study represents an additional effort to understand collaborative capabilities in the context of firm competitiveness intertwined with other capabilities – innovative, absorptive, and adaptive – that support sustainable innovativeness.

The structure of the article is as follows. First, a literature review summarizes how coworking spaces relate to collaboration as a capability. Then, based on a previous study on the relationship of collaboration and innovativeness at the intra-organizational level (Quandt & Castilho, 2017), a set of collaboration factors are presented as a reference point for the current study. Next, a content analysis of the interviews yields a broader set of proposed collaboration factors, which then is used to develop a concept formed by four collaboration dimensions. A "Convenience Sharing" and "Community Building" model based on Capdevila (2014) suggests different conditions where collaborative capability develops from those four dimensions. In the concluding remarks, the limitations of the results are discussed and further research topics are suggested.

Coworking Spaces

Collaboration in coworking spaces may be subject to different interpretations. It may be seen either as a byproduct of the space, or as the very reason why such a place exists. However, a coworking space cannot be defined as just a place where diverse actors such as entrepreneurs, freelancers, and offsite workers interact. Different and often conflicting needs may yield a socially complex context where a community is formed and can be transformed by this socialization (Van den Broek, 2013).

Coworking refers to a specific way of organizing people around work that, by its own nature, facilitates collaboration, characterized by the co-location of economic actors, leading in some cases to the emergence of a highly-collaborative community (Capdevila, 2014). In that sense, a coworking space nurtures business ecosystems, given the potential for knowledge sharing and learning practices in a particular space that results in opportunities for innovation in business, services, and products.

Some view coworking as more than a convenient way of sharing resource – they see it as a way to escape the isolation of working alone and feel it provides a convivial space to break the loneliness (Moriset, 2013). For others, coworking is a "state of mind" (Kwiatkowski & Buczynski, 2011). Finally, others even view coworking spaces as "serendipity accelerators" (Moriset, 2013).

The reasons to join a coworking space are mainly to access the space itself, the direct contact, the events, and the sense of the community or "home" that all of this provides (Stumpf, 2013). Ross and Ressia (2015) expand those reasons by considering four aspects that make a coworking space appealing:

1. Flexible, precarious working conditions associated with a broader macro-social economic reality.

2. The attractiveness of flexible alternatives to either working from home or a corporate office.

3. Opportunity for social interaction that brings also the benefit of a better separation of working and home activities.

4. Opportunity to participate in collaborative projects and put related skills into practice.

Coworking spaces are certainly places where a propensity for social interaction can be enhanced, as can a willingness to share resources. However, what actually differentiates a coworking space from other spaces for work and learning is its complex social concept (Waters-Lynch & Potts, 2017), which can be described in terms of motivation to work together in a "good neighbours" and "good partners" proposition (Spinuzzi, 2012). Good neighbours work alone, focusing on their own tasks, politely alongside others; good partners actively foster the trust required that can lead to formal work collaborations.

The good neighbours and good partners proposition suggests there are different levels of collaboration in coworking spaces. Capdevila (2014) proposes a collaboration typology for coworking spaces that considers cost, resources, and relational approaches. The cost-driven level is about the rental of specific physical

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spaces, where building a community is non-existent and sharing knowledge is a secondary goal. The resource level is about a common physical space that attracts people or organizations that look for a mix of personal convenience and socialization advantages. In the relational level, the focus is on the synergistic effect of collaboration from a community shaped by a diverse social network of people with both strong and weak ties that choose to share resources serendipitously while in close proximity with each other. It often starts with a community, not a space, and it may take some time to build.

A relevant aspect of collaboration in coworking spaces is to understand the behavioural motivation behind the individuals' desire to share their resources and networks with each other (Kenline, 2012). In this sense, a coworking space is the reflection of a community well-being dependent on a common mental ground for emerging relationships (Stumpf, 2013). As a socially-constructed phenomenon, collaboration in coworking spaces is a product of cultural and social practices, as well as an expression of a shared mental space of values and beliefs.

A better comprehension of collaboration capabilities in the context of coworking spaces might boost, for instance, a diverse social network with some specific socialization advantages or through some community building strategies that sustain higher levels of motivation to work together. This highlights the importance of new sources of firm competitiveness through the identification of factors and dimensions related to collaboration in coworking spaces.

Collaboration as a Capability

Collaboration capabilities in the context of coworking spaces bring the opportunity to build and manage relationships based on mutual trust, communication, and commitment. Thus, such capabilities are linked to a broader social complex phenomenon and generate some specific socialization advantages for coworking founders, community managers, and coworkers of those spaces.

Collaboration is also a capability that allows organizations to adapt quickly to a changing economic environment and rely on "ingredients" of social interaction that have a strong impact on the innovative result. Among those ingredients are processes of shared creation based on shared understanding that none had previously possessed or could obtain on their own (Dalkir, 2011) and mutuality (Gray, 1989), which is highly dependent on formal commitment (Gray & Wood, 1989).

In a study aimed to identify the different factors that influence collaboration in an intra-organizational context (Quandt & Castilho, 2017), collaboration as a capability was translated into intertwined factors that influence collaboration and affect the ability of an organization to innovate. The proposed ten collaboration factors represented a specific form of collaboration in which the presence of barriers to knowledge sharing and mutual aid are minimized.

Collaboration capability could be described through the same intertwined factors as proposed by Quandt and Castilho (2017): as an integral component of other capabilities – adaptive, absorptive and innovative (Wang & Ahmed, 2004). In a coworking space, collaboration capability might evolve from collective action that supports innovation and firm performance to a generic meta-capability in uncertain and complex environments, which impacts the innovative results of an organization through the exploitation of combined and complementary capabilities.

Methodology

The proposed approach is exploratory; the aim is to propose a typology for coworking spaces that might help coworking founders and community managers make strategic decisions. It is based on the perceptions and experiences of collaboration among coworking founders, community managers, and coworkers of those spaces. It involved a combination of semi-structured interviews, secondary data related to the coworking spaces under study and their leaders, as well as direct observation and insights during the field research. Semi-structured interviews were conducted during a research trip in six Asian countries between November 2015 and January 2016 (Table 1). The choice of places was determined by convenience and accessibility, not due to any expectation that coworking spaces in Asia are typical or unique in some way, although this may be an area worthy of future research. Rather, it was assumed that coworking spaces mirror some common factor such as technological changes; new generation lifestyles; the increased complexity of globalized business that impact any space wherever the country it is located. The interviews included 31 individuals (P1 – P31) who were mainly founders of coworking spaces, community managers, and coworkers of those spaces. The interview questions focused on four perspectives:

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Table 1. Coworking spaces visited by country and number of interviews

Country	Number of Coworking Spaces Visited	Number of Interviews (Founders/Managers/ Coworkers)
Thailand	8	14 (8/2/4)
Malaysia	1	2 (1/1/0)
Singapore	1	6 (1/1/4)
Indonesia	1	3 (0/2/1)
Vietnam	2	3 (3/0/0)
Japan	2	3 (1/2/0)
Total	**15**	**31 (14/8/9)**

the meaning of collaboration, challenges of collaboration, successful experiences with collaboration, and less successful experiences with collaboration. The selection of coworking spaces followed the opportunity to be in contact with a broader, diverse sample of a coworking ecosystem in each country. The preliminary selection of websites was based on the combination of at least one of three criteria: i) the ones that had the most relevance in terms of size or economic impact; ii) the ones that pioneered the activity in their region; and iii) the ones that could represent a diverse social network through a specific field or professional activity, such as a focus on creative industries.

All the interview data were transcribed and exported to Atlas TI software for the methodological procedures of content analysis, based on a method of collection, description and analysis (Figure 1) proposed by Friese (2010). This process involves:

1. Scanning the data, recognizing relevant points and giving them a badge or identity.

2. Digging into the data, associating, categorizing, and ranking it in order to describe it with the utmost accuracy.

3. Reflecting on the data, creating new meanings, and leading to new ways of understanding a reality.

The initial set of factors influencing collaboration was reviewed and refined in light of the encoding process of the interviews, according to the phases contained in the descriptive level (Figure 1).

Analysis and Discussion

The analysis is structured in four main phases:

1. *Code creation:* utilizes a ten-code system proposed by Quandt and Castilho (2017) in the context of the relationship between collaboration and innovativeness in a case study of an innovative organization to support the codification of the preliminary interviews and eventually the creation of new codes.

2. *Code consolidation:* provides a refined coding system for the remaining interviews through the consolidation of a new set of codes along the set of ten original factors.

3. *Code freezing:* a more refined code system brings about a merger of the codes in four families.

4. *Conceptualization:* a new system of collaboration factors is proposed.

Phases 1 and 2: Code creation and consolidation (encoding the interviews)
A ten-code system proposed by Quandt and Castilho (2017) (Table 2) supported the codification of the interviews. As content analysis involves recognizing relevant points that bring new meaning to the data, additional codes were created in order to better explain specific aspects of collaboration capability in coworking spaces. This first phase was followed by a code-consolidation phase in which a new set of codes provided a refined coding system for the remaining interviews, forming an expanded code system (Table 3) together with the codes proposed previously by Quandt and Castilho (2017).

Phases 3 and 4: Code freezing and conceptualization (a system of collaboration factors)
A third step and fourth phase aimed at the creation of new meanings through the formulation of a concept that merged the codes along four dimensions. The creation of a set of four different dimensions followed an interpretive inductive–deductive analysis supported by a progressive refinement of the theoretical model of the factors influencing collaboration at a more conceptual abstract approach (Friese, 2010). From a combination

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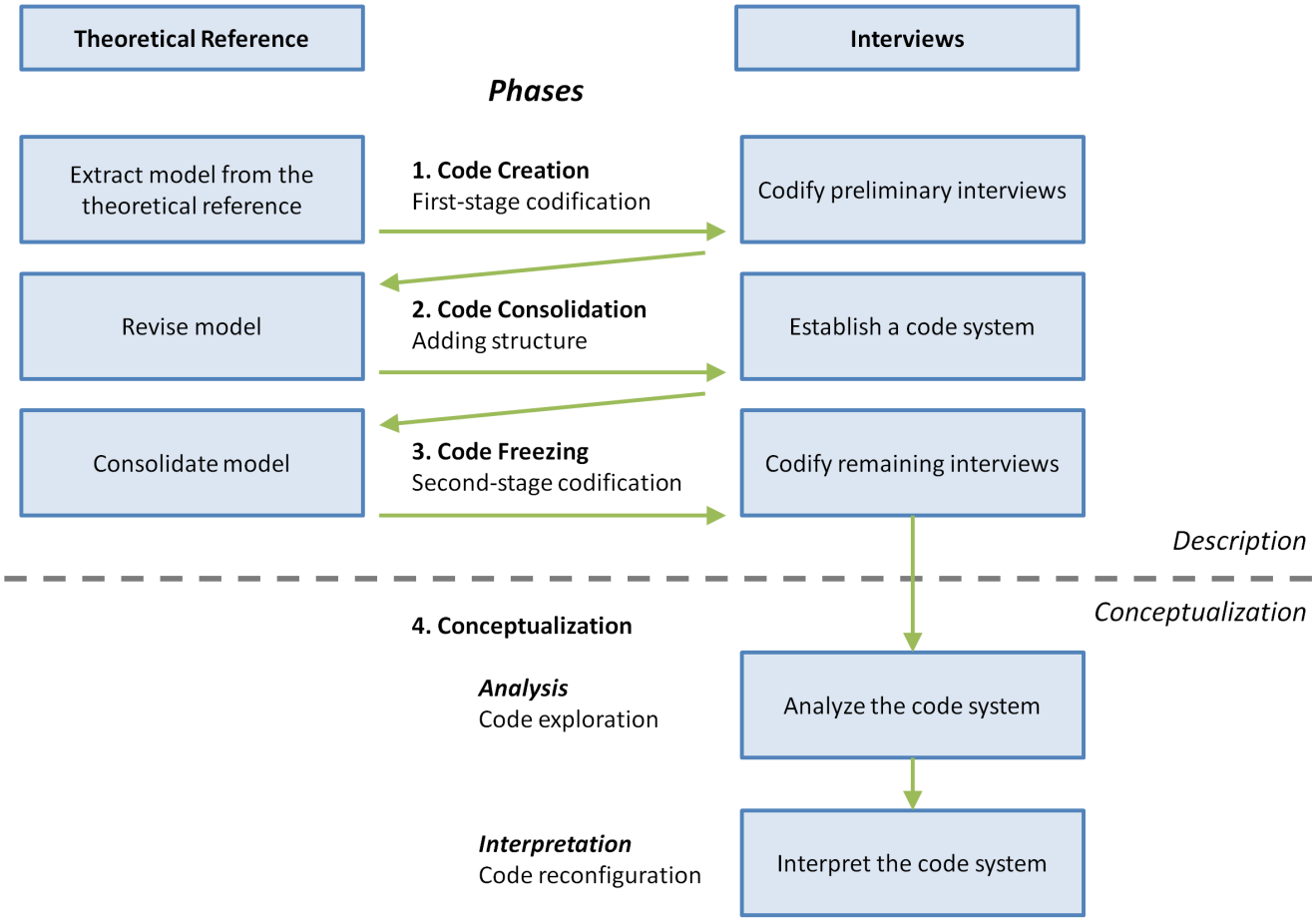

Figure 1. Codification model (Adapted from Friese, 2010)

of collaboration factors derived from the set proposed by Quandt and Castilho (2017), together with the new collaboration factors, four different code groups were created, considering the following statements (Table 4):

1. *Factors that enable knowledge sharing:* a continuous building of positive expectations (Reciprocity) of shared interests, complementary or homogeneous (Sharing), through informal interaction lines (Transparency) among members who have access (Access) to information channels; favourable statement of confidence (Recommendation); and communication skills (Communication of Expertise).

2. *Factors that enhance a creation field:* flexibility for shared creation (Opening) through continuous adjustments of expectations around different perspectives (Flexibility) supported by a flow of emerging interactions (Being Collective) in a social gathering (Partying) where a collective energy (Co-Creation) in a trustful field (Trust at First) provides a giving and receiving (Belongingness) good will (Friendship) attitude.

3. *Factors that enhance individual action for collective results:* mutual aid (Selflessness) based on autonomy and preservation (Self-Sufficiency) supported by a fearless behaviour towards the others (Being an Individual) and a process of free development as an individual (Self-Determination) and conscious of their own character, including feelings and behaviours (Self-Awareness).

4. *Factors that support collective action for an effective execution:* a shared vision (Congruence) that brings a sense of legitimacy to manage tensions that are inherent to collaboration (Mobilization) supported by focus (Concentration) and determination (Purpose), and guided by an awareness of mutual reliance (Interdependence).

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Table 2. Factors that influence collaboration and associated indicators

Factors	Associated Indicators	References
Flexibility: Involves continuous adjustments of expectations around different perspectives in high-tension interactions	• Degree of willingness to change • Degree of encouragement for explanation of differences • Ability to engage in situations of disagreement	Thomson (2006) Antikainen et al. (2010) Crespell et al. (2006)
Reciprocity: Continuous building of social ties, developed around positive expectations of trust and reciprocity	• Degree of positive expectations of reciprocity • How obligations and expectations are met	Thomson (2006) Tsai (1998) Mattesich et al. (2001) Ellinger (2006) Hoffmann (2005)
Congruence: Shared vision based on clear expectations, goals, roles, and responsibilities that brings a sense of identity	• Degree of openness and involvement in decision making • Degree of consistency in decisions	De Clercq et al. (2011) Mattesich et al. (2001) Hoffmann (2005) Chua (2002) Chow & Chan (2008) Hansen (2009) Chua (2002)
Access: People who have access to information	• Degree of access to people • Degree of access to information	Thomson et al. (2007) Chua (2002) Hansen (2006)
Mobilization: The leader ensures the legitimacy to manage resources and manage tensions that are inherent to collaboration	• How much the leader encourages team autonomy • How the leader encourages staff to venture	Ellinger (2006) Huxham (2005) Hurley & Hult (1998) Crespell et al. (2006)
Transparency: Informal interaction lines among members using information channels molded by transparency	• Degree of informal social relations	Thomson et al. (2007) Chua (2002)
Selflessness: Degree of support and mutual aid in the workplace, which is revealed in the interdependence of individuals	• Degree of willingness to help • Degree of willingness to ask for help • In what context one helps the other beyond what is necessary, required, or expected	Chua (2002) Mattesich et al. (2001) Hurley & Hult (1998) Crespell et al. (2006) Antikainen et al. (2010)
Opening: Flexibility and a stimulating environment for shared creation, which provides openness to ideas, but it is sensitive to resource constraints	• Degree of reworked ideas • Level of fault tolerance • Openness to innovative ideas • Degree of tolerance for taking risks	Ellinger (2006) De Clercq et al. (2011) Hoffmann (2005) Gray (1989) Hurley & Hult (1998) Antikainen et al. (2010)
Self-sufficiency: Movements of affirmation between individuals and areas, considering the need for autonomy and preservation	• Degree of acceptance of paradigms from other fields of knowledge • Degree of attachment to their own field of expertise	Chua (2002) Hansen (2009) Mattesich et al. (2001) Hurley & Hult (1998)
Sharing: Process of exchange and combination of shared interests	• Degree of tolerance to behavioural differences • The degree to which each one is perceived to belong to a group	Thomson et al. (2007) Hoffman (2005) Chow & Chan (2008) Chua (2002) Crespell et al. (2006)

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Table 3. Additional factors that influence collaboration and associated quotations

New Collaboration Factors	Quotations from Interviews
Trust at First Creation of a trustful field that supports the building of trustful relationships	• "There is already an established relationship of trust to it and it naturally seems to rebound people who are not very trustful already." (P14) • "In the act of collaborating together – especially within a coworking space – we need to have trust as the first thing." (P22)
Being an Individual A personal positive perception about life that brings a fearless behaviour towards the others supported by trust and creativity	• "It is hard to innovate by yourself alone. People must be in the same frequency so they are fearless and anything is possible." (P20)
Recommendation A favourable statement of confidence suitable for a third part as a path to building a relationship	• "There are different levels of referrals. I know this person. A good recommendation (makes a difference)." (P11) • "A lot of people are introduced to each other here through friends of friends and there is already a basis to trust to it." (P14)
Purpose Determination of doing something intentionally around a specific effort linked to a desired result	• "…a country is a reflection of its people and its people will only be active citizens or happy individually if they care about something with passion." (P13) • "It brings a strong intention of autonomous thinking and the power of a community of creative people…" (P19)
Self-Awareness Knowledge and awareness of one's own character, including feelings and behaviours	• "People … are in a process of life of finding themselves … and they want to do something." (P3) • "We are not ashamed of (proposing) meditation … because you cannot be a good leader if you don't know yourself well yet." (P13)
Concentration The condition or ability to be focused in a particular task without being distracted	• "It is difficult to focus, it is too social, too much laughing going on … for networking. The experience it is really great but if you really want to produce, to focus, it's difficult…" (P1) • "Most of the time I need to focus on my work … If I communicate with people, the job can be very slow. You have to balance these things." (P15)
Self-Determination Able to freely decide and conduct one's own development as an individual	• "A personal behaviour can pop up and being able in collaboration to get you as an individual to a higher level." (P1) • "People-powered problem solving." (P6)
Being Collective A flow of emerging interactions between individuals sustained by a field of vulnerability and trust	• "Many magical possibilities when people meet up together … when people meet together it emerges new kind of business, new possibilities … many outcomes." (P5) • "A coworking space itself needs a lot of passion because it is an energy. (It is soul.) You come here because you want to share your loneliness. It doesn't make sense (from the point of view of efficiency)." (P20)
Belongingness Act of being a member attending the need to give and receive attention to or from the others	• "Everyone talks to outsiders when somebody comes. This is a good community. Not just the mayor but also all the people." (P4) • "They come here and feel they are at home." (P17)
Co-Creation A collective energy that brings different parties together in order to produce a mutually valued outcome	• "How individuals, groups, companies can one affect each other … so they can create new projects, ideas, business, plans, and opportunities for themselves and for the others." (P14) • "To make things happen, it is good to have inspiration with other people." (P16)
Partying A social gathering for pleasure and amusement rich with meaningful experiences	• "Partying that is not a party place but I want to make the office a party place." (P4) • "I started this business for fun. It could be fun if people are really opened up … you have to be open to everybody – it doesn't matter who they are." (P17)
Friendship Good will as a quality of being with others	• "I get along with you – I get a good feeling with you." (P7) • "Collaboration can only happen when people here start to participate in an activity and make friends, and as they become friends, they can trust one another." (P20)
Interdependence: Awareness of mutual reliance between individuals and organizations	• "The experience and feeling of coming together … you are not only centered on ourselves you are also connected to your neighbour." (P10) • "It is not just about people working more but also part of a well-rounded vision of who people are what should be doing how work fits into that…" (P14)

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Table 4. Association between previous model (Quandt & Castilho, 2017) and new factors that influence collaboration around four intervening factors

Intervening Factors	Previous Factors that Influence Collaboration	New Factors that Influence Collaboration
Enabling knowledge sharing	**Access:** People who have access to information **Transparency:** Informal interaction lines among members using information channels molded by transparency **Sharing:** Process of exchange and combination of shared interests **Reciprocity:** Continuous building of social ties, developed around positive expectations of trust and reciprocity	**Recommendation:** A favourable statement of confidence suitable for a third part as a path to building a relationship
Enhancing a creative field	**Flexibility:** Involves continuous adjustments of expectations around different perspectives in high-tension interactions **Opening:** Flexibility and a stimulating environment for shared creation	**Partying:** A social gathering for pleasure and amusement, rich with meaningful experiences **Co-Creation:** A collective energy that brings different parties together to produce a mutually valued outcome **Belongingness:** Act of being a member attending the need to give and receive attention from others **Being Collective:** A flow of emerging interactions between individuals sustained by a field of vulnerability and trust **Trust at First:** Creation of a trustful field that supports the building of trustful relationships **Friendship:** Good will as a quality of being with others
Supporting a collective action to an effective execution	**Mobilization:** The leader ensures the legitimacy to manage resources and manage tensions that are inherent to collaboration when combining assertiveness and courage to take risks **Congruence:** Shared vision based on clear expectations, goals, roles, and responsibilities that brings a sense of identity	**Concentration:** The condition or ability to be focused in a particular task without being distracted **Purpose:** Determination to do something intentionally around a specific effort linked to a desired result **Interdependence:** Awareness of mutual reliance between individuals and organizations
Enhancing an individual acting for the collective	**Selflessness:** Degree of support and mutual aid in the workplace **Self-sufficiency:** Movements of affirmation between individuals and areas	**Being an Individual:** A personal positive perception about life that brings a fearless behaviour towards others supported by trust and creativity **Self-Determination:** Able to freely decide and conduct one's own development as an individual **Self-Awareness:** Knowledge and awareness of one's own character, including feelings and behaviours

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Prevalence of collaboration factors considering both types of coworking spaces

This research proposed, through an interpretive inductive–deductive methodology based on Friese (2010), a model of four different dimensions that summarize collaboration factors regarding coworking spaces. The dimensions are adherent in different degrees to either the "Convenience Sharing" or "Community Building" types of coworking spaces (Figure 2).

The Convenience Sharing type of coworking space resembles the resource approach proposed by Capdevila (2014) as one of the three elements of a collaboration typology for coworking spaces – the other two approaches being cost and relational approaches. The resource approach is about convenience and socialization advantages, more adherent to enabling knowledge sharing and supporting a collective action to an effective execution. In Convenience Sharing coworking spaces, there is a tendency to defend self-interest, and the collective view is not fully internalized. Trust is built over time. Therefore, people are more attracted by personal convenience, and socialization advantages and community-building activities are necessary to keep the sharing mode alive.

In the Community Building type of coworking space, relationships based on collaboration are primarily an act of trust, which is highly dependent on formal commitment. Community-building tends to precede the space itself. It resembles the Capdevila (2014) typology in the sense that the relational level focus is on the synergistic effect of collaboration through a diverse social network of people. Community Building coworking spaces bring interdependence and formal commitments that stem from self-determination and a fearless positive perception towards the others, guided by a common mental ground for emerging relationships (Stumpf, 2013). People with both strong and weak ties choose to share resources serendipitously. A shared mental space of values and beliefs prevails, shaped by a diverse social network, less dependent on community building activities as the desire to share their resources and networks with each other (Kenline, 2012) is much more evident. Thus, the Community Building type tends to be more linked to enhancing an individual action for the collective and to enhancing a creative field.

This simplified representation of four dimensions – and their underlying factors – reflects the meaning and challenges of collaboration. These challenges are mainly expressions of the mutual adjustments being made by the main stakeholders: founders, community managers, and users, in order to deal with a highly complex social context. Mutual adjustments are necessary to keep a balance between conflicting mental models of sharing, privacy, and friendship, and needing and being needed, all within a space that is supposed to enact a more socially oriented approach as well as providing an expression for more privacy-oriented tasks. As the interview subjects indicated in this study, conflicting mental models drive a "stolen idea" culture, a mindset that prevents sharing (P22) as well as a culture of "being a friend of anyone" in clash with a culture of "do not talk to strangers" (P15). That explains the importance of the community builder role as a dialogue initiator (P4). A traditional organizational culture is replaced by the challenge of cultivating a sense of equals together with

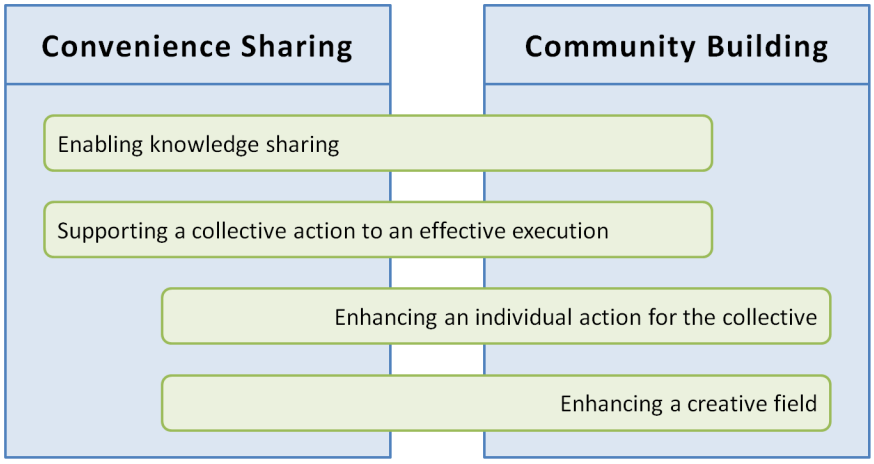

Figure 2. Prevalence of collaboration factors considering the Convenience Sharing and Community Building approaches

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a sense of diversity (P10; P14). These mutual adjustments reflect a polarity between concentration and sharing in a space where there is a double role of doing business as well as being a contributor to this larger "business" that is dependent on the way interaction happens among the members (P14) who are not convinced of the value of collaboration (P14).

Conclusion

This exploratory study proposed a set of dimensions linked to collaborative capabilities in coworking spaces in order to help strategic decision making among coworking founders and community managers. It suggests that collaborative capability in coworking spaces depends on four interconnected dimensions that relate to various extents to two different types of coworking spaces, where collaboration capabilities foster such spaces as enabling contexts to reconfigure organizational resources through knowledge sharing, enhancing a creative field, supporting individual actions for collective results, and supporting collective action towards an effective execution. This study also proposes that Convenience Sharing coworking spaces are mostly related to knowledge sharing and supporting a collective action towards an effective execution, whereas Community Building coworking spaces are more related to enhancing a creative field and enhancing an individual action for the collective.

The study was conducted only in Asian countries in a relatively limited sample of spaces. Possibly, the results would be different if the interviews were conducted in a different cultural setting. Additionally, there are several political, cultural, and social aspects that might reveal differences between developing countries and developed countries within Asia regarding collaboration in coworking spaces. Nevertheless, this study can contribute to the coworkers' perspective, helping them to decide whether a particular co-working space will be more aligned with their particular needs for collaboration. In a broader perspective, this research may also contribute to an evaluation of the level of collaborative capability that can be supported by different types of coworking spaces. This would also support decision-making processes linked to the configuration of coworking space strategies and their capability to promote collaboration among participants. Further studies could involve the application of the resulting model of two types, four dimensions, and underlying factors to coworking spaces in other regions to verify model validation and potential adaptations.

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About the Authors

Carlos O. Quandt is a Professor at the Business School of Pontificia Universidade Católica do Paraná (PUCPR) in Curitiba, Brazil. He received his PhD in Urban and Regional Planning from the University of California, Los Angeles (UCLA) in the United States. His research and consulting work include projects for the Institute of the Americas, the International Research and Development Centre (Canada), the Center for North American Integration and Development, the New Vision Business Council of Southern California, the Lewis Center for Regional Policy Studies (USA). His key areas of interest and experience are in the fields of innovation and knowledge management, innovativeness, clusters and networks, and regional development.

Marcelo F. Castilho is a PhD student at the Business School of Pontificia Universidade Católica do Paraná (PUCPR) in Curitiba, Brazil. He holds a Master of Arts in Automotive Design from Coventry University in the United Kingdom. His professional background includes a 22-year career dealing with product innovation, first as an expert and later as a design manager in the commercial vehicle sector. His research and consulting work includes organizations in search for collaboration capabilities and design thinking methods to achieve results, considering aspects of creativity, innovation, sustainability, and individual wellbeing and inner balance.

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References

Allred, C. R., Fawcett, S. E., Wallin, C., & Magnan, G. M. 2011. A Dynamic Collaboration Capability as a Source of Competitive Advantage. *Decision Sciences,* 42(1): 129–161. http://doi.org/10.1111/j.1540-5915.2010.00304.x

Antikainen, M., Makiaa, M., & Ahonen, M. 2010. Motivating and Supporting Collaboration in Open Innovation. *European Journal of Innovation Management,* 13(1): 100–119. http://doi.org/10.1108/14601061011013258

Assenza, P. 2015. If You Build It Will They Come? The Influence of Spatial Configuration on Social and Cognitive Functioning and Knowledge Spillover in Entrepreneurial Co-Working and Hacker Spaces. *Journal of Management Policy and Practice,* 16(3): 35–48.

Blomqvist, K., & Levy, J. 2006. Collaboration Capability – A Focal Concept in Knowledge Creation and Collaborative Innovation in Networks. *International Journal of Management Concepts and Philosophy,* 2(1): 31–48. http://doi.org/10.1504/IJMCP.2006.009645

Capdevila, I. 2014. *Different Entrepreneurial Approaches in Localized Spaces of Collaborative Innovation.* Paris: ESG Management School. http://dx.doi.org/10.2139/ssrn.2533448

Clifton, N., Fuzi, A., & Loudon, G. 2014. *New In-House Organizational Spaces that Support Creativity and Innovation: The Co-Working Space.* Paper presented at the R & D Management Conference 2014, June 3–6, 2014, Stuttgart. Germany.

Dalkir, K. 2011. *Knowledge Management in Theory and Practice* (2nd ed.). Oxford: Elsevier.

Friese, S. 2010. *Qualitative Data Analysis With Atlas Ti.* Thousand Oaks, CA: Sage Publications Ltd.

Gray, B. 1989. *Collaborating: Finding Common Ground for Multiparty Problems.* San Francisco, CA: Jossey-Bass Inc.

Hurley, R. F., & Hult, G. T. 1998. Innovation, Market Orientation and Organizational Learning: An Integration and Empirical Examination. *Journal of Marketing,* 62(3): 42–54.

Huxham, V. 2005. *Managing to Collaborate: The Theory and Practice of Collaborative Advantage.* New York: Routledge Taylor & Francis Group.

Kenline, C. 2012. *Defining a Culture: The Paradigm Shift Toward a Collaborative Economy.* Fort Wayne, IN: Indiana University Purdue University.

Kwiatkowski, A., & Buczynski, B. 2011. *Coworking: Building Community as a Space Catalyst.* Fort Collins, CO: Cohere.

Mattesich, P., Murray-Close M., & Monsey B. 2001. *Collaboration: What Makes It Work.* Saint Paul, MN: Fieldstone Alliance.

Moriset, B. 2013. *Building New Places of the Creative Economy. The Rise of Coworking Spaces.* Paper presented at the 2nd Geography of Innovation Conference, January 23–25, 2014, Utrecht, The Netherlands. https://halshs.archives-ouvertes.fr/halshs-00914075

Quandt, C. O., & Castilho, M. F. 2017. Relationship Between Collaboration and Innovativeness: A Case Study In an Innovative Organization. *International Journal of Innovation and Learning,* 21(3): 257–273. https://doi.org/10.1504/IJIL.2017.083400

Ross, P., & Ressia, S. 2015. Neither Office nor Home: Coworking as an Emerging Workplace Choice. *Employment Relations Record,* 15(1): 42–57.

Spinuzzi, C. 2012. Working Alone Together: Coworking as Emergent Collaborative Activity. *Journal of Business and Technical Communication,* 26(4): 399–441. https://doi.org/10.1177/1050651912444070

Stumpf, C. 2013. *Creativity and Space: The Power of Ba in Coworking Spaces.* Masters Thesis, Corporate Management & Economics. Zeppelin University.

Van den Broek, W. 2013. The Future of Coworking. *Deskmag,* October 31, 2013. Accessed December 1, 2017: http://www.deskmag.com/en/the-future-of-coworking-882

Wang, C., & Ahmed, P. 2004. The Development and Validation of the Organizational Innovativeness Construct Using Confirmatory Factor Analysis. *European Journal of Innovation Management,* 7(4): 303–313. https://doi.org/10.1108/14601060410565056

Waters-Lynch, J. M., & Potts, J. 2017. The Social Economy of Coworking Spaces: A Focal Point Model of Coordination. *Review of Social Economy,* 75(4): 417–433. https://doi.org/10.1080/00346764.2016.1269938

Waters-Lynch, J. M., Potts, J., Butcher, T., Dodson, J., & Hurley, J. 2016. *Coworking: A Transdisciplinary Overview.* Working Paper. Melbourne, Australia: RMIT University. http://dx.doi.org/10.2139/ssrn.271221

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