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COWORKING IN THE CONTEXT OF CLUSTERS

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ABSTRACT

The aim of this study This study aims to verify whether coworking spaces are associated with the concept of industrial clusters, constituting themselves as microclusters. The methodological basis of the investigation is centered on the theoretical conceptual model of investigation called the microcluster conditioning paradigms and the teleology of coworking. The results of the empirical investigation were analyzed using inferential statistics. The inferential analysis was based on the application of Pearson's Correlation technique to determine the degree of association between the independent variables called microcluster conditioning paradigms and the teleology-dependent variables of coworking and the use of F statistics to obtain the significance test of the hypotheses. Pearson's Coefficient of Variation was also applied to assess the homogeneity of the data in relation to the studied variables. From the data obtained, it can be said that there is evidence of an association between the conditioning paradigms of microclusters and the teleology of coworking management. Thus, it is inferred that the Coworking space presents characteristic and interactive similarity of business clusters, so it is pertinent to classify it as a microcluster system. The contributions of this study are relevant to understand the dimensions of Coworking spaces as Microclusters and may bring entrepreneurs a new vision about their business.

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INTRODUCTION

In recent years there has been growth in Brazil and around the world of enterprises destined to become Coworking spaces. The English term can be freely translated into Portuguese as "cowork" or joint work. In this type of space, different businesses share the same office to host their businesses, bringing benefits such as cost reduction, expanded networking and the opportunity to locate themselves in the noblest areas of major centers. According to the 2018 Coworking Census (COWORKING BRAZIL, 2018), there are 1,194 Coworking spaces in Brazil, a number 48% higher than the previous year, 2017. In Brasilia, capital of the federation, there are about 35 spaces for Coworking, according to the same study. At the same time, over the last two decades, supra-enterprise entities have been studied, which Zaccarelli et al (2008, p. 44 apud GUIMARÃES, 2010, p. 29) defined as: "a system instituted by the interrelationship of a set of businesses [...] in which the dynamics of relationships between organizations imply systemic effects of amplifying the competitive capacity of the system and its components, in relation to companies located outside it".

The supra-enterprise entities, according to Guimarães (2010, p.28), cover several terms, using related concepts such as: organization chain, supply chain, business chains, clusters, business networks, etc. This article seeks to relate the concepts related to Coworking to a specific type of supra-enterprise entity: the clusters. Porter (1998) defined clusters as being "geographic concentrations of companies and interrelated institutions of a specific sector". Thus, as a deduction, one can infer that this type of business concentration is applied to Coworking spaces, since it occurs on a reduced geographic scale, compared to industrial clusters. In this context, then, there is evidence to characterize Coworking as a microcluster as a supra-enterprise entity. Therefore, in this context, the central object of this investigation is to verify if there is an association between the conditioning paradigms of microclusters and the teleology of coworking management.

Theoretical Framework

Cluster: The English word cluster, does not have direct translation into Portuguese, but conceptually and generically, according to Sousa, 2003, p. 13, "[it] means a group of similar things or activities, which develop together." Sousa (2003, p. 13) explains that "such terminology is not unique to economic literature, since it is found in

many areas, such as administration, statistics, IT, medicine, and, in all of them, it expresses a concept of aggregation, junction, and integration. In the area of administration, already in the 20th century, Marshall (1920, apud MORAIS; PEREIRA, 2014, p. 37-38) dealt with the concept of productive clusters. The author considered that "specialized business clusters drive the economy of a location.

The so-called Trinity of Marshall presents three factors as a source of geographic concentrations: specialized suppliers of inputs, robust markets of specialized labor and information spillovers. The spillover effect is an economic term that expresses the fact that an activity creates externalities, affecting those who are not directly involved in the process, but are close. (MARSHALL 1920 apud MORAIS; PEREIRA, 2014, p.38)

Clusters, in the context of this work, according to Porter (1998), based on his article *Clusters and the New Economics of Competition*, are constituted of "geographic concentrations of interconnected companies and institutions in a particular field" (free translation). The author argues that clusters encompass a number of interconnected industries and other entities important to competition, which, according to the author, include, for example, suppliers of specialized inputs such as components, machines and services, and suppliers of specialized infrastructure. Regarding the concept of clusters, Capdevila (2014, p.11) states that they were "conceptualized around the interconnection of large companies and institutions, linked by complementarities and similarities. Such interconnections are portrayed in vertical and horizontal dimensions, as described by the author:

"The horizontal dimension consists of companies that produce similar services and compete with each other. Competition between grouped companies forces innovation and product differentiation (PORTER 1998; PORTER 1990 apud CAPDEVILA 2014, p.11). The vertical dimension is based on the complementarities of cooperation localized forms of the cluster, thus creating networks of suppliers and customers. Both dimensions, horizontal and vertical, are closely related and mutually nurture each other, stimulating the growth of the cluster as Marshall has already noted (MARSHALL, 1919 apud CAPDEVILA 2014, p.11)". However, it is important to highlight the position of Cassanego (2014, apud Gascon, Pezzi and Casals, p.34) that, given the existence of different schools of thought about clusters, there is a certain consensus regarding the understanding of this phenomenon in three dimensions. The first of these would be the one that defines clusters as "geographic concentrations of specialized companies, workers with advanced skills, and support institutions, giving rise to flows of knowledge and cluster effects in the form of economies of scale and diversification" (CASSANEGO, 2014, p.34).

The next dimension highlighted by the author concerns the specialized services provided by clusters, "which implies some competitive advantages: [...] groups simultaneously allow intense competition and close cooperation between their companies, a phenomenon that has sometimes been called cooptation. (CASSANEGO, 2014, p.34-35)". Finally, Cassanego (2014, p.35) highlights the institutional and social dimension of clusters such as universities and public organizations. The author says that the interconnection, cooperation and interaction between these agents implies "in the formation of formal and informal contacts, exchange of information, know-how and technical experience, which at the same time facilitates the development of new ideas, projects, products, services and so on, allowing an improvement in companies". The study on supra-enterprise entities is also noteworthy, in which Zaccarelli et al (2009, p. 38) emphasizes, "the proliferation and development of small businesses organized in business cluster structures around the world has been an economic phenomenon that has occurred in the last 30 years". According to the authors, this occurred because of the difficulty that small businesses were having in adapting to changes resulting from emerging technological innovations. The solution would be to cooperate, since in this model,

small companies could have access to positions practically impossible to be reached in isolation. In this sense, the understanding of organized business structures as microclusters must also be referenced. According to Capdevila (2014, p. 119) microclusters are "businesses that present an innovation dynamic similar to clusters, but on a smaller scale". For Michael (2007, p.21), in corroborating with the theme, he describes microclusters as follows

"The term microcluster was coined to refer to the geographic concentration of a small number of companies in a cohesive local environment, where complementary interaction between these companies contributed to a greater level of local expertise. A microcluster, then, is defined by its local context and the unique identification of its product, and not by artificial perceptions of the regionality of production processes" (MICHAEL, 2007, p.21, our translation).

Coworking: As said before, the term Coworking comes from the English language. The English verb "to work", according to the Michaelis dictionary (1987) means "the action of working". The prefix "co", according to the same dictionary, indicates "with, in collaboration with, together, mutual". This way, we can translate the term (which has no Portuguese correspondent) as "coworking" or "working together". According to Soares and Solrato (2015, p.62), the term Coworking is attributed to games designer and American theorist Bernie DeKoven, having been coined in 1999, while he was developing a certain computer-coordinated platform. "This system had the function of collaborating with the work in business meetings, informing those present the most important notes about the meeting on screens that were visible to all, simultaneously, based on the idea of 'working together as equals'". (SOARES AND SOLRATO, 2015, p. 62).

But it was only in 2005 that the first coworking space itself was opened.

"The current idea of coworking was consolidated in August 2005, when Brad Neuberg, an American software engineer, founded an environment designed to share work spaces in a community center for women called Spiral Muse and located in San Francisco, United States (BOTSMAN;ROGERS, 2011;SPINUZZI, 2012 apud SOARES E SOLRATO, 2015, p. 62)

When conceptualizing Coworking, Uda(2013, p. 2,.) explains the phenomenon as 'a way of working where working individuals come together in one place to create value, sharing information and wisdom through communication and cooperating under the conditions of their choices'. Bottura (2017) brings the following definition:

"Coworking is a format in which the workplace is shared with other professionals, being a modern alternative to the old office model, which limited the actions of the tenants and which had costs that made business profitability impossible".

The coworking has certain characteristics, among which stand out:

- Sharing costs of renting a space, condominium and other expenses such as: telephone, electricity, water, maintenance, cleaning and reception, which provides great savings;
- Differentiated locations: with the division of expenses there is a possibility to opt for spaces in privileged regions for the business;
- Simplified administrative part: the spaces are either managed by a third party or by an administrative committee, reducing concerns;
- Adaptation of your workspace to real needs, regardless of the size of the business and ease of adjustment in case of growth;
- Suitable spaces for interaction, inspiration, knowledge and credibility, enabling its members to boost growth, through the best working environments and the possibility of networking;

- Adaptation to the most varied types of professionals: freelancer, a small entrepreneur or a large company. (BOTTURA, 2017)

A study conducted by Tanaka et. al (2016), in Brazil, also showed that it is a common characteristic in those who seek coworking the intention of not feeling isolated.

"Coworking Spaces' proposal is to be environments where a group of people work side by side independently, share costs, practice networking, avoid isolation and share ideas and experiences. Coworkers are attracted by the proposal of innovation and cognitive, social and cultural development, promoted by the exchange of knowledge and sharing of experiences among professionals from different areas". In their study, the authors concluded that for 64% of respondents, there was a positive increase in their networking after joining the Coworking, and for 36.5%, the opportunity for interaction is of extreme influence in the decision to remain in this space. In 2017, according to GCUC (Global CoworkingUnconference Conference) data, there were 14,411 Coworking spaces worldwide. The study estimates that this number will reach 30,432 by 2022. In Brazil, reports indicate that the first Coworking space was opened in 2007, in the city of São Paulo - SP (DESK COWORKING, 2017; NEX COWORKING, 2016; RIBEIRO, 2014). Currently, according to the Coworking 2018 Census, prepared by the CoworkingBrasil organization, there are 1,194 Coworking spaces registered in the country. Compared to the study of 2017 in relation to 2018, there was an increase of 48%. As for the data for 2015, the year in which the organization conducted the first study, the increase is approximately of 500%, as we can see in the image below:

Capdevilla's theory: conceptualizing coworking as microcluster:

The French author IgnasiCapdevilla, in his work entitled "Coworkers, Makers, and Fabbers Global, Local and Internal Dynamics of Innovation in Localized Communities in Barcelona", PhD thesis, at HEC Montreal¹, studied the Coworking spaces of Barcelona (Spain), in which he presents evidence to consider the Coworking spaces as microclusters. Capdevilla (2014), studied 21 of the 118 spaces catalogued at the time. He classified the sample in 3 groups, considering the level of innovation of the catalogued spaces and focused the research on 5 spaces with characteristics and dynamics of innovative processes. Through qualitative research, Capdevilla (2014, p. 102 - 115) described important characteristics of the studied spaces, observing the level of interaction and innovation among the coworkers of the sample, as well as in relation to the external community. The author listed relevant points in the interaction that took place in these spaces, such as location, physical space, furniture and tools offered, internal events open to the external community, development of projects between the coworkers and external actors. Thus, the author found the 4 aspects that he considered most important to understand the dynamics of innovation of these spaces, when creating his research model, and thus describes it:

In the model of localized dynamics of innovation, the different dynamics have been described very separately. However, our findings show that the four aspects considered (places, spaces, events and projects) are closely related and interdependent development of innovative processes. Nevertheless, the sequential or causal link between the dynamics is not predetermined and depends on each case. (CAPDEVILLA, 2014, p. 115 - 116, our translation)

In discussing the results obtained, Capdevilla (2014, p. 118) states that these spaces "show the 'multiscale' dynamics of innovation in cities". For him, "the locus of innovation does not depend exclusively on the companies or clusters of companies located in the territory, but on the complex ecosystem of innovation dynamics that occur between

different levels". In view of his observations, the author then comes to a comparison between the spaces of Coworking and industrial clusters, saying:

This article contributes to the literature on innovation in cities, highlighting the role that the average field plays in the dynamics of innovation in a city, in particular the Coworking Spaces². However, the comparison of the innovation dynamics observed in Coworking Spaces with those referred to in the literature on clusters show parallels. (CAPDEVILLA, 2014, p. 118, our translation)

However, for Capdevilla (2014, p. 118), "the similarities between the dynamics in Coworking Spaces and clusters are not exhaustive, but illustrative of comparable phenomena at different scales," therefore, he points out two main similarities:

- Specialization and "localized capabilities". According to Capdevilla (2014, p. 118 - 119), cluster participants are exposed to a large and diverse group of knowledge. Thus, "although each organization masters specific and limited capabilities, they can benefit from the capabilities of other members by collaborating. Through this collaboration, he reinforces the argument by referring to MaskelleMalmberg (1999, apud CAPDEVILLA, 2014, p. 118), who states that clusters can facilitate the integration of diversity and the "combination of complementarities that contribute to the cross-pollination of different knowledge and expertise that benefit a cluster's capacity for innovation and differentiation through the creation of 'localized capabilities'. In this sense, the author highlights that the Coworking spaces, at the most expressive level of innovation, present in a specialized and progressive way the development of a "'localized capacity' difficult to imitate and that represent one of the most valuable intangible assets of the community.
- Role of projects and events. At this point, according to Capdevilla (2014, p. 119), "within clusters, collaboration between organizations with different knowledge bases is promoted by a common institutional framework that reduces cognitive distance and facilitates communication. Collaborations within clusters would, according to the author, generally be coordinated in the form of projects. These projects would facilitate temporary relationships, where complementarity between actors would combine to achieve an "innovative effort". "Similarly, internal projects in Coworking Spaces allow co-workers to combine complementary bodies of expertise and increase competitiveness in the marketplace" (CAPDEVILLA, 2014, p. 119)

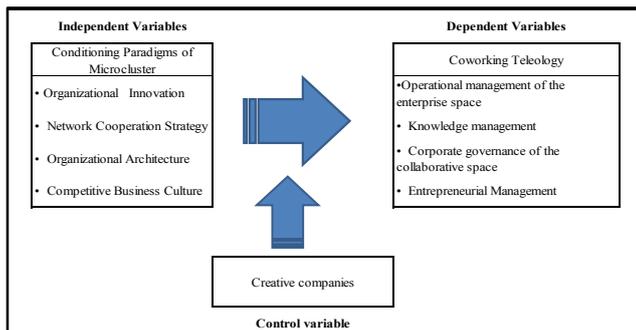
In view of the evidence pointed out, Capdevilla (2014, p. 119 - 120) concludes that coworking spaces could be assimilated as microclusters, since they present interaction dynamics similar to clusters, but on a smaller scale.

The Method applied to the research: This article has a methodological approach defined as descriptive and field research. In Freitas and Prodanov's view (2013, p. 52) it is therefore sought to describe how "the facts are observed, recorded, analyzed, classified and interpreted, [...] that is, the phenomena of the physical and human world are studied, but are not manipulated by the researcher". And, on the other hand, it examines evidence through data collection in primary sources, that is, in the field, where the studied phenomena occur. Andrade, (2010, p. 115) corroborates this understanding by defining it: "this is so called because data collection is carried out 'in the field', where the phenomena occur spontaneously, since there is no interference from the researcher on them. In the field research, the study was developed in Coworking spaces located in the Federal District, Brazil. There are, in this region, 35 known spaces (Census Coworking 2018) and the users of 10 of these cooperative spaces were studied by applying a closed questionnaire, based on the likert scale.

¹ HEC Montreal: School offering business courses, located in Montreal, Canada.

² CWS: Abbreviation for Coworking Spaces.

Figure 1. Conceptual model for the study of microcluster conditioning paradigms and coworking teleology



Source: adapted from Almeida and Kruglianskas (2017)

The likert scale, according to Michel (2005, p. 41), is an adequate technique to obtain quantitative and qualitative data. "It consists in presenting items in the form of statements or judgments about a category of analysis, about which people are asked to express their position in relation to the concept put" (MICHEL, 2005, p. 41). The application of the questionnaire was done remotely, by sending an e-mail to the respondents, containing a link that directed them to the form, in the Google Forms platform. The methodological basis of the research focuses on the theoretical conceptual research model called the microcluster conditioning paradigms and coworking teleology. (Figure 1). From Guimarães's cluster taxonomy, (2010, p.33-34), it was sought to verify whether there is evidence that the coworker space presents characteristic elements of a microcluster, following Capdevilla's observations (2014, p.118). In this context, it is important to emphasize the importance of building an empirical research model that can efficiently establish links between the various elements of a given scientific phenomenon and the observed reality. In this direction, Almeida et. al (2019, p. 467), corroborate the statement:

The construction of an empirical research model is an efficient instrument to establish the connections of the different realities observed and their practices associated with the search for knowledge of borders, through the appropriation of the knowledge of epistemology, theories and the underlying techniques applied to theories. It is, in this context, that the theoretical and operative constructs are idealized to explore, understand and explain the dimensions and structuring elements of a given scientific phenomenon (free translation).

RESULTS AND DISCUSSION

The results of the empirical investigation were analyzed by the use of inferential statistics. The inferential analysis was based on the application of the Pearson Correlation technique to determine the degree of association between the independent variables called microcluster conditioning paradigms and the teleologically dependent variables of coworking and the use of F-statistics to obtain the hypothesis significance test. Pearson's Coefficient of Variation was also applied to evaluate the homogeneity of the data in relation to the variables studied. The group of explanatory variables organizational innovation, network cooperation strategies and organizational architecture, as well as the variables explained operational management of the enterprise space, knowledge management and corporate governance of the collaborative space have representative Pearson Correlation Coefficient, with low degree of dispersion, for the whole sample analyzed. However, the sample presents a homogeneity not very representative in relation to the average for the explanatory variable competitive business culture and the explained entrepreneurial management, respectively. Therefore, considering the numerical expression set of the analyzed sample, it can be verified that there is homogeneity and representativity for 6 variables in relation to the data obtained through the application of the research instrument applied to the Coworking group object of the analysis (Table 1)

Table 1 Data validation matrix of the research instrument

Dimension of analysis of variables	Homogeneity of the variable	
	Coefficient of Person's variation	Indicator parameter
Organizational Innovation	34,36	Representative
Network cooperation strategy	33,43	Representative
Organizational Architecture	34,41	Representative
Competitive business culture	54,50	Unrepresentative
Business space management	53,31	Unrepresentative
Knowledge management	29,57	Representative
Corporate Governance of the business space	26,87	Representative
Entrepreneurial management	18,23	Representative

Source: Autors

Hypothesistest: In order to validate the microcluster (explanatory) conditioning paradigm construct and the coworking teleology variables (explained), 4 hypotheses were formulated for validation, analysis and interpretation of empirical research data. According to Almeida et. al (2019) the validation of an analogic construct is conditioned to a meticulous scientific process of verification of the hypotheses constructed from theoretical and epistemological approaches and, above all, of submission of these hypotheses to tests of significance, through the application of parametric or non-parametric statistics. In this sense, Stevenson (1981) corroborates that the purpose of significance tests is to evaluate the statements about the values of population parameters. Therefore, making a decision to accept or reject a certain hypothesis, based on a certain statement about a population parameter, should be done by applying the significance test by statistical procedure. The hypotheses defined for the evaluation of the construct Conceptual model for the study of microcluster conditioning paradigms and coworking teleology, through the application of the significance test, are the ones in table 2 below.

Table 2. Significancehypothesistest

Study object	Hypothesis	Coefficient F			
		Fo Calculation	Critical Fc	Significance	Decision
Conceptual model for the study of microcluster conditioning paradigms and coworking teleology	H1 - There is an association between the explanatory variable, called Conditioning Paradigms of Microclusters, and the explained variable, called Operational management of the enterprise space	9,47	2,79	Fo>Fc	Accept the experimental hypothesis H1≠ 0
	H2 - There is an association between the explanatory variable, called Conditioning Paradigms of Microclusters, and the explained variable, called Knowledge Management	3,24	2,79	Fo>Fc	Accept the experimental hypothesis H1≠ 0
	H3 - There is an association between the explanatory variable, called Conditioning Paradigms of Microclusters, and the explained variable, called Corporate Governance of the collaborative space	5,06	2,79	Fo>Fc	Accept the experimental hypothesis H1≠ 0
	H4 - There is an association between the explanatory variable, called Conditioning Paradigms of Microclusters and the explained variable, called Entrepreneurial Management	9,06	2,79	Fo>Fc	Accept the experimental hypothesis H1≠ 0

Source: Autors

The Fo coefficients calculated from hypotheses H1,H2, H3 and H4 were higher than the Critical Fc. Thus, at a significance level of $P \geq 0.05$, one can reject the null hypothesis H0 and accept the experimental hypotheses. That being so, it is possible to infer that there is evidence of association between the explanatory variables of microcluster conditioning paradigms and the corresponding explained variables of operational management of enterprise space, knowledge management, corporate governance of the collaborative space and entrepreneurial management.

Correlation Analysis: From the analysis of Table 3 - Correlation Matrix between the components of the resulting Coworking teleology and the microcluster conditioning paradigms, at a 5% significance level, it can be seen that most correlation coefficients have a weak and low degree of positive association and only one indicator presents a moderate degree of positive association. On the other hand, a set of moderate, weak and low negative correlations can also be observed in relation to some variables. Thus, it can be inferred that there is a direct influence of the explanatory variables in relation to those explained, that is, the assumptions of the conditioning paradigms of

microclusters have a direct and inverse association in relation to coworking theology. Therefore, it can be affirmatively stated that there is evidence that coworking spaces can be classified as microclusters. In this sense, it should be noted that the understanding of the organizational phenomenon described by coworking spaces can be studied, understood and analyzed in the context of business clusters. Therefore, the coworking space has a management with characteristics focused on the cluster approach and presents elements of an organizational culture forged in values and attitudes aimed at risk taking, shared values, innovation and also organizational change.

Final remarks: The compendiums on management topics have explored issues related to business clusters over the past decades, as already referenced in this work. However, although the theoretical advances on the subject are expressive, there are still a number of questions to be answered, considering the dynamics of technological, political, socioeconomic and cultural changes that are submitted to organizations.

Table 3. Correlation Matrix between the components of the resulting Coworking teleology and the microcluster conditioning paradigms, at a 5% significance level

Dependent variable Independent variable	Teleology of the Coworking System							
	Business space management		Knowledge management		Corporate Governance of the Business Space		Entrepreneurial Management	
	Correlation	Level of Significance	Correlation	Level of Significance	Correlation	Level of Significance	Correlation	Level of Significance
Organizational Innovation	Moderate negative -0,64	0,010494	Low positive 0,15	0,010494	Low negative -0,01	0,010494	Moderate positive 0,55	0,010494
Network cooperation strategy	Weak negative -0,35	0,017293	Low positive 0,15	0,017293	Weak positive 0,31	0,017293	Weak positive 0,41	0,017293
Organizational Architecture	Low negative -0,19	0,018919	Low positive 0,14	0,018919	Low positive 0,24	0,018919	Low positive 0,27	0,018919
Competitive business culture	Low positive 0,22	0,016997	Low positive 0,33	0,016997	Low negative -0,23	0,016997	Low positive 0,27	0,016997

The study of Coworking spaces as Microclusters can bring entrepreneurs a new vision about their business. In this context, the shared interactions of knowledge about business strategy, technological innovation, network cooperation lead a competitive business culture. In this sense, Almeida, Marques and Porto (2018) corroborate when they describe that organizations with adaptive culture characteristics are susceptible to changes in the organizational environment and thus express it:

The individual-company relationship agreed upon in the management models and dimensioned and forged in the explicit and tacit values of an organizational environment that transcends its boundaries, guides the actions of its actors, modeling and sharing values, attitudes and feelings, as a way of adjusting the individual's behavior to the organization's environment. (ALMEIDA, MARQUES E PORTO, 2018, p.208)) Free translation

At this point, it should be noted that the adaptive culture of the users of the Coworking space leads to the expressed dynamics of supra-enterprise entities described by Zaccarelli et al (2008, p. 44 apud GUIMARÃES, 2010, p. 29). The association between the explanatory variables organizational innovation and network cooperation strategies and the teleology explained variable of entrepreneurial management (moderate and weak positive correlation, respectively) brings evidence on the boundaries of innovation and network cooperation in Coworking environments. On the other hand, it is also worth noting the evidence in relation to the explanatory variables of organizational innovation. Network cooperation strategy and organizational Architecture when associated with the variable Management of the enterprise space (explained) has a moderate, weak and low negative correlation, respectively. This associative relationship assumes a proportional inversion. In this context, it is inferred, therefore, that the greater the intervention of the manager of the enterprise space in the actions of management of the space of Coworking, greater will be the reducing influence of actions of innovation, cooperation and structuring organization of demand in

new businesses. However, it is important to emphasize the methodological validation of the construction, the conditioning paradigms of microclusters and the teleology of Coworking, described by the theoretical model of investigation, because through the statistical methodological parameters applied to survey, scientific evidence and explanatory responses were obtained regarding the phenomenon investigated. In this context, from the measured data, it can be affirmed that there is evidence of association between the conditioning paradigms of microclusters and the teleology of coworking management. Thus, it can be inferred that the Coworking space presents a characteristic and interactive similarity of business clusters, thus, it is possible to classify it as a microcluster system. Finally, the contributions of this study are relevant to understanding the dimensions of Coworking spaces as Microclusters and may bring entrepreneurs a new vision about their business. Cluster business strategies can be adapted to Coworking and experiences already accomplished can be reused, considering that the literature on this subject is well expanded.

REFERENCES

- Almeida, Francisco Alberto Severo, KRUGLIANSKAS, Isak, Porto, Marcelo Duarte; Malafaia, Ana Carolina M.S.A, Model of Social and Environmental Scientific Research: A Theoretical test Applied to the Analysis of Environmental Public Policies and the Economic and Socio-Environmental Performance of Firms. International Journal of Advanced Engineering Research and Science (IJAERS), Vol-6, Issue-5, May- 2019
- _____, Caetano, Kênia Tomas Marques, PORTO, Marcelo Duarte, Approach of McGregor's X and Y Theory Associated with the Adaptive or Non-Adaptive Culture Construct of Kotter and Heskett: An Empirical Study in Goiás, Brazil International Journal for Innovation Education and Research. Vol:-6 No-12, 2018
- _____, Francisco Alberto Severo de; KRUGLIANSKAS, Isak. Modelo de investigação científica socioambiental: um ensaio teórico aplicado à análise de políticas públicas ambientais e o desempenho econômico e socioambiental das firmas. In: Anais... Florianópolis: Unisul, 2017. Disponível em: 10 dez 2018.
- Andrade, Maria Margarida de. Introdução à metodologia do trabalho científico: elaboração de trabalhos na graduação. 10 ed. São Paulo: Atlas, 2010.
- Bottura, Fernando. Cinco principais características de um coworking. [2016?]. Disponível em: <http://www.administradores.com.br/noticias/negocios/cinco-principais-caracteristicas-de-um-coworking/120104/>. Acesso em 20 jul. 2018
- Capdevila, Ignasi. Coworkers, Makers, and Fabbers Global, Local and Internal Dynamics of Innovation in Localized Communities in Barcelona. 2014. Tese (phD em Administração). HEC Montreal, Universidade de Montreal, Montreal, 2014. Disponível em: <http://ignasi.cat/wp-content/uploads/2014/12/v7-Dépôt-final-thèse-Ignasi-Capdevila.pdf>. Acesso em 10 jul. 2018.
- Cassanego Junior, Paulo Vanderlei. Governança em clusters de negócios: um estudo em clusters do Rio Grande do Sul. 2014. Tese (Doutorado em Administração) - Faculdade de Economia, Administração e Contabilidade, Universidade de São Paulo, São Paulo, 2014. Disponível em: <http://www.teses.usp.br/teses/disponiveis/12/12139/tde-06012015-120214/pt-br.php>. Acesso em: 19 jul. 2018.
- CO in MICHAELIS Dicionário Prático Inglês-Português/ Português- Inglês. São Paulo: Cia Melhoramentos.
- Coworking Brasil. Censo Coworking Brasil 2018.2018 Disponível em: <https://coworkingbrasil.org/censo/2018>. Acesso em 20 set. 2018
- _____. Coworking em Distrito Federal. Disponível em: <https://coworkingbrasil.org/df/>. Acesso em 05 jan. 2019
- Desk Coworking. O panorama do coworking no Brasil. 2017. Disponível em <https://www.deskcoworking.com.br/o-panorama-do-coworking-no-brasil>. Acesso em 24 ago. 2018.

- Freitas, Ernani César de; PRODANOV, Cléber Cristiano. Metodologia do trabalho científico [recurso eletrônico] : métodos e técnicas da pesquisa e do trabalho acadêmico. 2 ed. Novo Hamburgo: Feevale, 2013.
- Gcuc, Global Coworking Unconference Conference. 2018 global coworking forecast: 30,432 spaces and 5.1 million members by 2022. 2017 Disponível em: <https://gcuc.co/2018-global-coworking-forecast-30432-spaces-5-1-million-members-2022/>. Acesso em 24 ago. 2018.
- GUIMARÃES, Antônio Teodoro Ribeiro. Empresas instaladas em entidades supra-empresas com orientação estratégica dual. Anápolis: UEG, 2010.
- Michael, Ewen. Micro-clusters and networks: the growth of tourism. Amsterdam: Elsevier, 2007.
- Michel, Maria Helena. Metodologia e pesquisa científica em ciências sociais. São Paulo: Atlas, 2005
- Morais Neto, Siqueira de. PEREIRA, Maurício Fernandes. Criação de valor compartilhado: planejamento de estratégia e metodologia para aplicação fundamentada no conceito de Michael Porter. São Paulo: Atlas, 2014
- Newbigin, John. A Economia Criativa: Um Guia Introductório. Londres: British Council, 2010. Disponível em: https://creativeconomy.britishcouncil.org/media/uploads/files/Intro_guide_-_Portuguese.pdf. Acesso em 24 ago. 2018.
- Nex Coworking. O crescimento do coworking no Brasil. 2016. Disponível em <https://nex.work/blog/trabalho/crescimento-do-coworking-no-brasil/>. Acesso em 24 ago 2018.
- Porter, Michael E. Clusters and the New Economics of Competition. 1998 Harvard Business Review. 1998. Disponível em <https://hbr.org/1998/11/clusters-and-the-new-economics-of-competition>. Acesso em 10 jul. 2018.
- Ribeiro, Tatiane. Impact HUB, o primeiro coworking do Brasil. 2014. Disponível em: <https://queminova.catracalivre.com.br/inspirar/impact-hub-o-primeiro-coworking-do-brasil/> Acesso em 24 set. 2018.
- Soares, Juliana Maria Moreira; SALTORATO, Patricia. Coworking, uma forma de organização de trabalho: conceitos e práticas na cidade de São Paulo. AtoZ: novas práticas em informação e conhecimento, [S.l.], v. 4, n. 2, p. 61-73, dez. 2015. ISSN 2237-826X. Disponível em: <https://revistas.ufr.br/atoz/article/view/42337/27165>. Acesso em: 08 mar. 2019.
- SOUSA, Caroline de. Clusters industriais: vantagem competitiva e desenvolvimento regional. 2003. Tese (Mestrado em Economia). Faculdade de Economia, Universidade Federal do Rio Grande do Sul, 2003 Disponível em: <http://hdl.handle.net/10183/2770>. Acesso em 10 jul. 2018.
- STEVESON, William J. (1981) Estatística aplicada à administração. São Paulo: Harba & How do Brasil.
- Tanaka, Rafaela Miyuki. et al. Características da prática do trabalho compartilhado (Coworking) no Brasil em um contexto de sociedade individualizada. Revista Espacios, vol. 38, nº 4, 2017. Disponível em <http://www.revistaespacios.com/a17v38n04/17380418.html>. Acesso em 18 ago 2018
- UDA, Tadashi. Hokkaido What is Coworking? : A Theoretical Study on the Concept of Coworking. 2013. University Collection of Scholarly and Academic Papers. Hokkaido University Library, 2013. Disponível em: <http://eprints.lib.hokudai.ac.jp/dspace/bitstream/2115/53982/1/DPA265.pdf>. Acesso em 15 ago. 2018
- Work in Michaelis Dicionário Prático Inglês-Português/ Português-Inglês. São Paulo: Cia Melhoramentos.
- Zaccarelli, Sérgio Baptista; Guimarães, Antônio Teodoro Ribeiro; Almeida, Martinho Severo; Almeida, Francisco Alberto Severo de. Conceituando clusters de negócios como entidades supra-empresas. In: ALMEIDA, Francisco Alberto Severo de; GUIMARÃES, Antônio Teodoro Ribeiro; FRANCO, Mário José Batista; LEITÃO, João Carlos Correia (org.). Governança Estratégica, Redes de Negócios e Meio Ambiente: Fundamentos e Aplicações. Anápolis: UEG, 2009.
