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INNOVATION IN COOPERATION NETWORK OF PUBLIC INTERMUNICIPAL CONSORTIUM IN BRAZIL: AN EMPIRICAL STUDY

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ABSTRACT

This article describes the empirical research model called "Information management system and innovation in Public Intermunicipal Consortium in cooperation network", with the focus of the four-pole method. And also by the projection of its theoretical and operational elements that seek to explain the association between the conditioning paradigms of innovation in a cooperation network of public consortium and the teleology of the information management system. A survey was applied in public intermunicipal consortia in Brazil. These consortia have the character of regional economic development, urban, environmental management, education and health. To measure the data collected, the following statistical tools were applied: Alpha Cronbach, to evaluate the density of the questionnaire data; the Pearson Correlation Coefficient, to verify, by analyzing the correlation and linear regression between the data surveyed, if there is a variable association relationship explaining innovation in a public consortium network and the explained variables of teleology of the information management system; and the F statistic to obtain the significance test of the hypotheses and make the decision to accept or reject the null hypothesis. In this context, from the verified data, it can be affirmed that there is evidence that the innovation variable in public consortium network exerts a positive influence on the set of variables denominated: management of the information process, knowledge management, information management and management communication.

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INTRODUCTION

Expanding knowledge related to management boundaries is a major challenge for researchers in the field of science. The interdisciplinary and transdisciplinary character, which this theme is inserted, broadens the horizons of the investigated phenomena. There are several dimensions of scientific approaches that extend the boundary knowledge of Information Management through the application of theories from other areas of knowledge. Among these, we highlight the science of administration through the strategic management and diagnostic analysis of process information management in organizations (Almeida *et al.*, 2009 e 2015; Estrela, 2012; Silva, 2013; Campos, 2013; Fernandes, 2014). In this sense, innovation occurs in those public organizations whose models of information management and innovation are centered in

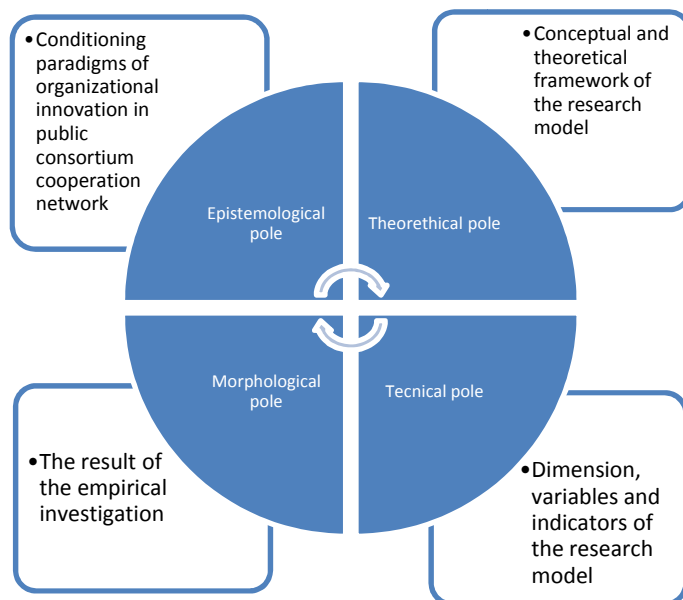
strategic alliances oriented to cooperation in organizational networks. This is a way of transposing environmental changes and a series of obstacles that slow down the growth and development of these organizations, for economic reasons, government policy and even technology. The concept of networks and their typologies are extensively explored in the literature of organization and economy theories (Grandoni and Soda 1995, Veciane 1999, Ireland *et al.*, 2001, Franco 2003, Almeida *et al.*, 2009, Almeida 2014, Simão and Franco 2014). Networks are ordered dimensions of connections structured by the set of formal or informal relationships that are established between two or more actors. On the other hand, the Intermunicipal Public Consortium cooperation networks are organizations structured in a network with forms of organic relations (according to the standards and legal norms) defined in the Constitution of the Federative Republic of Brazil. And also by law 11.107 of April 2005 and regulated by Decree 6017/2007; or socially (informal relationship) based on norms and socio-cultural values. In this context, this article presents

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the preliminary results of empirical research related to information management and innovation in the network of Intermunicipal Public Consortia. The bases of this research are based on the theoretical and operational models described from the construct called Management Information System and Innovation in cooperation network of Intermunicipal Public Consortium. Therefore, the contributions of this study will be relevant to understand the dimensions of governance of the information management and organizational innovation system centered on network of cooperation of public consortia.

Theoretical contribution of research

The theoretical conceptual research model: The construction of empirical research model is the important element to establish the connections of the observed realities and their practices. This is associated with the search for a new knowledge, through the appropriation of the knowledge of epistemology, of theories, of the underlying techniques applied to theories. In this sense, Silva (2006) advocates the application of the four-pole method as a research tool. This author considers that this methodology is not restricted to a merely instrumental view, because the interactive dynamics between epistemology, theory, technique and morphology leads to the projection of interpretive paradigms of theoretical and operational models. In this way, when dealing with information management and innovation system in a cooperation network, reference can be made to the information and innovation management system in the cooperation network of the Intermunicipal Public Consortium under the four-pole method (Figure 1).



Source: authors

Figure 1. Information Management System and Innovation in a Cooperation Network of the Intermunicipal Public Consortium

Epistemological pole: The epistemological pole presupposes the development of a diagnostic action. It should be based on the discursive, reflective and interrogative dialectic as to the thematic issues to be addressed in relation to the paradigms of cooperation in Public Consortium Intermunicipal network and organizational innovation. On the other hand, it focuses on elements that lead to the identification of methods and practices related to the information process to meet the precepts of network cooperation and innovation, in reference

to the teleology of the information management system and innovation in cooperation network of intermunicipal public consortium.

Theoretical Pole: The theoretical pole, referring to the paradigms of network cooperation of Intermunicipal Public Consortium and organizational innovation, establishes the set of theoretical and practical reasons for the foundation and definition of the abstract theoretical model (systemic view). Therefore, through the construct system of information management and innovation in Intermunicipal Public Consortium network, we have the research model organized and structured in the form of conceptual representation that allows us to postulate associations or analogies with theoretical structures that may lead to an understanding of the investigated phenomenon.

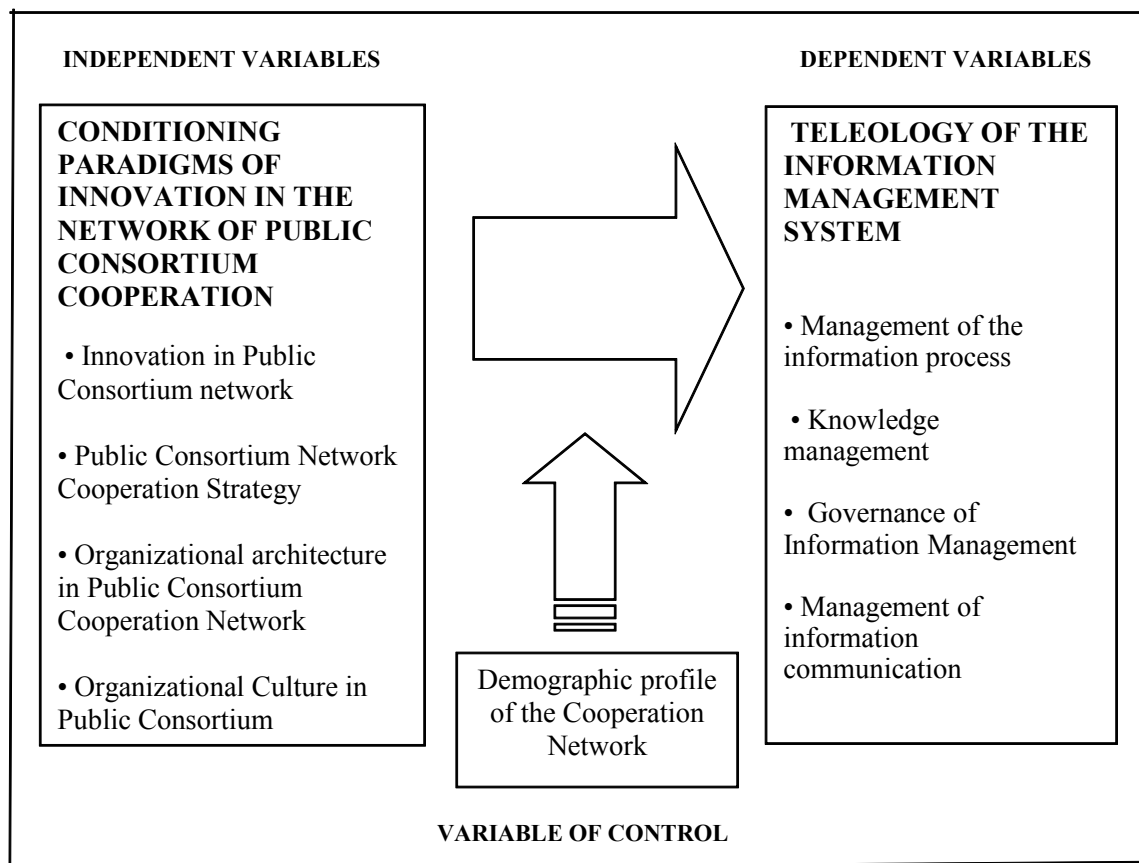
Technical Pole: The technical pole is the referential for the analysis of the pertinence and consistency of the abstract theoretical model known as the information management system and innovation in the Intermunicipal Public Consortium network, built under the criteria established at the epistemological and theoretical poles. In this phase, the dimensions and interactions of the abstract theoretical model in logical representation (Cartesian view) are described and explained. The logical (operational) model of empirical research explicitly specifies the set of operational elements required to model empirical research in terms of its size, variables and indicators. These elements are essential for the construction of a primary data collection instrument, as well as for the organization and methodological structuring of the investigation regarding the application of statistical tools to measure the data collected.

Morphological Pole: The teleology of the morphological pole is to establish technical and operational conditions for the development of actions that promote the interlocution and the interaction between the actors that are interested in the results of the investigation. In this sense, the morphological pole verifies the premises of the investigation in relation to the system of information management and innovation in Intermunicipal Public Consortium network, described from the technical pole, with the technical production of the research results.

Therefore, at this stage, research results are shared and disseminated in academic and professional settings as a way to broaden discussions about study and research. Thus, the results of the research are shared with the Federal, State and Municipal Governments that are executor of public policies through intermunicipal public consortia. In addition, with municipalities benefiting from the results of the innovative action of public management in meeting the demands of local society. In this sense, information management undoubtedly plays an important role in information communication for man and society when managing process, sharing, governance and communication of research. Therefore, the way of thinking information management under the prism of the four-pole method broadens the understanding of the phenomena of information management. It introduces the unification proposition between intuition and reason, as a synthesis derived from the systems theory approach. It represents the construction of symbolic (theoretical) mental models of observed realities and operant reason, logic, Cartesian approach, which describes analytically the logical structure of the observed abstract model.

The operational logical model of research: The researcher makes use of the systemic vision to define the set of essential elements that base their perception on a certain phenomenon observed. The aforementioned cognitive process is portrayed by the epistemological and theoretical poles, through the organization of the abstract thought of the researcher, who associates his experience of the observed reality (tacit knowledge) to formulate his research questions and make conceptual definition of the theoretical construct of research. Therefore, the question of investigation originated at the epistemological pole and the theoretical framework that underlies the basis of the study complement each other to form the research construct in this study. In this sense, the four-pole method, under the systemic approach, adds the interaction and integration of poles to build the theoretical model of research. On the other hand, under the Cartesian approach, it allows, from this theoretical model of investigation, to establish operational methodological parameters to seek scientific evidences and explanatory answers regarding the phenomenon to be investigated. Thus, the operational model of research constitutes the logical representation of the theoretical model of research, which portrays the conceptual elements through a Cartesian approach (Figure 2).

Methodology applied to the research model: Conceptual models become operative (deterministic) when the constitutive elements of their dimensions are dissected into variables and indicators that allow them to be measured using statistical tools. In this sense, Martins and Theofilo (2009) corroborate when they say that the definition of operability leads to a series of procedures that are assigned a measurable meaning to a concept applicable to a specific set of circumstances. Therefore, an operative (deterministic) model, based on the set of variables and data indicators, must be validated through the use of statistical tools, from the perspective of seeking explanations and logical explanations about the phenomenon investigated. In this context, specialists in statistics applied to the social sciences (Malhorta, 2008, Monteiro Filho, 2003, Black, 1997, Mattar, 1996 and Levin, 1987) point to a series of data measurement instruments, such as: of descriptive analysis, using percentage relative frequency, position, dispersion and association measures and by the inferential method for hypothesis validation. In this sense, the research instrument for the collection of primary data was organized and structured from the theoretical model and dimensioned from the independent, dependent and control variables. This had as reference the description of the dimensions of the conditioning



Source: adapted from Almeida et.al 2012

Figure 2. Conditioning paradigms of Innovation in cooperation networks of public consortium and the teleology of the information management system

In this way, the operational model of research, the logical representation of the theoretical model, describes, firstly, the taxonomy of the independent, dependent and control variables. They form the central nucleus of the research object: it seeks to explain if there is a relationship between the conditioning paradigms of innovation in a public consortium cooperation network and the teleology of the information management system.

paradigms of innovation in cooperation network of the public consortium and the teleology of the information management system and the demographic profile of the network of cooperation in public consortium. Each dimension is associated with a set of indicators of the variables, which were expressed by a question of the questionnaire. The questionnaire was modeled as an opinion survey under the title: innovation in network of public consortium cooperation and information management in three blocks, namely:

- I) Demographic profile of the intermunicipal public consortium cooperation network - Classifies the Intermunicipal Public Consortium as a basis on criteria related to the type of organization, services provided and socioeconomic indicators
- II) Innovation in the public consortium cooperation network - This section seeks to know the position of public consortium managers on issues related to technological innovation, cooperation strategy, organizational architecture and organizational culture of cooperation networks of intermunicipal public consortium.
- III) Intermunicipal public consortium network information management system - In this section, we seek to know the position of public consortium managers on issues related to processed information, governance, knowledge production and their communication in cooperation networks of intermunicipal public consortium

The data collection instrument was elaborated on a Likert scale, with scores ranging from 1 to 5. The Likert scale is a summative characteristic and allows the ordering of an attitude of favorability or unfavorability in relation to a given object. (Selltiz *et al.*, 1967). According to Gill (1999), the results obtained by manifestation of attitude and / or opinion about a problem studied, through the application of data collection instrument constructed on the basis of the Likert-type scale, can be analyzed using the tests of correlation. However, it should be noted that there is a discussion among researchers about the use of parametric and non-parametric statistics in the analysis of the data obtained through the Likert scale. Jamieson (2004) emphasizes that non-parametric statistics should be applied to ordinal data, in the case of a sample with an interval characteristic. However, Allen and Seaman (2007) point out that the analysis of ordinal data (Likert scale) as the data range is based on the assertion that parametric statistical test are more powerful than non-parametric alternatives. Carefio and Perla (2007) point to the use of Pearson's correlation, multiple regression, variance analysis and F-test as possible parametric statistical instruments for the Likert scale data analysis. But according to Kislenko and Grevholm (2008), there is no consensus among researchers on which methods are suitable for using the Likert scale. Considering the arguments presented, the results of this empirical investigation were analyzed through the use of descriptive and inferential statistics. The descriptive analysis made by interpreting the percentage relative frequency. The inductive or inferential analysis is based on the application of the Pearson Correlation technique to determine the degree of association between the studied variables and the use of the F statistic to obtain the test of significance of the hypotheses. Pearson's correlation and Cronbach's alpha are also used to validate the applied research instrument, as well as to measure the internal reliability of the collected data.

RESULTS OF THE SURVEY

The survey was sent by the google forms system:

https://docs.google.com/forms/d/e/1FAIpQLSc9bZs70g2Sc4V yqsplQ_ko2bofRJR9VxuzY7Colm0fGhAayg/viewform. The sample of 140 (one hundred and forty) Brazilian intermunicipal public consortia, institutions of initiative and competence of entities (Federal, State, Federal District and Municipalities), organized and structured according to the standards and legal norms defined in the Constitution of the

Federative Republic of Brazil and by the National Congress of Brazil, through law 11,107 of April 2005 and regulated by Decree 6017/2005. The return of 31 (thirty-one) respondents, or 22, 14% of the sample, was obtained. Therefore, the sample meets the measurement requirements at interval level by using Pearson's correlation as a measure of association between two or more variables (Levin, 1987). The typology of respondent intermunicipal public consortia is as follows: multifinality (24.1%), infrastructure (3.5%), regional economic development (3.5%), urban development and environmental management (17.2%), health (31.0%), education (3.5%), other modalities (17.2%).

Consistency analysis of the data collection instrument: The numerical set expressed by the Pearson correlation coefficient for the innovation variable in public consortium network is representative for the following management practices: expansion of municipal public policies, improvement of socioeconomic indicators of the region and contribution of rationalization of public resources. However, the homogeneity of the sample is not very representative in the question about the complexity of the management practices of the public consortia investigated. It must be considered that the Alfa Conbach has a degree of consistency measured as good (0.88) for the grouped set of components of the analysis variable. Therefore, by the results presented by Alfa Conbach and Pearson's correlation coefficient, the questionnaire data can be measured as consistent.

Hypothesis Testing: With the objective of determining the degree of association between the explanatory variable Innovation in Public Consortium network and the teleology variables of the information management system - Information process management, Knowledge management, Governance of information management and Communication management of the information, the following research hypotheses were formulated, namely:

- H1** - There is an association between the explanatory variable, called Innovation in the Public Consortium network and the explained variable, called Management of the information process in Public Intermunicipal Consortium
- H2** - There is an association between the explanatory variable, called Innovation in the Public Consortium network and the variable explained, called Knowledge Management in Public Intermunicipal Consortium
- H3** - There is an association between the explanatory variable, called Innovation in Public Consortium network and the variable explained, called Information Management Governance in Public Intermunicipal Consortium
- H4** - There is an association between the explanatory variable, called Innovation in Public Consortium network and the explained variable, called Management of information communication in Public Intermunicipal Consortium.

The calculated Fo coefficients of the hypotheses H1, H2, H3, H4 were larger than the critical Fc. Thus, at the significance level of $P \geq 0.05$, we can reject the null hypotheses H0 and accept the experimental hypotheses. In this sense, it is possible to infer that there is evidence of association between the explanatory variables innovation in public consortium network and their corresponding variables explained teleology of the information management system.

Dimension of research analysis	Ask of question	Dimensional homogeneity		Sample validation	
		Coefficient of variation of Person	Indicator Parameter	Cronbach Alfa	Degree of consistency
Innovation in Public Consortium network	The management practices of the intermunicipal consortium in which I participate have expanded the implementation of municipal public policies	0,15	Representative	0,88	Good
	The practices of management of the intermunicipal consortium of which I participate has improved the socioeconomic indicators of the region.	0,18	Representative		
	The management practices of the intermunicipal consortium in which I participate have contributed to the rationalization of public resources.	0,19	Representative		
	The management practices of the intermunicipal consortium I am involved in are complex and do not contribute to helping the municipality implement public policies.	0.66	Not very representative		

Source: authors

Hypothesis group	Hypothesis	Coefficient F			
		Calculation Fo	Critical Fc	Significance	Decision
Innovation in Public Consortium network	H1 - There is an association between the explanatory variable, called Innovation in the Public Consortium network and the explained variable, called Management of the information process in Public Intermunicipal Consortium	2,67	2,45	Fo>Fc	Accept the experimental hypothesis H1 ≠ 0
	H2 - There is an association between the explicative variable, called Innovation in the Public Consortium network and the variable explained, called Knowledge Management in Public Intermunicipal Consortium	2,67	2,45	Fo>Fc	Accept the experimental hypothesis H2 ≠ 0
	H3 - There is an association between the explicative variable, called Innovation in the Public Consortium network and the explained variable, called Information Management Governance in Public Intermunicipal Consortium	2,67	2,45	Fo>Fc	Accept the experimental hypothesis H3 ≠ 0
	H4 - There is an association between the explanatory variable, called Innovation in the Public Consortium network and the explained variable, called Management of information communication in Public Intermunicipal Consortium	2,67	2,45	Fo>Fc	Accept the experimental hypothesis H4 ≠ 0

Source: authors

Correlation analysis: The results of Pearson's correlation between the explanatory variable of innovation in public consortium network and the explained variables of teleology of the information management system show a positive association between the studied variables. Therefore, from the measured data, it can be affirmed that there is evidence that the innovation variable in public consortium network exerts a positive influence on the set of variables denominated Information Process Management, Knowledge Management, Governance of information management and Communication Management of information. Table 3 presents the correlation matrix between the studied variables, at a significance level of 5%.

The following observations are made regarding the associations between the analyzed variables:

- There is evidence that management practices in innovation related to managerial processes and methods are efficient in the implementation of public policies
- It can also be inferred that there is a sharing of managerial knowledge among the members of the researched consortiums, although not very representative
- Evidence points to a marked agency conflict, that is, the relationship between managers and stakeholders (stakeholders), given the low positive correlation

Table 3 - Matrix of correlation between the components of the resulting teleology of the information management system and the conditioning innovation in a network of public consortium, at significance level of 5%

Dependent variable		Teleology of the information management system							
		Management of the information process		Knowledge management		Governance of Information Management		Management of information communication	
		Correlation	Level of significance	Correlation	Level of significance	Correlation	Level of significance	Correlation	Level of significance
Innovation in Public Consortium network	The management practices of the intermunicipal consortium in which I participate have expanded the implementation of municipal public policies	Positive Moderate	0,007754	Positive low	0,007754	Positive low	0,007754	Positive low	0,007754
	The management practices of the intermunicipal consortium I am involved in have improved socioeconomic indicators in the region	Positive Weak	0,008500	Positive Moderate	0,008500	Positive Moderate	0,008500	Positive Moderate	0,008500
	The management practices of the intermunicipal consortium in which I participate have contributed to the rationalization of public resources	Positive low	0,009548	Positive Weak	0,009548	Positive Weak	0,009548	Positive Weak	0,009548
	The management practices of the intermunicipal consortium I am involved in are complex and do not contribute to helping the municipality to implement public policies	Positive low	0,015138	Positive low	0,015138	Positive low	0,015138	Positive low	0,015138

Source: authors

ANALYSIS OF RESULTS

Then, from the data presented in the Pearson correlation, an interpretative analysis of the management practices of the consortia is carried out. These practices are related to the explanatory variable of innovation in public consortium network and the degree of association between the explained variables of Information Process Management, Knowledge Management, Governance of information management and Communication Management of information. In this context, comments are based on the degree of association of the variables that allow to make a series of deductions on the set of management practices of the Public Consortia investigated.

Implementation of municipal public policies: The practical management of intercity public consortium, regarding the implementation of municipal policies, has a positive influence on the variable components of teleology management information system, which can be deduced by the degree of association of the correlations presented in Table 4.

- The low positive correlation indicates that the communication between the management of the consortium and local society is not very representative.

Improvement of socioeconomic indicators in the region: The positive influence that the innovation variable in public consortium network exerts on the set of variables information process management, knowledge management, information management governance and information communication management contributes to the improvement of regional socioeconomic indicators, having as reference the types of consortia studied.

Regarding the associations between the variables, we can observe:

- There is evidence that organizational innovation practices are representative because, according to the sample studied, the low positive correlation indicates a direct association with the information process management of the consortium entities.

Table 4 - Correlation matrix between the components of the resulting teleology of the information management system and the conditioning factor in the network of public consortium - implementation of municipal public policies, at a level of significance of 5%

Dependent variable Independent variable		Teleology of the information management system							
		Management of the information process		Knowledge management		Governance of Information Management		Management of information communication	
		Correlation	Level of significance	Correlation	Level of significance	Correlation	Level of significance	Correlation	Level of significance
Innovation in Public Consortium network	The management practices of the intermunicipal consortium in which I participate have expanded the implementation of municipal public policies	Positive Moderate	0,007754	Positive low	0,007754	Positive low	0,007754	Positive low	0,007754

Source: authors

Table 5 - Correlation matrix between the components of the resulting teleology of the information management system and the conditional innovation in the public consortium network - improvement of the socioeconomic indicators of the region, at a significance level of 5%

Dependent variable Independent variable		Teleology of the information management system							
		Management of the information process		Knowledge management		Governance of Information Management		Management of information communication	
		Correlation	Level of significance	Correlation	Level of significance	Correlation	Level of significance	Correlation	Level of significance
Innovation in Public Consortium network	The management practices of the intermunicipal consortium I am involved in have improved socioeconomic indicators in the region	Positive Weak	0,008500	Positive Moderate	0,008500	Positive Moderate	0,008500	Positive Moderate	0,008500

Source: authors

Table 6 - Matrix of correlation between the components of the resulting teleology of the information management system and the conditional innovation in public consortium network - rationalization of public resources, at a significance level of 5%

Dependent variable Independent variable		Teleology of the information management system							
		Management of the information process		Knowledge management		Governance of Information Management		Management of information communication	
		Correlation	Level of significance	Correlation	Level of significance	Correlation	Level of significance	Correlation	Level of significance
Innovation in Public Consortium network	The management practices of the intermunicipal consortium in which I participate have contributed to the rationalization of public resources	Positive low	0,009548	Positive Weak	0,009548	Positive Weak	0,009548	Positive Weak	0,009548

Source: authors

Table 7 - Correlation matrix between the components of the resulting teleology of the information management system and the conditional innovation in the public consortium network - Complexity regarding management practices, at a significance level of 5%

Dependent variable Independent variable		Teleology of the information management system							
		Management of the information process		Knowledge management		Governance of Information Management		Management of information communication	
		Correlation	Level of significance	Correlation	Level of significance	Correlation	Level of significance	Correlation	Level of significance
Innovation in Public Consortium network	The management practices of the intermunicipal consortium I am involved in are complex and do not contribute to helping the municipality to implement public policies	Positive low	0,015138	Positive low	0,015138	Positive low	0,015138	Positive low	0,015138

Source: authors

Therefore, it can be deduced that the actions implemented by the consortium network contribute to the improvement of the regional socioeconomic indicators of the federative entities participating in the consortium network.

- There is a moderate positive correlation of the investigated sample, in relation to the other variables analyzed. This shows that there is a sharing of knowledge among the consortium members. The evidence for the low agency conflict between the stakeholders of the consortium system and an effective communication with society regarding the socioeconomic results generated by the researched public consortium network.

Contribution to the rationalization of public resources: The management practices of the public consortia researched have a positive association degree of weak and low. As a result of management performance, the evidence points to a set of managerial actions with little impact in relation to the rationalization of public resources. Therefore, we can infer that management practices within the public inter-municipal consortia are conservative. For, given the degree of association obtained, the evidence points to innovative solutions that are not very representative to promote the management of the information process, knowledge management, governance of information management and information communication management.

The following observations are made regarding the associations between the variables:

- The degree of low positive association in relation to the organizational innovation variables and the management of the information process, evidences that the practices of management of the intermunicipal consortia do not have a representative contribution in the application of the use of public resources by the researched consortia
- In this context of analysis it is verified that the degree of weak positive association between the organizational innovation and the other variables knowledge management, Governance of information management and communication of information, presents evidence that:
 - a) The innovative experiences are little shared among the members of the consortium researched;
 - b) There is certain degree of agency conflict between stakeholders (manager of the consortium vs. local society)
 - c) The communication of the relevant facts of the actions of the intermunicipal consortium investigated and its connections with the local society are little publicized

Complexity of management practices: Regarding the complexity of managerial practices, there is a low degree of positive association between the explanatory variable innovation in the public consortium network and the explained variables of information process management, knowledge management, governance of information management and communication. It is evidence that the process of organizational innovation has not contributed to attenuate the level of legal and normative complexity in the intermunicipal public consortium network. In this sense, we can infer that the implementation of public policies in intermunicipal public

consortium network, in view of the legal and normative complexity that govern federated consortium entities (Union, States, Federal District and Municipalities) is determinant for:

- The low level of organizational innovation of consortium actions
- Delimit the sharing of management experiences among the consortium members
- Accentuate the conflict of agency (manager of the consortium and municipal entities) in face of the legislation and the regulation of the consortium public entities
- Limit the communication of consortium actions considering the legislation and mandatory rules of the federative entities participating in the consortium.

Final considerations: The network system of cooperation of inter-municipal public consortia plays a significant role for socioeconomic development and implementation of public policies. This occurs within the Federal, State, Federal District or Municipal governments. They are public policies directed to regional economic development, urban, environmental management, education and health. Brazilian intermunicipal public consortia are governed by the standards and legal norms defined in the Constitution of the Federative Republic of Brazil and by the National Congress of Brazil, by law 11,107 of April 2005 and regulated by Decree 6017/2005. The federative entities seek, through consorcial action, to gather managerial expertise to leverage public policies to meet the regional and sectoral demands of local societies. On the other hand, they also aim to optimize the application of public budgetary resources, as well as the sharing of human and material resources of the federative entities. This empirical study, applied to a set of intermunicipal public consortia of multifinalitary characteristics, infrastructure, regional economic development, urban development and environmental management, health, education, among other modalities, brings a reading of the degree of association between the construct of conditioning paradigms innovation in cooperation network of public consortia and the teleology of the information management system. In this context, the variable influence innovation in public consortium network was analyzed in relation to the set of variables denominated Management of the process of the information, Management of the knowledge, Governance of the Information management and Management of the information communication. Thus, the following considerations are made from the results obtained in the research:

- The innovative management practices of the public consortia surveyed are efficient in implementing public policies, but need to improve knowledge sharing, governance and communication of the consortium management and the cooperating network;
- The results of the policies implemented by public consortia surveyed are not very representative in relation to innovative practices, but efficient in terms of knowledge sharing, low agency conflict and communication with local society
- Innovative practices related to the application of public resources are not very effective, which can contribute to accentuate the agency conflict (manager of the consortium x stakeholders)
- The normative and legal complexity to which the public consortia and their federative entities are subjected are

determinant to the low degree of organizational innovation, compromising the sharing of experience and accentuating the agency conflict (manager of the consortium x federative entities).

Finally, it is worth mentioning the methodological validation of the construct paradigms of the conditioner innovation in cooperation network of public consortia and the teleology of the information management system. Described by the theoretical model of research and using statistical methodological parameters applied to the survey, scientific evidence and explanatory answers about the phenomenon investigated were obtained. In this context, from the data obtained, it can be stated that there is evidence that the innovation variable in the public consortium network exerts a positive influence on the set of variables: information process management, knowledge management, governance of the information management and management of information communication. Therefore, the contributions of this study are relevant to understand the dimensions of the governance of the information management and organizational innovation system centered on the network of cooperation of public consortia of the federative entities of Brazil.

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