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**Original article** 

# Network relations interpretation issues in the context of management disciplines classification

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#### INFORMATION

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#### **ABSTRACT**

The main purpose of the paper is to present and comment about word interpretation issues in the field of management science. In the first part of the ongoing paper, the authors focus on describing characteristic meanings and classifications of relations within the network concept, at the same time expressing critical views of some common interpretations and misunderstandings. Subsequently they analyze and critique the new classification system of scientific fields and managerial disciplines, implemented on the 1st of October 2018 in Poland.

#### **KEYWORDS**

network relations, collaboration, cooperation, scientific disciplines classification, management science

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## Introduction

In the last two decades there has been dramatic changes in the field of social organization within Poland. This has come about due to the complex and multi-dimensional interactions between partners [1, p. 6] operating through a network of relations (domestic, pan-European and International) [2, p. 29-51; 3] enhanced through tools such as the Internet. However, the new network concept raises questions regarding divisions and interpretations of possible kinds of relations. Therefore, in the first part of this paper, the authors focus on analyzing and systematizing unique meanings and classifications of possible ways of inter-organizational collaboration (cooperation, coopetition) within the network approach.

In order to enable scientists to scrutinize problems within managerial sciences, including questions concerning the network concept, it is necessary to create a theoretical fundament of universally acceptable classifications of scientific fields and disciplines. In Poland, a new classification was implemented on the 1st October 2018, immediately sparking off substantial

critical views. Thus, concentrating on social sciences (which include managerial fields), the authors analyze and comment upon key problems regarding the appropriateness of this imposed classification of managerial disciplines.

In this paper, the following scientific research methods were used: study of literature (in the field of inter-organizational network concept), reports, documents and acts of law (concerning classification of scientific fields and disciplines).

# 1. Cooperation versus collaboration

Within the confines of network relations, it is difficult to truly understand the notions of cooperation and collaboration. Although often these words are thought to mean the same action, in organizational (managerial) contexts, their meanings differ.

Cooperation can be defined in a general or an economic-organizational context. In the first, cooperation is perceived as a characteristic of organized human activity [4, p. 221-4, 229-42] in which individuals contribute to something, working together with others. In the economic-organizational context, cooperation is understood as the development of relationships between organizations and social groups, which aid in achieving a common objective, rather than contradictory goals [5, p. 5]. Cooperating organizations are still autonomic, relations can be broken at any time without any negative influence on the ability of achieving sought objectives by individual entities [6, p. 277-81]. According to H. Jagoda and J. Lichtarski, cooperation means putting into place various sorts of repetitive and long-term relations between organizations that are of different forms and levels of integration [7, p. 151]. It is also understood as a process of doing something in order to achieve a common goal to which all cooperating organizations identify. In this case, the fundament of relation is constituted by trust, loyalty and acting for the good of all. At the same time, to achieve the effect of cooperation, the collaborative partners adopt certain principles of communication and conflict-solving [8, p. 17].

Collaboration, however, is understood as one of the forms of co-doing something, in which common actions and tasks are supposed to lead to achieving a common objective. Such a general understanding of collaboration has been adopted by J. Niemczyk, E. Stańczyk-Hugiet and B. Jasiński, who define collaboration as doing something with others when at least two entities have similar goals [9, p. 101]. It means complementary actions coordinated through built relations, tasks taken up in order to achieve results desired by all collaborating parties [10, p. 90-102]. A very characteristic element of collaboration is simultaneous realization (by each party) of both common and individual goals. At the same time, set objectives ought to be characterized by social utility and related to production or processing of material or symbolic objects [11, p. 30]. B. Kaczmarek claims that collaboration should be perceived as a coordinated action focused on realization of operational tasks which stem from work division or inter-organizational relations built as a result of appropriate agreements [5, p. 5]. In such relations, no organization is able to compete effectively without the near-constant support of other partners [12, p. 12-8]. In other words, collaboration requires coordinated ways of solving problems by partners, and success of the undertaking depends on proper contribution by each of them [13, p. 562-77].

Both cooperation and collaboration ought to be analyzed in the context of inter-organizational cooperation and inter-organizational collaboration. Most scientists perceive them as different actions. Inter-organizational cooperation is analyzed through relations between

partners within which each organization gains benefits and learns from others in order to increase efficiency in achieving individual goals. It is also understood as relations that allow informational, material and energetic exchange, when all parties show proper engagement and reciprocal attitude. Thus, three crucial elements of inter-organizational cooperation are: exchange, engagement and reciprocation [14, p. 10-23].

Inter-organizational collaboration, however, is defined very generally and it means that organizations do something together, and the aim is to realize some projects and gain mutual benefits. It is a relation that links at least two parties [15, p. 28], and it is also understood as taking up actions which are compatible and complimentary, and which have a positive influence on the process of achieving organizational objectives [16, p. 13]. In this meaning, inter-organizational collaboration can be identified with doing the job, realizing common projects, and it may concern an organization as a whole, in part or the individuals within it.

To make things more complicated, although cooperation and collaboration are defined differently, they are quite similar concepts and they have common elements. The most important include:

- variety of organizational forms private, public or non-governmental organizations,
- relations between organizations can be both formal and informal,
- organizations can be related through finance, resources or labor force,
- different configurations of forces symmetric or asymmetric power,
- relations between producers and suppliers are built through the process of exchange and negotiations [17, p. 683-706].

T. Pszczołowski proposed a very interesting distinction concerning the notions of cooperation and collaboration. He identified three types of co-doing something:

- 1. Collaboration, also known as positive cooperation.
- 2. Competition (rivalry).
- 3. Conflict, also known as negative cooperation [18, p. 273].

In the literature, a simplified version of the above distinction can be found. This presents two kinds of co-doing something:

- 1. Collaboration actions based on a cooperative approach and expectation of reciprocation; it this sense it is also defined as 'co-doing something in a narrow meaning'.
- 2. Confrontation actions connected with rivalry and conflict; in practice, such a behavior often has the form of competition of varied intensity.

Negative cooperation takes place where interaction is not connected with realization of common goals. The example of such a common element is conditions in which organizations achieve their own, separate objectives. Thus, organizational activity depends not only on dealing with parties which tend to realize common goals, but also ones that have contradictory goals. Here, measures taken up by an organization may be initiated by behavior of competitors. In this case we talk about cooperation in wider meaning, because it just means co-doing something.

Hence, only positive cooperation allows identifying joint actions with realization of common goals. This means mutual organized actions, coordination of common undertakings. What is vital in situations of inter-organizational cooperation (private, public or non-governmental), is the existence of horizontal ties and relations within an inter-organizational network.

The distinction analyzed above does not cover all possible forms of relations between organizations. What is important, is that in some cases, other approaches appear in which contradictory forms are present. Such a relation is called coopetition. According to A.M. Brandenburger and B.J. Nalebuff, coopetition is understood as a situation in which cooperation and competition take place simultaneously [19]. In other words, it is a cooperation between rivals, which is initiated in order to increase the chances of the mutual gain of some potential benefits from the market.

# 2. New classification of managerial disciplines

## 2.1. Reasons for changes - Ministry's stance

The new classification of scientific fields and disciplines, implemented on the 1<sup>st</sup> of October 2018 in Poland [20] is very unclear, hence it raises a lot of questions. Among them there are also doubts regarding the correctness of classification of managerial disciplines.

The Ministry of Higher Education claims that the change is intended to eliminate the artificial narrowing of research, to adjust the classification of disciplines to the international standards and to allow objective assessment of scientific work [21]. The previous division of scientific fields and disciplines was very much different from worldwide standards. It showed 8 general fields of knowledge, 22 fields of science and arts, and 102 disciplines. As a result of such a detailed division, Polish science was limited to very narrow specializations, and international communication with scientists working in the same fields was difficult. To make the problem clearer, it is worth noting that the classification by Organization for Economic Cooperation and Development (OECD) shows only 42 disciplines, which made it 60 disciplines fewer than in Poland.

However, the very fact of narrowing disciplines was not the main problem of the previous classification. A very negative consequence of this phenomenon was the situation that some very narrow disciplines had only a few active scientists. In more than 1/5 of all disciplines, the research was carried out only by around a hundred scientists (in case of three disciplines the overall number of scientists was lower than 24). Consequently, carrying out objective evaluation of their work in many cases appeared to be extremely difficult. The results of the re-evaluation have a direct impact on placing funds for development of research potential, in enhancing the efficiency of organizing study processes etc. Thus, classification of scientific fields and disciplines plays an extremely important role in the development and operation of higher schools.

The Ministry believes that new classification allows objective assessment of quality of scientific activity, as previously, evaluation was done separately in each department, which in most cases did not match the real scale and subject matter of the carried out research. In the new system, it is the scientific work of entire school in each discipline that is evaluated.

The new classification does not mean that some scientific fields have been eliminated; each discipline is classified, and some have been consolidated. This means that, in practice, research will be carried out within all scientific fields and is still financed by public funds. Moreover, majors at schools can be created independently from the classification of disciplines. Thus, it is possible to initiate majors that are related to different disciplines, or to some

narrow specialization within some discipline. Possibilities to create inter-disciplinary studies are also supported by the fact that new Constitution for Science implements the rule that the right to open studies in some discipline is possessed by the whole school, not only some particular department.

#### 2.2. Critical views on the classification

Unfortunately, The Ministry's interpretation of new classification has been criticized is not clear and in some parts, illogical. According to the opinion of the Crisis Committee of Polish Humanities [22], substantial, even drastic changes will result in administrative chaos. Although the new system was supposed to be based on classification by OECD, modifications and differences from this role model in practice led to substantial lack of inner cohesion. Some disciplines have been joint together, other split without any reasonable explanation. Moreover, in many cases one discipline includes several sciences that operate through different methodologies.

Regarding social sciences, in which managerial and business disciplines are placed, crucial examples of lack of consequence in naming and dividing fields of science and disciplines are as follows:

The new classification presents a new scientific field 'sciences of management and quality', thus suggesting that measures in the field of management are separated and different from measures in the field of quality. Such a division is absolutely illogical because in practice, 'quality' means 'quality management', therefore, it ought to be perceived as an inseparable part of 'management'. Some hints regarding what the motives for the separation were can be found in the classification of disciplines (within the scientific field in question) – they are divided into sciences of management and sciences of commodities. Thus it suggests that quality issues are typical only for goods (products). This view cannot be accepted for two main reasons. Firstly, from a managerial point of view, quality concerns not only products, but every aspect of an organization - for instance: quality of processes, quality of training system, quality of communication system etc. Secondly, even when we concentrate on quality of products, in practice, we must analyze this from the perspective of managing quality (in order to ensure quality of a product), in this way linking it directly with the sciences of management.

Unfortunately, within the analyzed field there is another confusing and illogical division. The disciplines of 'sciences of commodities' were described as being related to 'management of quality and product'. This suggests that it is possible (and correct!) to manage quality separately from managing the product itself. For both scientists and managers such a proposal seems absolutely unacceptable. Needles to say, there is a clear incoherence between disciplines (in which 'quality management' appears) and the name of the scientific field (in which management and quality are separated),

The new field of sciences 'economy and finance' (similarly divided into two disciplines 'economy' and 'finance') suggests that these two elements are separate. In reality they are closely linked; managing finance is one of the economic issues dealt with in each organization.

## **Conclusions**

Although the network concept has become an attractive way of operating and developing organizations, it based upon complex relations between partners. The similarities and differences between collaboration, cooperation and coopetition are still wrongly understood and misinterpreted. For both scientists and managers, it is extremely important to understand these sometimes vague and subtle differences in ties and relations between partners, because only then will they be able to recognize the real benefits from the network.

The scientific analysis and development of the network concept ought to be supported by an adequate classification of scientific fields and disciplines. Only then will it be possible to position the research correctly and allow it to contribute adequately to the advancement of science — especially from the methodological point of view. Unfortunately, however, the new classification of the sciences that has been implemented in Poland is unclear and illogical. The names of some disciplines do not match their real scientific specifications and the whole system seems to be imposed by administrative authorities, whereas classification of scientific work ought to be strictly linked with the research carried out and grouped according to similarity of methodology.

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#### **Conflict of interests**

All authors declared no conflict of interests.

#### **Author contributions**

All authors contributed to the interpretation of results and writing of the paper. All authors read and approved the final manuscript.

#### **Ethical statement**

The research complies with all national and international ethical requirements.

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## **Biographical note**

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# Problemy interpretacyjne relacji sieciowych w kontekście klasyfikacji dyscyplin naukowych

#### STRESZCZENIE

Głównym celem artykułu jest ukazanie i odniesienie się do obecnie szeroko dyskutowanych problemów interpretacyjnych w nazewnictwie proponowanym w naukach o zarządzaniu. W części pierwszej autorzy skoncentrowali się na scharakteryzowaniu znaczeń i klasyfikacji relacji międzyorganizacyjnych w ramach koncepcji sieciowej, jednocześnie wyrażając krytyczne poglądy dotyczące niektórych interpretacji. W dalszej części rozważania te odniesiono do podstaw teoretycznych, skupiając się na analizie poprawności nowej klasyfikacji dziedzin nauki i dyscyplin naukowych obowiązujących w Polsce od dnia 1 października 2018 roku.

#### **SŁOWA KLUCZOWE**

relacje sieciowe, współpraca, kooperacja, klasyfikacja dyscyplin naukowych, nauki o zarządzaniu

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