



THE EVALUATION SYSTEM PROPOSAL OF THE BUSINESSES PREPAREDNESS FOR COOPERATIVE MANAGEMENT IMPLEMENTATION

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Abstract. The objective of the paper is to propose an assessment system of company readiness for cooperative management utilisation according to a detailed analysis of scientific literature and according to a performed empirical research. The proposal defines particular levels of readiness, basic methodology and the way of the readiness index calculation. The paper has brought the application of the proposed assessment system of readiness for cooperative management utilisation in the conditions of Slovak companies according to the empirical research carried out on the sample of 221 respondents.

Keywords: cooperation, cooperative management, assessment system, company, research, readiness index.

JEL Classification: M10, M13, M14.

Introduction

Lately it is noticed the increased interest and discussion of several theoretical and practical specialists in the matter of cooperative management and creating of cooperation relationships. However, the area of cooperative management might be taken as little developed. In most cases the attention is paid particularly to the matter of forming clusters, description of their activities and benefits regarding regional development (Vodák, Soviar 2011). It is necessary not to forget the existence of common partnerships and mutual cooperation within supplier and customer relationships. The quality of such relationships is a prerequisite of the future success of a business on a market (Soviar, Závodská 2011). Therefore attention should be paid to the forms of cooperation, process of creation and especially the issues of management of the resulting cooperation activities. And so, nowadays it is significant to talk about cooperative management.

Companies can meet different unsuccessful business initiatives in development of the relationships in practice

mentioned above. Business strategies that do not recognize the presence of complexity and uncertainty with related and future changes will be inflexible and unlikely to be correct (Varmus 2009). The main reasons of failures include the absence of management of cooperation activities, unclearly stated plan, improperly divided competitions and at last, but not least, the absence of corporate strategy intended to form and develop cooperation. Managers often misunderstand the role of cooperation, the way of their security, the importance and benefits of cooperative management and they do not use cooperation potential of a company to the maximum extent.

Cooperative management may be regarded as a set of approaches, methods, techniques and procedures used in a company management which defines cooperation direction of the business. In order to implement and perform cooperative management in a company successfully it is necessary for the company to have some results in the area affecting cooperative management. Every company is situated at a different level of readiness for utilisation of cooperative management. Therefore it is needed to identify the current level

of preparation to find weaknesses and define recommendations to improve them (Lendel, Varmus 2012). However, it is also essential to have a proper methodology to assess readiness of a company for the implementation and performance of cooperative management.

1. Objective and methodology

The main objective of the paper is to get new knowledge in the area of cooperation focusing on the area of strategy management, marketing and to introduce a possibility of a system of readiness of a company for cooperative management utilisation. A proposal of particular levels of readiness of a company for cooperative management utilisation may contribute to identification of weaknesses of the company in this area and to find a space for further improvement significantly. The proposed system can be used as a checking tool during the period of using cooperative management in a company. It is intended to provide managers with a tool for self-assessment. Thus the company management gets a real image of their level of readiness for cooperative management utilisation.

To solve the examined issues in the paper requires using of several methods depending on particular parts of the solution.

The methods of documents analyses (when analysing current and historical data related to the matter), a questionnaire method and a method of a semi-structured interview (collection of the data in empirical research and the method of observation (visits of selected companies) were used to obtain and collect the information.

When processing the information mainly the quantitative assessment method was used (application of statistical methods) and a comparative method (when comparing the data obtained in the empirical research and the data for the analysis of secondary resources).

The objects of the research contained middle and small businesses operating in the Slovak territory and managers at a middle and top level of a company management were final respondents. 221 respondents took part in the research focused on the assessment of preparation of companies to utilise cooperative management.

The objects of the research were businesses operating in all sectors of national economy in Slovakia. Specifically, the companies included in the medium and large businesses based on the number of employees by the Statistical Office of the Slovak Republic (SO SR). The target group of research were businesses. These businesses had to meet the following selection criteria:

- scope of Slovakia,
- the number of employees more than 50.

Based on these criteria, it can be concluded that target group were medium and large businesses operating in the

territory of Slovakia. The final respondents were the managers at the top and middle management level of businesses. For the sampling was chosen representative technique. Its advantage is that when analysing the data it was possible to generalize to a basic set the results gathered. Specifically, it was used a sample survey on a random basis. For the sample size calculation the application available on the internet was used. The application also provided alternative scenarios for the sampling error and sample size.

The size of the sample represents 345 respondents (medium and large businesses) for the desired 95% confidence interval a maximum permissible error of 5%. Because the research involved 221 respondents the maximum sampling error reached 6.37%. The data collection was carried out solely by a personal enquiring.

The methods of induction, deduction, synthesis (when forming the assessment system of readiness of a company for utilisation of cooperative management and in definition of particular levels of preparation), abstraction and modeling were used to solve the examined matter.

2. The current state of dealing with the issue

Nowadays there is a debate on a definition of cooperative management and allocation of their operation areas. There are a few definitions of cooperative management in the literature but each of them covers only a part of the overall role of cooperative management. Table 1 summarizes the definitions of the term *cooperative management*.

A wide explanation variability of the term *cooperative management* may be also documented by the following theses. Lafleur (2005) understands cooperative management as the way the management and development of cooperation are conducted in a competitive setting. In Ray opinion (2002) cooperative management represents a term for framework for the integrated management of enterprise networks. Brown (1998) also leans to this opinion by his thesis that cooperative management is a partnership between government and industry. According to Staatz (1983), cooperative management is about the cooperative decision making in the context of heterogeneous preferences, there is a need to develop models that address the issue explicitly and in so doing suggest alternative ways of structuring cooperatives to deal with the group choice. Mendoza gives some attention to the fact that the cooperative management may be defined as the efficient and effective utilization of the resources of a cooperative as a business organization for the purpose of serving the needs of its members within the context of the accepted cooperative principles. Watzlawick sees cooperative management as a complex decision making process within the three levels of management pyramid which aims at achieving a proper balance of success of cooperative enterprise as a

business unit as well as a social institution. Davis (1999) perceives cooperative management as a practice of managing a cooperative business organization. Davis & Donaldson (1998) are inclined to believe and claim that cooperative management is a philosophy of management that can be applied irrespective of the ownership structure. Zhang (2011) believes that cooperative management is a core of all management problems. In his opinion the cooperative management provides conditions of constructing a cooperation system. These conditions are the motivation of resource dependence, objective of effect enhancement, constraints of encouraging cooperation and possession of technology of cooperation.

Based on the thorough analysis of domestic and foreign literature we can proceed to the following definition: “Cooperative management is effective and pragmatic management of cooperative relations between independent organizations or individuals for the purpose of raising of their competitiveness.” (Soviar 2012).

Within the analysis of scientific literature the attention was paid also to the effort to find out or to identify current assessment processes of readiness of a company for utilisation of cooperative management. The carried-out the detailed analysis shows that the authors deal solely with the area of forming clusters within the examined matter. This area has been discussed in detail and different methods of clusters forming have been proposed. One of the most popular techniques is based on a

pattern created by Professor Michael Porter. It is a quite simple, very useful and flexible pattern called Location Quotient – LQ (1).

$$LQ_i = \frac{e_i / e}{E_i / E}, \tag{1}$$

where

- LQ_i – location quotient for the sector “ i ”,
- e_i – regional employment in the sector “ i ”,
- e – general regional employment,
- E_i – state employment in the sector “ i ”,
- E – general state employment.

The values inside and mainly above the area of 0.85–1.15 are considered as significant for cluster creation. In this pattern there is possible to change the values for example for profit or high-added value etc. (Porter 1998).

Therefore only a partial proposal may be found in the scientific literature, especially, in the area of cooperation and understanding of cooperative management, such as (Veerakumaran 2006):

Cooperative management is a complex decision making process, and decisions are made at all the three levels of management pyramid.

The overriding objective of cooperative management is to serve the needs of members.

The conduct of all the activities must be governed jointly by the two sets of principles namely, a) principles of management and b) principles of cooperation.

Table 1. Definitions of the term cooperative management

Author(s)	Definition
Davis, Donaldson (1998)	Cooperative management is a philosophy of management that can be applied irrespective of ownership structure.
Davis (1999)	Cooperative management is the practice of managing a cooperative business organization.
Mendoza	Cooperative management may be defined as the efficient and effective utilization of the resources of a cooperative as a business organization for the purpose of serving the needs of its members within the context of the accepted cooperative principles.
Watzlawick	Cooperative management should be understood as a complex decision making process within the three levels of management pyramid which aims at achieving a proper balance of success of cooperative enterprise as a business unit as well as a social institution.
Lafleur (2005)	Cooperative management is the way the management and development of cooperation are conducted in a competitive setting.
Ray (2002)	Cooperative management represents a term for framework for the integrated management of enterprise networks.
Brown (1998)	Cooperative management is a partnership between government and industry.
Staatz (1983)	Cooperative management is about the cooperative decision making in the context of heterogeneous preferences, there is a need to develop models that address the issue explicitly and in so doing suggest alternative ways of structuring cooperatives to deal with the group choice.
Zhang (2011)	Cooperative management is a core of all management problems. Cooperative management provides conditions of constructing a cooperation system. These conditions are the motivation of resource dependence, objective of effect enhancement, constraints of encouraging cooperation and possession of technology of cooperation.

The creation of proper balance between efforts aiming at commercial success and those aimed at maintaining the institutional goals of the cooperative association.

Like any other management, it seeks to achieve its aim by means of effective and efficient use of resources.

These findings formed a base for the subsequent proposal of an assessment system of a company readiness for utilisation of cooperative management and for definition of particular levels of readiness.

3. Proposal of an assessment system of readiness of companies for cooperative management utilisation

The research performed was intended to identify the level of readiness of the Slovak companies for cooperative management utilisation. A so called readiness index was used to assess the readiness of the companies. For internal purposes (monitoring of improvement of cooperation processes, motivation of employees, remuneration system, etc.) it is very good to have a value which represents the general readiness of a company in the area of utilisation of cooperative management available.

Stating of a methodology to calculate the readiness index the same principles which are used to calculate the index of customer satisfaction were followed. That means that two measured values are used for the calculation: the importance rate of factors affecting successful utilisation of cooperative management for managers (performance of mutual cooperation) and performance which the company achieves at such factors.

The calculation of particular weights (V) is needed to calculate the readiness index of a company to utilise cooperative management. The calculation of weights follows the level of importance:

$$v_i = \frac{w_i}{\sum_{i=1}^N w_i}, \quad (2)$$

where

v_i – weight of the i^{th} factor,

w_i – importance rate of the i^{th} factor,

N – number of factors affecting successful utilisation of cooperative management.

The level of readiness of a company for cooperative management utilisation (readiness index) is calculated using the following formula:

$$Ip_i = \frac{\sum_{i=1}^N v_{ij} x_{ij}}{10 \sum_{i=1}^N v_{ij}}, \quad (3)$$

where

Ip_i – readiness index of the i^{th} company,

v_{ij} – weight of the i^{th} factor,

x_{ij} – performance achieved at the i^{th} factor,

10 – refers to the range used (the scale from 1–10),

N – number of factors affecting a successful utilisation of cooperative management.

The total index of readiness is a mean of all individual indexes of readiness. The readiness index has a target to be improved through a reduction of a difference between the rate of importance of particular factors and assessment of their performance.

The companies managers were provided with the key factors of cooperative management utilisation (Table 2) upon which they assessed their performance. The following table shows the factors together with the description of the activities which they include.

Table 2. Description of factors of successful utilisation of cooperative management

Factor	Description
<i>Mutual trust</i>	flexibility, seriousness, trustworthiness, responsible approach, frankness, reliability, etc.
<i>Benefits of cooperation</i>	cooperation value, competitiveness, mutual utilisation of advantages, etc.
<i>Observing of contractual terms and conditions</i>	deadlines meetings, agreements fulfilment, willingness to cooperate, etc.
<i>Level of communication</i>	companies willingness to communicate, to inform inwards and towards partners, open communication, etc.
<i>Information system</i>	Data and information flows, technical equipment, data saving, data transfer, etc.

Source: own elaboration

In terms of Table 2, the cooperation management is seen as management that stems from initiatives and needs to cooperate, leaning on the cooperation potential of the company, using mutual trust as its main cooperation tool and acting in the pro-cooperation climate supported by suitable communication and information systems. In centre of enterprise attention is the *benefit of cooperation*. The outcome of the cooperation is the created value that improves competitiveness of the company and opens doors to new opportunities (on the market, in processes, and work approaches, etc.).

The first important aspect which influences cooperation management is *a mutual trust*. Its purpose is to create such a work environment that it will support a cooperation climate. In particular, this means to adhere to contractual terms, professional approach and seriousness of parties in cooperation, responsible approach to dealing with issues during the cooperation as well as reliability of parties in the cooperation.

The important aspect of cooperation management is an information system. Cooperation management must be supported by a suitable information system which enables the use of company cooperation potential in its cooperation activities. This aspect can be also seen as a system of management that supports cooperation, including cooperation approaches, methods, management resources, management styles, initiatives that lead to improvement and better use of cooperation in the enterprise. We also include the external and knowledge systems that were created with the goal of ensuring effective work with knowledge and data related to cooperation. This requires a certain investment of company management into information systems, so that a free flow of information is ensured together with appropriate technical and program equipment.

They could also match particular factors with the importance level or to set priorities. As Figure 1 shows the highest priority is given to the mutual trust (9.35), observing contractual conditions (9.35) and benefits of cooperation (8.94). The lowest priority was given to a communication level (8.52) and especially, to an information system (7.62).

There is not a single case when the performance assessment would exceed the priorities of company managers (Fig. 2) which may be regarded as unacceptable, especially, regarding the matter of utilisation of cooperative management.

The areas for improvement may be seen in all case. The most significant differences in the importance and performance are in the factors like trust, cooperation benefits and contractual conditions meeting.

The total index of readiness of companies for cooperative management utilisation is 75.88%. The highest level of readiness achieved was 98.26% and the lowest one was only 10%.

The performance matrix is a specific type of graphics showing the results of the research of company readiness. All the factors analysed are arranged inside the matrix according to their importance and the performance achieved matched to them by the company managers. The matrix shows the options for future planning. It is divided into four quadrants according to the level of importance and performance. Figure 3 shows a positive situation where all companies responded are in the quadrant with the high importance and performance. However, certain factors are in the border area with the low performance quadrant (information system and communication level). It is necessary that the managers of the companies notice exactly these factors which will result in the increase of performance at these factors.

Upon the values of readiness index achieved the companies may be divided into five levels of readiness:

- chaotic level,
- insufficient level,
- acceptable level,
- high level,
- excellent level.

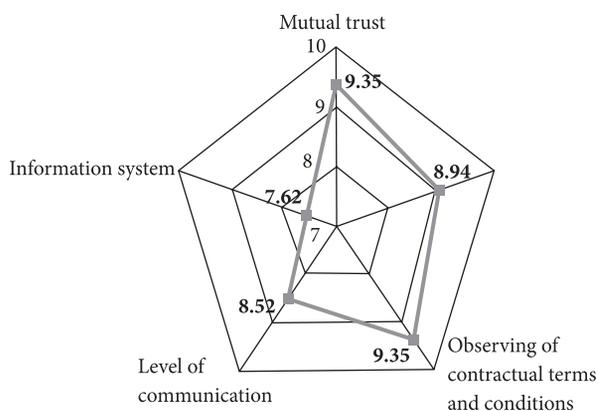


Fig. 1. Rate of importance of key factors of cooperative management utilisation

Source: own research

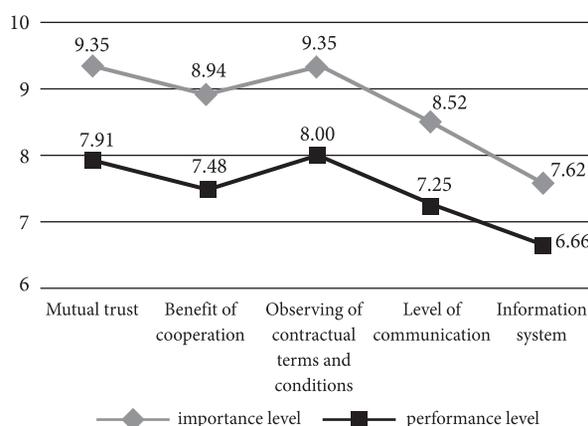


Fig. 2. Profile of performance of cooperative management utilisation in a company

Source: own research

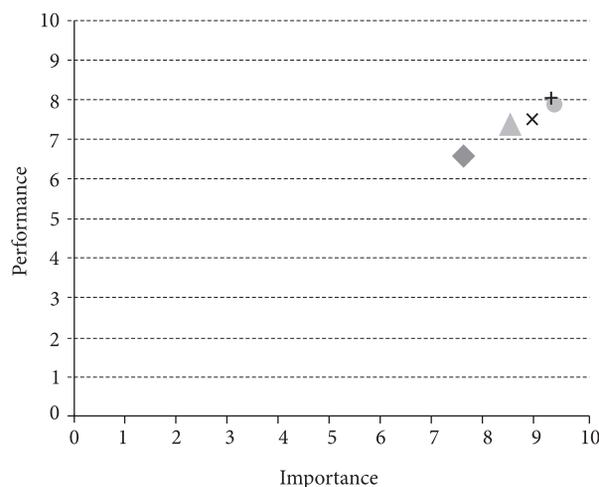


Fig. 3. Performance matrix

Source: own research

The chaotic level of readiness corresponds with a company which is not primarily interested in working with other companies and organizations, i.e. in forming of cooperation relationships in the business area. The company management does not have clear ideas about potential cooperation and benefits resulting from it. This lack of awareness is reflected especially in the fact that companies do not develop the already existing cooperations and they only maintain them. Company managers stick to the ways approved and they do not develop new initiatives outwards. Other signs of this lack of awareness and lack of interest are insufficient and non-working communications not only between the departments inside the companies but also in a mutual communication with the current company partners. The communication level gets even worse by the companies' improper information systems.

The insufficient level of readiness corresponds with a company which shows a commencing effort to apply some elements of cooperative management and creation of new relationships. Although the company management have some ideas about cooperation and the benefits of it, such an idea is not reflected in the long-term company plans and in the company strategy at all. A slight progress may be seen in the area of the company information system. That serves as a tool to save, process and communicate important information resulting from the partnership relationships, however, without any integrated conception. In many cases the company employees do not know about the existing cooperation

relationships which should be developed. Company managers focus only on fulfilment of the tasks exactly specified by the top management. Problems occur also in the area of meeting of contractual conditions. However, these are in a much smaller extent than at the previous level.

The acceptable level of readiness corresponds with a company which meets at least a minimum level for utilisation of cooperative management. Cooperation is already included in both the corporate strategy and company plans in a certain way and some sources are designated to develop them. New initiatives in this area are registered in the company within an active information system. The company employees try to find solutions differently and participate within the existing partnership relationships actively. They discuss such solutions with each other actively. However, interconnection of their ideas with the work of the management and further detail development and spreading the ideas into new dimensions are limited.

The high level of readiness corresponds with a company that is on a good way of becoming very successful in the area of utilization of cooperative management. Company management and marketing support the development of the current and making of new cooperation relationships. The employees of the company notice their partners and they foreseen their future needs including cooperation needs. They think in a context and in conditions different from the employees in most of the companies and their objective is to bring a higher added value for the partners in cooperation (Blašková 2010). The efficient registration of information related to the cooperation relationships within the company information system helps to this purpose. There is the efficient communication based on directness and mutual trust in the company.

The excellent level of readiness is typical for a company, which may be classified in a top group in the area of utilisation of cooperative management. The company achieves the highest values in particular key elements of utilisation of cooperative management. Cooperative management supports cooperation activities of management to the full extent and engages all employees of the company to this process actively. There is a sophisticated information system providing efficient information flows between the company and its partners. Cooperation relationships are based on intentional maintenance and building of mutual trust. Cooperative relations are based on a mutual trust and meeting the contractual conditions.

A comparative table has been prepared according to the calculation of readiness of particular companies for utilisation of cooperative management upon the achieved readiness indexes (Table 3).

As you can see in Figure 4 the biggest part of the companies is situated in the acceptable level of readiness (39.8%). Such companies have a good basis on which utilisation

Table 3. Comparative table – the readiness index

Level	Readiness index (range in %)	Number of companies
chaotic	0–40	7
insufficient	41–60	24
acceptable	61–80	88
high	81–90	66
excellent	91–100	36

Source: own research

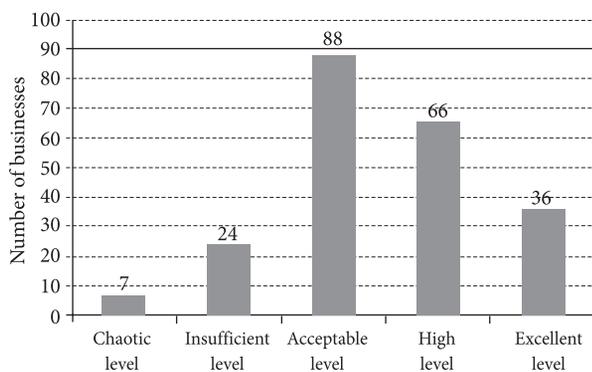


Fig. 4. The achieved level of readiness for utilisation of cooperative management

Source: own research

of cooperative management may be built systematically step by step. A group of the companies typical for chaotic (3.1%) and insufficient levels (10.8%) may be considered to be negative. Such companies must choose a waiting strategy. They should take some measures to increase the level up to the acceptable level at first. Only then they can be recommended to get to the utilisation of cooperative management.

The fact that 29.8% of the responding companies showed a high level of readiness and 16.2 % of them showed an excellent level and so they may be considered positively.

4. Discussion

We have prepared a detailed methodology in order to assess the level of readiness of companies for utilisation of cooperative management which might be a basis for further assessment also in other performed researches. On the other side we realize that this methodology has been made upon our experience and particularly upon detailed analysis and synthesis of the knowledge in the area of cooperative management obtained from the scientific literature. Therefore, the methodology created bears the signs of subjectivism. Verification of it in form of a discussion of the wider public and practice in the area of cooperation, strategic marketing and strategy management will be necessary for its further application. In order to do this we are planning to address it to the experts from universities especially, in Italy, Germany, Austria, Poland, Lithuania and the Czech Republic. The correctness of the defined levels of readiness may be also verified if a more detailed empiric research is carried out.

The results obtained by the research form a basis to define particular levels of readiness and specification of the ranges. Particularly the interviews with managers from the middle and top management levels help to achieve more comprehensive sight of utilisation of the cooperative management, identify the key areas affecting the preconditions for its utilisation in a company which are subjects to the assessment within the readiness index.

Particular levels of readiness have been proposed in order to define different development stages in achievement of the highest level of utilisation of cooperative management. A similar approach may be seen also in case of maturity stages from the CMM model (Capability Maturity Model) that was made in the Software Engineering Institute Carnegie Mellon of Pittsburgh University in the early ninetieth of the last century (more Gartner 2001).

The presented methodology is a valuable tool for company managers in utilisation of cooperative management. It may also be used as a tool for self-assessment. Management gets the assessment of company readiness for utilisation of cooperative management, identifies their

weaknesses in this area and reveals space for further improvement this way. We can also see utilisation of the proposed methodology in form of a checking tool during utilisation of cooperative management. The objective of a company should contain sustainable development of mutual cooperation with partners in order to enhance competitiveness of the company. However, a minimum acceptable level is necessary for a successful performance of cooperative management which will provide utilisation of its key elements.

Conclusions

Nowadays, active work in the area of cooperative management may help companies not only to keep their position on the market and it can even enhance its competitiveness and find new perspective partners (Soviar 2009). It is essential to form suitable conditions in the company to have cooperative management applied. That requires identification of current conditions of meeting of the key elements of cooperative management. The methodology proposed should serve this purpose.

In the proposal of the assessment system of readiness of a company for utilisation of cooperative management we followed the strategy management and marketing theory. Upon the detailed analysis including an empiric research the facts that helped to propose the assessment system for readiness were found out. They pointed out problematic areas which affect readiness of companies to utilise cooperative management. The collected knowledge from the matter of cooperative management enabled us to create an integrated proposal of the assessment system of readiness of a company for the cooperative management utilisation. The analysis of the scientific literature found a lack of the integrated assessment system of a company readiness for cooperative management utilisation. The authors mostly deal only with the description of the methods intended to the clusters forming issue.

The solution of the matter in the paper was intended to propose an assessment system of company readiness for cooperative management utilisation. The assessment methodology of a company readiness we have designed is applied in the conditions of Slovak companies and is considered a determining result. The methodology prepared should serve the managers at secondary and top management both as an inspection tool and self-assessment tool which indicate company weaknesses in the area of cooperation and reveal a space for improvement.

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