

*PhD Eng. Roman Chorób*¹ 

Department of Quantitative Methods and Economic Informatics
Faculty of Economics
University of Rzeszow

Confidence as a determinant of establishing and developing innovative integration connections in agribusiness

INTRODUCTION

The ever-growing importance of trust in the economy is associated with its confirmed impact on many aspects of organizational operations. It also results from the necessity of purposely building in the entities of a work environment based on trust and trust in external relations. A high level of trust is a valuable organizational resource and can be a prerequisite of competitive advantage. The level of trust seems to be a good predictor of economic development. In societies which are characterized by high social confidence, optimistic attitudes prevail, which limit the focus on risk and intensify the focus on opportunities (Krot, Lewicka, 2016, p. 11). F. Fukuyama (1997) argues that distrust causes people to stop believing in the sense of teamwork, becoming asocial. Lack of trust or its low level may therefore limit the horizons, encourage conspiracy, corruption, destroy civil attitudes, increase authoritarianism.

For the process of creating innovative networks or cluster structures, an important element of empirical experience is the belief that trust can be created even among people from other organizational cultures or between individuals who do not share any values outside their limited commercial purposes (Huotari, Iivonen, 2005). Confidence creates opportunities to reduce transaction costs that are extremely important in the functioning of mechanisms, where, on the one hand, any particularisms, and on the other, too much regulation and procedures can disrupt both the cluster's own way of functioning and influence the dominance of corporate and bureaucratic culture. In addition, social capital, which is an element of

¹ Address for correspondence: University of Rzeszów, Faculty of Economics, Department of Quantitative Methods and Economic Informatics, Ćwiklińskiej street 2/402, 35-601 Rzeszów; tel. 17 872 17 13; e-mail: rchorob@ur.edu.pl. ORCID: 0000-0003-2045-6251.

organizational culture with trust displayed among other cultural values, can regulate elements of human behavior in personal and inter-organizational relationships in such a way as to limit the transaction costs always present in enterprises and between business partners (Krannich, 2013, p. 58).

The main objective of the study is to show the importance of trust in initiating and developing innovative integration ties, such as cluster structures. It plays a special role in creating the expansion of integration links - the participants of the integrated system give the trust to each other, with an indication of the leader of the cluster. The study presents the results of own research carried out among entrepreneurs-participants of cluster structures operating in the agribusiness of the Podkarpackie Province.

OUTLINE OF THE CONCEPT AND ADVANTAGES OF THE FUNCTIONING OF CLUSTER STRUCTURES

Strengthening the implementation of the concept of cluster development policy (*cluster-based policy, cluster-oriented policy*) is a great interest for clusters as innovative integration structures². Extensive research on the reasons for the formation and determinants of the development of clusters of entities made it possible to conclude that the implementation of this concept could significantly contribute to the increase of competitiveness of the local and regional economy. In addition, it is assumed to support it with other types of complementary policies, which means that they need to be coordinated in order to achieve synergy effects. At the same time, the implementation of this policy, consistent with the modern network paradigm of innovation, should lead to an increase in the innovation of enterprises (Brodzicki, 2002).

Clusters as specific structures of relations may arise in virtually every sector of economy – both in industry and services, in sectors of advanced technology as well as in sectors of traditional technology. They can be distinguished by varied levels of innovation and technological progress and at the same time they can use different strategies and differently shape the prospects of their own development.

The identification of cluster structures is based on the isolation of a series of market connections of those relations that are associated with the functioning of the value chain in the vertical and horizontal dimensions. The established relations bring together the entities which represent different links of this chain. Thus, the following groups of entities may function within clusters (Sölvell, 2009):

- companies (competitors, suppliers, service providers, purchasers and companies in related sectors);
- representatives of the public sector (central level, regional level and local communities);

² In the literature, the term: bunch, industrial beam, cluster is also often found.

- representatives of the academic community (universities, research institutes, technology parks, technology transfer centres etc.);
- organizations supporting cooperation (chambers of commerce, cluster organizations, etc.);
- financial institutions (financing resources);
- the media (creators of the cluster's and region's brands).

The cluster structure therefore brings measurable benefits as a form of cooperation between enterprises and the benefits include (Baran, Kłos, 2007, p. 316):

- increased productivity of activity,
- economies of scale,
- reduction of costs of transactions, transportation, technical infrastructure,
- specialization, due to critical mass of entities specializing in a particular field,
- specialization of factors, i.e. labour market, sources of research and development, technology, financing mechanisms,
- access to information on changes of the market and technology,
- access to skilled labour ,
- the ability to more easily adapt and respond to changes in the environment (technological knowledge, practice of management, marketing),
- learning process through joint search of activities and innovative solutions,
- the use of complementary elements and synergies between the companies.

THE IMPORTANCE OF TRUST IN AN INNOVATIVE ORGANIZATION IN THEORY

The company's innovation depends to a large extent on the organization's potential for change, which includes the intellectual, organizational and financial capabilities necessary for their creation and implementation (Krot, Lewicka, 2016, p. 51). Many researchers in this field focus on the analysis of factors affecting the innovativeness of enterprises (Cainelli et al., 2001; Kleinknecht, Mohnen (ed.), 2002; Baldwin, Hanel, 2002), pointing to factors such as: R&D outlays, company size, ownership form, number of competitors, etc. Traditionally, external factors are also recognized as determinants of innovative activity, including changes in the education system, access to information, education and knowledge resources, legal, political and economic regulations, tradition and many more.

As a very important factor influencing the emergence of innovations in the enterprise, human capital is indicated (Wojtczuk-Turek, 2012), whose knowledge, the ability to use it and create new ideas, as well as the level of commitment to work are a source of competitive advantage difficult to imitate. Innovation-oriented enterprises therefore strive to attract employees with high competence potential (so-called talents). However, the mere acquisition of talented employees is not enough, because their optimal use takes place in the organizational context, and

is associated with a wide range of factors that can stimulate or limit the actions taken by them.

The role of trust increases in the conditions of uncertainty and volatility. These features are inscribed in the modern economic reality. It seems, therefore, that one of the basic values that should be characteristic of the culture of contemporary organizations is trust in both internal and institutional relations (Krot, Lewicka, 2016, p. 68). In an organization based on trust, norms and values concerning it should be universally binding. In this context, one can speak of a culture of trust which Sztopka (2007) defines as “normative rules prevalent in the society, requiring trust and credibility, enforced by social sanctions”. The culture of trust is associated with identification around common values, the way employees are treated with respect and partnership, openness to change, the willingness to learn, share knowledge.

In conclusion, trust is a phenomenon or an extremely valuable value in the contemporary conditions of business operations. Therefore, many authors point to the need to consciously create an organizational culture based on trust for maintaining the position of a company focused on competing through innovation, in order to fully use the strength of human potential and achieve higher company efficiency and competitive advantage. For the existence of a climate of trust supporting innovation, not only deeply rooted and unambiguously communicated values and norms are necessary, but also tools that support them, such as reward systems and organizational support for innovators, ethical codes, training shaping good relations and stimulating cooperation, implemented procedures resolving conflicts or disputes.

THE ROLE OF TRUST IN THE DEVELOPMENT OF INNOVATIVE INTEGRATION STRUCTURES BASED ON RESEARCH

The cluster structure enables constant improvement of qualifications and development of skills of the workforce, which is one of the key factors of the cluster's competitiveness. The above-mentioned activities inevitably lead to better opportunities to achieve a higher degree of innovation. Close cooperation, high level of trust, numerous interactions are an excellent ground for new ideas, create a specific microclimate for innovations that can be tested and implemented at a lower cost. Companies acquire partners and suppliers as part of a cluster, which is another factor supporting efficiency and better productivity of processes and cooperation itself (Rundo, 2013, p. 57–58).

Members of the organization (mainly managers) can strengthen and consolidate trust, building social capital and adapting new elements of organizational culture (Fukuyama, 2000). These relationships can be shaped both in organizations and between cooperating entities. Each of the elements of creation of trust and links between them should be well understood and understood by the managers. It is noteworthy that in the business environment many countries support the de-

velopment of industrial clusters, where companies can develop skills and compete with global industry leaders (Kuei-Hsien, 2010, p. 141–155; Knop, Stachowicz, 2013, p. 61), among others through sharing resources, innovative opportunities and knowledge transfer. More and more scientists demonstrate the value of clusters in raising a competitive advantage by a given company, as well as regional competitiveness. Organizational knowledge, based on the use of trust, is important as industrial clusters constitute a unique environment for access to knowledge resources in the shortened absorption of knowledge (Saxenian, 1994).

Confirmation of the above considerations, in the context of the importance of trust in the development of innovative integration links, may be the results of research carried out by the author of this study³. Figure 1 presents determinants that, according to entrepreneurs, determine the establishment and expansion of cluster structures. The presented data indicate that the key elements were: the desire to acquire new markets and easy and cheaper access to information for members of the initiative (81.2% of responses), as well as the coordination of activities in creating value for the buyer (80.0% of indications). It is worth noting that in relation to the first two determinants, representatives of managing authorities were also of the same opinion. Nevertheless, such factors as: broadly understood promotion of the region (67.5%), increasing the competitiveness of the enterprise-participant of the initiative (62.5%) and access to public institutions and goods, ie EU funds and employees (62.5%). Particular attention should be paid to the next item due to the subject of this study. Half of the entrepreneurs drew attention to such factors as cooperation with local self-governments and the trust and cooperation in business relations occurring in the region. Almost every third respondent indicated such factors as: cooperation with universities, implementation of new technologies and access to innovative solutions (eg new technologies, management systems, etc.). The least important reason for the creation of the cluster initiative was the reduction of production costs – this was the opinion of every fifth entrepreneur surveyed.

The results of empirical research confirm that mutual trust is necessary to build friendly and lasting relations between the cluster members, without which the cluster will be only a façade structure. Overcoming the mental barrier in the form of distrust of business partners is the key to the success of the entire enterprise. It is worth emphasizing what the author of this study also agrees that cluster structures may be a kind of panacea for a chronic crisis of trust in Poland and the best example of the fact that cooperation based on mutual respect simply pays off (Wierzyński, [http](http://)).

³ The research was conducted in 2015 among 80 entrepreneurs-participants of the four only agri-food clusters as part of the implementation of an individual research project: “*Determinants of the development of innovative forms of integration links between agriculture and the food industry*” financed from the funds of the National Science Center (DEC-2011/01/D/HS4/03911). Their main subject was to get to know the determinants of the development of innovative integration links in the agribusiness of the Podkarpackie Province.

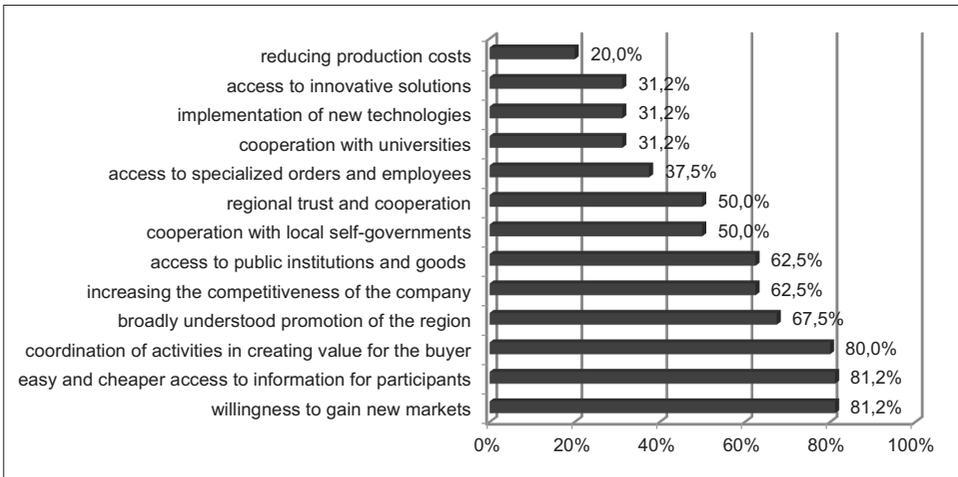


Figure 1. The main factors as the reasons for the creation of a cluster structure according to the opinion of entrepreneurs-participants of the cluster initiative (according to the scale of validity)⁴

Source: The author's elaboration on the basis of surveys.

An extremely important issue is the impact of cluster structures also on the increase in the level of innovation in the economy, which has been emphasized several times. The above-mentioned increase in the level of innovation in the economy may take place, among others by building mutual trust, facilitating communication and stimulating cooperation between the subjects of the triple helix⁵. According to 72.5% of entrepreneurs-participants of cluster initiatives, these structures significantly affect the increase in the level of innovativeness of the entire economy. Only 13.7% of respondents were of the opposite opinion, and 13.8% had no opinion in this respect. The research results confirm the thesis that properly functioning cluster structures significantly influence the increase in the level of innovation in the economy.

SUMMARY AND CONCLUSIONS

Literature studies as well as research results indicate that trust plays a key role in the course of many processes and phenomena in the organization, and consequently has a significant impact on the results and achievement of the object.

⁴ Data do not add up to 100%, because respondents could choose several answers.

⁵ *Triple helix* – also a golden triangle, the concept of participation in a cluster initiative or other organization, eg a regional innovation system, three key groups of partners: the sphere of enterprises, the scientific-research and educational sphere, and the administrative sphere (eg local government).

One of the main objects of enterprises is to build a strong competitive advantage, which is promoted by introduced innovations. Innovativeness is the main area of the company's operations, which is significantly influenced by its membership in the cluster structure. It is this type of integration system that creates and enables the use of pro-growth business conditions.

The cluster organization enables constant improvement of qualifications and development of the skills of the workforce, being one of the significant factors of the cluster's competitiveness. The above-mentioned activities lead to achieving a higher level of innovation. Close cooperation, high level of trust, numerous interactions are an excellent ground for new ideas, create a specific microclimate for innovations that can be tested and implemented at a lower cost. Companies acquire partners and suppliers as part of a cluster, which is another factor supporting efficiency and better productivity of processes and cooperation itself.

The management of the cluster structure also creates an increasing need for building trust between the participants of this structure. The value of participation in the cluster results mainly from trust, as well as direct and indirect acquisition of knowledge, resulting from involvement in activities with other entities-participants of the cluster. Therefore, the key factor in the development of cluster structures is to eliminate mental barriers resulting from a lack of trust in the market players, their credibility, business culture or even reliability. The level of trust, being an essential factor of social capital, is therefore the basis for creating every networking structure based on cooperation⁶.

REFERENCES

- Baldwin, J.R., Hanel, P. (2002). Determinants of innovative activity in Canadian manufacturing firms In: A. Kleinknecht, P. Mohnen (eds.), *Innovation and Firm Performance*, London. DOI: 10.1057/9780230595880_5.
- Baran, M., Kłos, M. (2007). Formy sieciowego współdziałania przedsiębiorstw In: E. Okoń-Horodyńska, A. Zachorowska-Mazurkiewicz (eds.), *Innowacje w rozwoju gospodarki i przedsiębiorstw: siły motoryczne i bariery*. Warszawa: Instytut Wiedzy i Innowacji.
- Brodzicki, T. et al. (2002). *Uwarunkowania rozwoju nowoczesnych technologii w Gdańsku*. Gdańsk: Opracowanie IBnGR.
- Cainelli, G., de Liso, N., Monducci, R., Perani, G. (2001). Technological Innovation and Firm Performance in Italian Traditional Manufacturing Sectors In: *Innovation and Enterprise Creation: Statistics and Indicators*. Eurostat, Sophia Antipolis.
- Fukuyama, F. (1997). *Zaufanie. Kapitał społeczny a droga do dobrobytu*. Warszawa: WN PWN.
- Fukuyama, F. (2000). *Wielki wstrząs: natura ludzka a odbudowa porządku społecznego*. Warszawa: Wyd. Bertelsmann Świat Książki.

⁶ Coopetition combines the concepts of cooperation and competition.

- Huotari, M.L., Iivonen, M. (2005). Knowledge processes: A strategic foundation for the partnership between the university and its library. *Library Management*, Vol. 26, No. 6/7. DOI: 10.1108/01435120410609743.
- Kleinknecht, A., Mohnen, P. (eds.). (2002). *Innovation and Firm Performance: Econometric Explorations of Survey Data*. Palgrave, Basingstoke. DOI: 10.1057/9780230595880.
- Knop, L., Stachowicz, J. et al. (eds.). (2013). *Modele zarządzania klastrami. Wybrane przykłady*. Gliwice: Wyd. Politechniki Śląskiej.
- Krannich, M. (2013). Zaufanie w klastrze In: L. Knop, J. Stachowicz et al. (eds.), *Modele zarządzania klastrami. Wybrane przykłady*. Gliwice: Wyd. Politechniki Śląskiej.
- Krot, K., Lewicka, D. (2016). *Zaufanie w organizacji innowacyjnej*. Warszawa: Wyd. C.H. Beck.
- Kuei-Hsien, N. (2010). Organizational trust and knowledge obtaining in industrial clusters, *Journal of Knowledge Management*, Vol. 14.
- Rundo, A. (2013). Klastry jako model współpracy przedsiębiorstw In: A. Rundo, M. Ziółkowska (eds.), *Nowoczesne modele współpracy przedsiębiorstw*. Warszawa: CeDeWu.
- Saxenian, A. L. (1994). *Regional Advantage: Culture and Competition in Silicon Valley and Route 128 Cambridge*. MA: Harvard University Press.
- Sölvell, Ö. (2009). *Clusters – Balancing Evolutionary and Constructive Forces*. Stockholm: Ivory Tower.
- Sztompka, P. (2007). *Zaufanie. Fundament społeczeństwa*, Kraków: Wydawnictwo Znak.
- Wierzyński, W. (2018). Klastry to zaufanie. Downloaded from: http://www.pi.gov.pl/parp/chapter_86196.asp?soid=02091BA6083F43EA929DC1546E4B1599 (2018.08.10).
- Wojtczuk-Turek, A. (2012). *Zachowania innowacyjne w pracy: wybrane zagadnienia teoretyczne i praktyczne*. Warszawa: Difin. DOI: 10.5604/01.3001.0009.6325.

Summary

Trust is the main product of the norms of social co-operation anchored in the national and group culture that make up social capital. The main objective of the study is to show the importance of trust in initiating and developing innovative integration ties, such as cluster structures. It plays a special role in creating the expansion of integration links - the participants of the integrated system give the trust to each other, with an indication of the leader of the cluster. Confidence creates opportunities to reduce transaction costs that are extremely important in the functioning of mechanisms, where, on the one hand, any particularizes, and on the other, too much regulation and procedures can disrupt both the cluster's own way of functioning and influence the dominance of corporate and bureaucratic culture.

The study presents the results of own research carried out among entrepreneurs-participants of cluster structures operating in the agribusiness of the Podkarpackie Province. They show that the level of trust, being a key factor of social capital, is the basis for building every structure of network cooperation. It was also proved that properly functioning, as well as forming integration structures occurring in the economy, are one of the essential conditions for its dynamic expansion.

Keywords: confidence, integration processes, cluster structures, agribusiness.

Zaufanie determinantą nawiązania i rozwoju innowacyjnych powiązań integracyjnych w agrobiznesie

Streszczenie

Zaufanie jest głównym wytworem norm społecznego współdziałania, zakotwiczonych w kulturze narodowej i grupowej, które składają się na kapitał społeczny. Głównym celem opracowania jest próba wskazania znaczenia zaufania w zainicjowaniu i rozwoju innowacyjnych więzi integracyjnych, jakimi są struktury klastrowe. Pełni ono szczególną rolę w kreowaniu ekspansji powiązań integracyjnych – zaufaniem obdarzają siebie nawzajem uczestnicy układu zintegrowanego, ze wskazaniem na lidera klastra. Zaufanie stwarza możliwości ograniczania kosztów transakcyjnych, które są niezmiernie istotne w funkcjonowaniu mechanizmów, gdzie z jednej strony wszelkie partykularyzmy, a z drugiej nadmiar regulacji i procedur mogą zaburzyć zarówno sam sposób funkcjonowania klastra, jak i wpłynąć na dominację kultury korporacyjno-biurokratycznej.

W opracowaniu zaprezentowano wyniki badań własnych przeprowadzonych wśród przedsiębiorców – uczestników struktur klastrowych funkcjonujących w agrobiznesie województwa podkarpackiego. Wynika z nich, że poziom zaufania, stanowiąc kluczowy czynnik kapitału społecznego, jest podstawą budowania każdej struktury sieciowej kooperacji. Dowiedziono również, że prawidłowo funkcjonujące, jak również tworzące się struktury integracyjne występujące w gospodarce, są jednym z istotnych warunków jej dynamicznej ekspansji.

Słowa kluczowe: zaufanie, procesy integracyjne, struktury klastrowe, agrobiznes.

JEL: D41, F15, L20, O31, R11.