

[DOI: 10.20472/IAC.2018.042.029](https://doi.org/10.20472/IAC.2018.042.029)

PETRA KECSKÉS
Széchenyi István University, Hungary

THE CHANGING ROLE OF PROXIMITY IN TODAY'S INTER-ORGANIZATIONAL RELATIONS

Abstract:

Geographical proximity i.e. the spatial concentration of organizations is a necessary requirement in the acquisition and transition of information as elementary resource between organizations. Today's' virtual communication methods and channels are able to connect physic distances and organizations far away from each other are interconnected through the different info communicational tools. However, virtual proximity does not entail unequivocally the evolution of relations between organizations.

The study will review the role of geographic and virtual proximity from the theoretical perspective which will be followed by the introduction of empirical research findings. Though organizations use virtual communication channels to maintain their relations internationally, periodical geographic proximity is needed. Geographic proximity plays different role and has different importance in diverse inter-organizational relation types.

Keywords:

Proximity, Geographical proximity, Virtual proximity, Inter-organizational relations, Inter-organizational communication

JEL Classification: F23

1 Introduction

The study of proximity in its traditional, geographic meaning is not a novelty however its analysis came to the fore due to the increasing importance of knowledge and innovation. Organizations function related to other organizations and institutions; inter-organizational ties are seen as relevant sources and play significant role in the evolution of organizations.

Geographical proximity i.e. the spatial concentration of organizations is a necessary requirement in the acquisition and transition of information as elementary resource between organizations. Today's virtual communication methods and channels are able to connect physical distances and organizations far away from each other are interconnected through the different information communicational tools. However, virtual proximity does not entail unequivocally the evolution of relations between organizations.

First, the study will give a theoretical overview of the literature dealing with proximity and its role in inter-organizational relations. The term 'proximity' will be introduced in its traditional, spatial meaning and as (virtual) proximity ensured by virtual information communicational channels and tools in the virtual space between organizations. Then, an empirical research and its findings will be reviewed. The main objective of the research was to find answers to the following questions:

- Is geographical proximity needed in inter-organizational relations on the international level?
- How can the role of virtual proximity be described in today's inter-organizational relations?

The empirical research will demonstrate the results of a survey research which was carried out in Western Hungary and which contains information about organizations with international relations. Therefore, a comprehensive analysis of proximity in today's inter-organizational relations will be presented.

2 The role of proximity

The term 'proximity' has several interpretations, thus it has to be defined clearly. Proximity in its traditional, spatial meaning is identified as the length of the shortest route between two points of the space (Lengyel – Rechnitzer 2004). Physical proximity (or distance) is often expressed by the term Euclidean distance that means the straight-line distance between two objects of the space. However, if economic actors are involved in the analysis different proximity measures and types should be taken into account. In the case of economic distance organizations can calculate with the costs that arise during transportation; distance expressed by time means how much time is needed for transportation (Mazurek 2012).

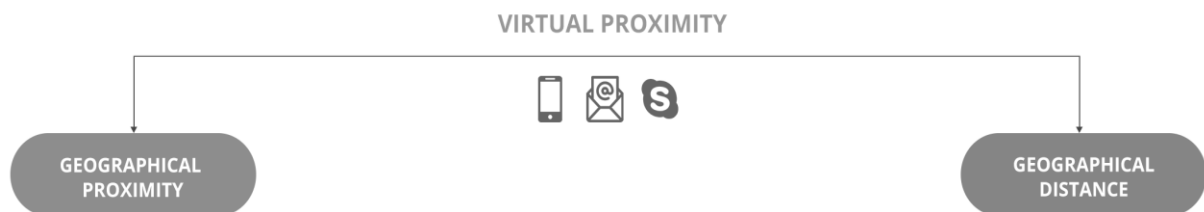
Several studies suggest the idea "*death of distance*" (Cairncross 1997, 2001; Johnson et al. 2006; Tranos – Nijkamp 2013) since the society uses different channels and virtual or digital places to maintain relations where the basics of geography do not exist and distance cannot be interpreted (Castells 2010).

On the other hand, other scholars (re)emphasize the key role of geographic proximity (Agnew – Livingstone 2011; Ghemawat 2001) and spatial concentration of R&D activities in cities (Boschma et al. 2014; Broekel – Boschma 2012; Cainelli – Zoboli 2012).

Based on the previously introduced concepts, virtual proximity is defined as a facilitator of interactions between objects (e.g. people or organizations) even through great geographic distances, thus, virtual proximity can bridge spatial distance. According to Coughlan (2014) virtual proximity is a kind of emotional closeness that is developed through the usage of info communication technologies and tools. It is not enough to possess the digital tools, these tools should be used as digital or virtual channels to communicate and to build and maintain relations with others (Coughlan 2014).

Previous studies have concluded that geographical proximity works not an exclusive factor in inter-organizational communication but periodically it is essential – especially during the evolution of interactions between organizations and settlements' local governments (Kecskés – Tompos 2017; Kecskés 2015; Szőke – Kovács 2014; Tompos et al. 2014).

Figure 1: Concept of geographical and virtual proximity



Source: Own adjustment (2018)

The concept and the interaction of geographical and virtual proximity illustrated in Figure 1 are based on the theoretical overview and will be studied in details in the empirical research. Geographical proximity is examined in two dimensions; first, the importance of spatial proximity, then the need of permanent geographic proximity will be evaluated by the enterprises.

It is assumed that virtual proximity through the usage of virtual communication channels (telephone, e-mail and other digital tools) can bridge geographical distances between organizations on the international level while geographical proximity is not at all necessary in these inter-organizational relations.

3 Empirical research and its findings

The main aim of the research was to study the changing role of spatial and virtual proximity on the international level of inter-organizational relations, moreover to adjust the concept highlighted in Figure 1 according to the research findings. Based on the literature review and based on the specific territorial aspects of the analyzed region, two research questions were defined:

- Is geographical proximity needed in inter-organizational relations on the international level?
- How can the role of virtual proximity be described in today's inter-organizational relations?

In order to examine the impact of geographic proximity in inter-organizational relations, a questionnaire survey was developed.¹ The research was conducted in Western Hungary in 2017; the final sample consists of 610 enterprises which possess at least one relation with foreign organizations. All the enterprises of the empirical research are situated in the Western counties of Hungary where the rate of foreign direct investments is the second highest in the country; moreover, this region is close to the Austrian, Slovakian, Slovenian and Croatian border and to the Western countries where most of the FDI is coming from.²

Enterprises of the survey (N=610) possess foreign organizational relations all over the world, however the main direction of these relations are in the European Union with other member states. There is one exception: relations with foreign higher institutions, universities and research institutions are oriented mainly to the neighboring countries of Hungary. The most significant and the highest number of relations are the business-type relations, i.e. relations with foreign suppliers and sales.

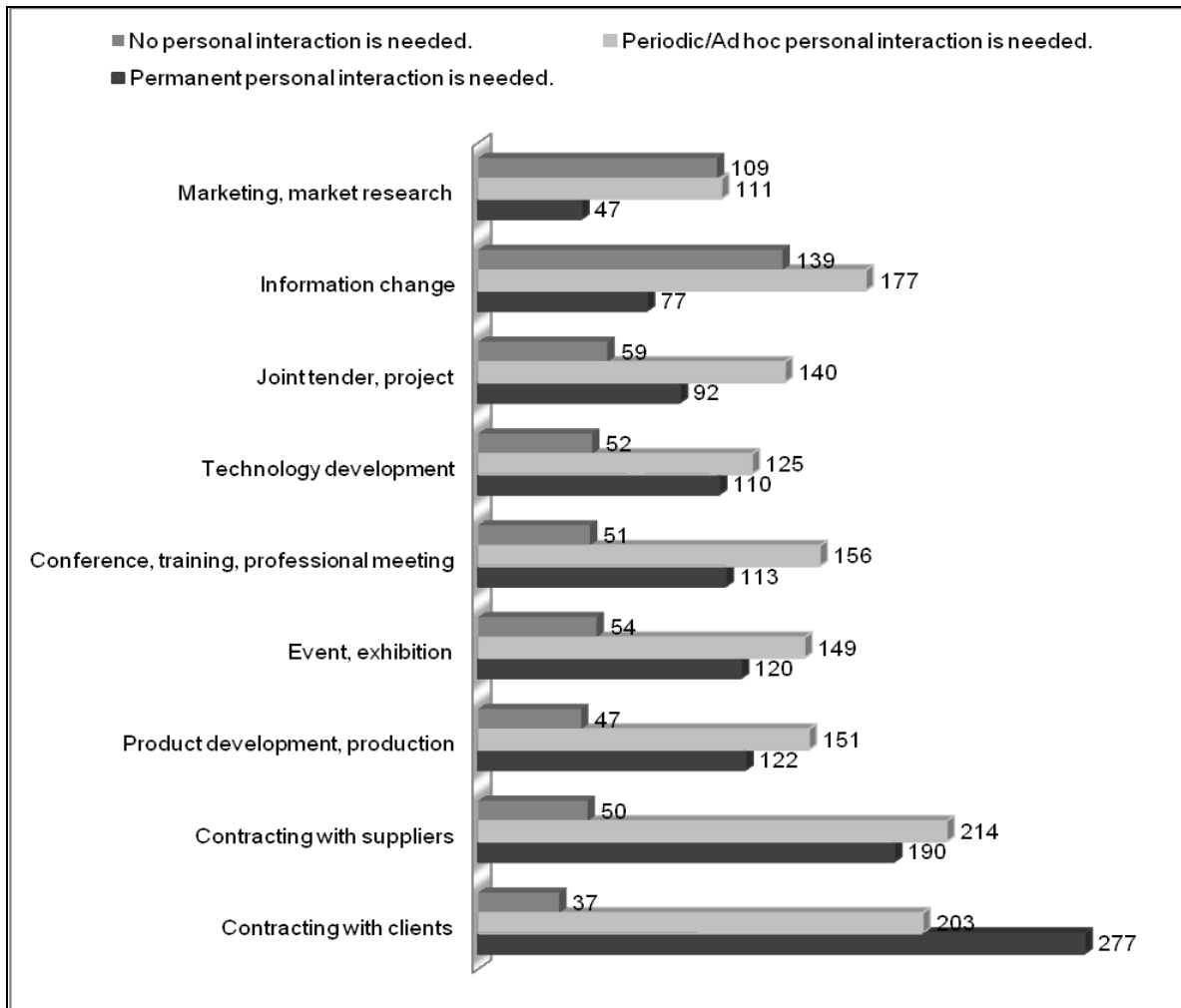
The relevance of geographic proximity was measured on a 1-5 scale; the results show significant differences in the evaluation of spatial closeness to different partner types. Geographic proximity is the most relevant in the case of suppliers and sub-contractors (N=530); 3.62 mean suggest that the spatial concentration of such partners are hold significant. The importance of the clients and customers' physical proximity is evaluated quite similar (mean=3.56; N=557). The total average importance index of geographical proximity is 3.61 in the case of business-type partner relations. On the other hand, the non-business partner relations are less important: its total average importance index is 2.29.

Beside the evaluation of spatial proximity's importance in international inter-organizational relations, enterprises should have also expressed when face-to-face, personal meetings are needed. Based on previous studies (Reisinger 2014; Csizmadia – Grosz 2012) several joint interaction and cooperation types were listed and enterprises should evaluate in which cases they need personal meeting or interaction with their partners (see Figure 2). Although they do not hold geographical proximity significant, enterprises can state that they met their partners personally in specific interactions or joint initiatives. Thus, a more comprehensive analysis can be carried out regarding the examination of geographic proximity. Figure 2 shows the need for personal meetings and interactions in the international inter-organizational relations of the sample enterprises.

¹ The introduced empirical research is part a wide-range study of the author's doctoral dissertation and contains selected findings related to the analysed topic.

² Up-to-date data are available at the following websites: https://www.ksh.hu/docs/hun/xstadat/xstadat_eves/i_qpk016.html (Retrieved 08. 07. 2018.) and <https://en.portal.santandertrade.com/establish-overseas/hungary/foreign-investment> (Retrieved 08. 07. 2018.).

Figure 2: Need for personal interaction in inter-organizational relations



Source: Own adjustment (2018)

The need for geographic proximity in the form of personal interactions shows different tendencies in various interaction types. In case of contracting both with clients (92.84% of enterprises) and suppliers (88.99% of enterprises), personal meetings and thus, geographic proximity is needed. When signing contracts with clients, permanent personal meeting are preferred while during contracting with suppliers, periodic face-to-face appointment are more often organized. In other joint interactions, ad hoc personal, i.e. spatial proximity is needed. Joint marketing activities require permanent physical closeness to partners the least of all.

Although the need for personal interaction is diverse in the different joint actions, geographic proximity stays relevant even it is ensured by ad hoc meetings or occasionally. However, it is important to examine what kind of channels and tools are preferred by enterprises during time periods when there is no personal interaction between them.

The usage of e-mails is the most supported by sample enterprises with international partners in case of all joint interactions. 269 enterprises use e-mails to change information with their partners;

during contracting with foreign clients and suppliers sample enterprises use virtual communication channels (e-mail and phone) as a complementary and not an exclusive tool to keep in contact.

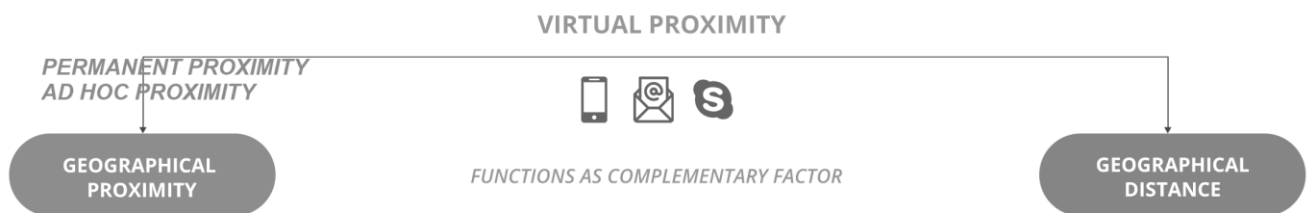
4 Conclusions

Based on the findings of the empirical research, the first research question can be answered by the statement that geographic proximity is necessary in the studied inter-organizational relations, though its importance is evaluated differently with various partners. While business partners' (both, clients and suppliers) spatial closeness is relevant, non-business partners' (e.g. local government, EDOs or higher educational institutions) geographic proximity to the sample enterprises is less important.

Moreover, the necessity of personal interactions shows also a diverse picture: geographical proximity is needed at least in the form of periodic, occasional personal interactions between organizations.

Virtual channels as communicational tools are more and more preferred by enterprises, however, the exclusivity of their usage cannot be observed. These channels function mostly as complementary means and preferred during the time periods when geographic distances should be bridged by them to keep contact with foreign partners. Thus, the concept of geographical and virtual proximity should be adjusted with some corrections (see Figure 3).

Figure 3: Model and interaction of geographical and virtual proximity



Source: Own adjustment (2018)

Geographical proximity has two forms – permanent and ad hoc/periodic proximity – and virtual proximity works as a complementary factor in inter-organizational relations on the international level.

The need of permanent geographic proximity depends on the type of the partner (business or non-business organizations) and also on the joint interaction or cooperation with the foreign partners. The need and the usage of virtual channels in inter-organizational relations is increasing, though these digital communicational tools function as supplementary channels and can bridge geographic distances only periodically.

5 Acknowledgement

The research and the study was conducted and supported by the “EFOP-3.6.1-16-2016-00017 - Internationalization, initiatives to establish a new source of researchers and graduates, and development of knowledge and technological transfer as instruments of intelligent specializations at Szechenyi University” project.

6 References

- AGNEW, J.A. and LIVINGSTONE, D.N. (2011). *The SAGE Handbook of Geographical Knowledge*. London: SAGE Publishing Ltd.
- BOSCHMA, R.; HEIMERIKS, G. and BALLAND, P-A. (2014). Scientific Knowledge Dynamics and Relatedness in Biotech Cities. *Research Policy*. Vol. 43, pp. 107-114.
- BROEKEL, T. and BOSCHMA, R. (2012). Knowledge Networks in the Dutch Aviation Industry: The Proximity Paradox. *Journal of Economic Geography*. Vol. 12, pp. 409-433.
- CAINELLI, G. and ZOBOLI, R. (eds.) (2012). *The Evolution of Industrial Districts: Changing Governance, Innovation and Internationalisation of Local Capitalism in Italy*. Berlin-Heidelberg: Springer Science & Business Media.
- CAIRNCROSS, F. (2001). The Death of Distance: How the Communications Revolution Is Changing Our Lives – Distance Isn't What It Used To Be. *Harvard Business School, Working Knowledge*. Online: <http://hbswk.hbs.edu/archive/2234.html> (2018.06.28.)
- CAIRNCROSS, F. (1997). *The Death of Distance: How the Communications Revolution Will Change Our Lives*. Boston, MA: Harvard Business School Press.
- CASTELLS, M. (2010). *The Rise of the Network Society*. Chichester: Wiley-Blackwell Publishing, Second Edition (1996).
- COUGHLAN, T. (2014). Enhancing Innovation through Virtual Proximity. *Technology Innovation Management Review*, Vol. 4, Nr. 2, pp. 17-22.
- CSIZMADIA Z. and GROSZ A.(2012). Innováció és együttműködési hálózatok Magyarországon. In: BAJMÓCY Z.; LENGYEL I. and MÁLOVICS Gy. (eds.). *Regionális innovációs képesség, versenyképesség és fenntarthatóság*. JATEPress, Szeged, pp. 52-73.
- JOHNSON, D. K. N.; SIRIPONG, N. and BROWN, A. S. (2006). The Demise of Distance? The Declining Role of Physical Proximity for Knowledge Transmission. *Growth and Change*. Vol. 37, Nr. 1, pp. 19-33.
- KECSKÉS, P. (2015). The impact of proximity on the relations between settlements – the case of Győr-Moson-Sopron County. *Tér – Gazdaság – Ember*. Vol. 3, Nr. 4, pp. 9-21.
- KECSKÉS, P. and TOMPOS, A. (2017). A földrajzi és a virtuális közelség hatása a vállalkozói kommunikációra. *Tér – Gazdaság – Ember*. Vol. 5, Nr. 2, pp. 40-49.
- LENGYEL, I. and RECHNITZER, J. (2004). *Regionális gazdaságtan*. Budapest-Pécs: Dialóg Campus Kiadó.
- MAZUREK, J. (2012). The Evaluation of an Economic Distance Among Countries: A Novel Approach. *Prague Economic Papers*. Vol. 3, pp. 277-290.

- NATIONAL STATISTICAL OFFICE (2018).
https://www.ksh.hu/docs/hun/xstadat/xstadat_eves/i_qpk016.html (Retrieved 08. 07. 2018.)
- REISINGER A. (2014). Vállalatok kapcsolati hálója Győrben és térségében. In: LADOS M. (ed.). *A gazdaságszerkezet és vonzáskörzet alakulása*. Universitas-Győr Nonprofit. Kft. Győr, pp. 230-243.
- SANTANDER Trade Portal (2018). <https://en.portal.santandertrade.com/establish-overseas/hungary/foreign-investment> (Retrieved 08. 07. 2018.)
- SZŐKE, J. and KOVÁCS, N. (2014). Kis- és középvállalkozások képviselőinek üzleti magatartása kultúraközi interakciós helyzetekben. *Társadalomkutatás*. Vol. 2. pp. 162-175.
- TOMPOS, A.; ABLONCZYNÉ MIHÁLYKA, L. and KECSKÉS, P. (2014). A survey on foreign language use in internal and external communication: the case of west Transdanubian companies. In: Tompos, A., Ablonczyné Mihályka, L. (eds.) "A tudomány és a gyakorlat találkozása" Kautz Gyula Emlékkonferencia. Győr, Magyarország, 2014.06.17 Győr: Széchenyi István Egyetem, 2014. Paper 39. 8 p.
- TRANOS, E. and NIJKAMP, P. (2013). The Death Of Distance Revisited: Cyber-Place, Physical And Relational Proximities. *Journal of Regional Science*. Vol. 53, Nr. 5, pp. 855-873.