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Sharing of resources: Theoretical background and a case study

Tereza Otčenášková **, Karolína Kolerová *, Vladimír Bureš *

^aFaculty of Informatics and Management, University of Hradec Králové, Rokitanského 62, 500 03 Hradec Králové, Czech Republic

Abstract

Sharing of resources is connected with several issues needed to be managed appropriately. Therefore, possibilities of sharing of information, knowledge, technologies and other items in various organisations and particularly in economic clusters are introduced. The advantages, disadvantages and the potential of sharing for the competitiveness and efficiency enhancement are discussed. Based on brainstorming, semi-structured interviews and statistical analysis, the case study compares the real processes within the particular cluster with theoretical assumptions. The results reveal that the potential of sharing is not effectively used. Moreover, these confirm the differences between participants considering the specific attributes. The findings in form of recommendations for improvements are provided.

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1. Introduction

Up to now the issue of resource sharing has been discussed mostly within technical disciplines dealing with energetic or bio-ecological systems (Kang, Huang & Grimshaw, 2013). Another significant field, where resource sharing occurs, represents computer science employing for example grid and cloud technologies. Considering the business area, currently the sharing processes are primarily addressed at the organisational level. Several issues are discussed, for instance the resource allocation among projects within the project management (Beşikci, Bilge & Ulusoy, 2013), physical and computing resources utilisation optimisation within organisations (García, Mendoza, Decouchant, Rodríguez & Pérez, 2013), standard human resource allocation process within organisational procedures and practices (Maenhout & Vanhoucke, 2013), work with web resources (Čech & Bureš, 2007) or emotional sharing as a tool for work with psycho-social aspects of work of the individuals (Liu, Ke, Wei & Hua, 2013). Extensively, relating to more organisations, sharing is resolved particularly in the area of negative impacts (externalities) on specific groups of stakeholders within region or supply chain (Bailey, Ishimura, Paisley & Rashid Sumaila, 2013). Recently, the efforts linked with knowledge sharing have become popular as well as pursued (Cai, Goh, De Souza & Li, 2013). Among others, there are also case studies addressing the attempts to determine the factors of sustainable partnership based on sharing and synergy among the participants (Cramm, Phaff & Nieboer, 2013).

To gain and retain the competitive advantage in this context and within the turbulent environment, clusters have recently received widespread attention as an instrument enabling companies to overcome internal limitations by joint efforts and resources with other companies, R&D (research & development) institutions and universities, and

^{*} E-mail address: tereza.otcenaskova@uhk.cz

public sector organisations in pursuit of a common objective or vision (Anderson, Schwaag-Serger, Sörvik & Hannson, 2004). Therefore, it is worthy to describe advantages, disadvantages and the potential of sharing for the purposes of competitiveness and efficiency enhancement not only within clusters. In this study the intention to examine the level of sharing matters generally and in a specific cluster is pursued. Firstly, the literature review is provided including the definitions of clusters and both their advantages and disadvantages. Afterwards, research methodology is mentioned. Results of the research together with the statistical tests are discussed in the next part. Finally, findings and implications are summarised and the limitations of the research as well as the potential areas for further research are outlined.



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Appendix A. Specifications of activities within HIT Cluster (HIT Klastr, 2013)

Development of human resources

- organisation and joint participation in fairs
- sharing of offers, requirements and the implementation of joint trainings and certifications
- organisation of active marketing of human resources
- organisation of workshops and lectures for students and members of the cluster
- joint communication with prospective employers by members of the cluster
- active cooperation in the area of education
- monitoring of competitive subjects at recruitment fairs, in the Internet and in the press

Increase of the quality of ICT companies

- research and development of methodological procedures with the aim to increase quality of ICT companies and provided services
- sharing of capacities by members of the cluster with the aim to save funds and share experiences
- production of a catalogue of sources for sharing containing, e.g. certificates, licences, premises, human resources, HW, SW

Marketing

- organisation of joint marketing events and researches
- ioint PR communication
- ensuring the distribution of marketing information between individual members of the cluster
- support of members of the cluster during marketing activities

Development and innovations

- creation and operation of a shared demonstration and testing centre
- ensuring the development of remote working

- ensuring shared care of clients, members of the cluster
- evaluation of the complementary character of products of cluster members and possible implementation of integration linkages
- ensuring the survey of selected technologies
- increase of the quality of internal processes of participants

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