COMMUNITY DEVELOPMENT THROUGH DIGITAL PUBLIC SPACES

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The development of Information and Communication Technologies facilitates wide range of our lives aspects, but is also responsible for widening the digital divide. One way to tackle this digital divide is community development through Digital Public Spaces. Based on the methodology of Digital Cooperatives project, we further analysed the budget of 31 practices from this field. We pointed on the differences in budgets of several types of these spaces that are arising from their scope and extent of their operations and emphasized potential role of universities in helping to reduce cost while establishing new Digital Public Spaces for the development of the community.

Keywords: *Digital Public Space, operation cost, digital divide, traditional DPS*

Introduction

Nowadays we experience dramatic changes in all sectors of our everyday lives, mostly under the influence of new technology. Information and Communication Technology (ICT) broadly affects our everyday lives. In many countries, the way we use the ICT nowadays was influenced by Digital Public Spaces (DPS; also called Telecentres, Public Internet Access Centres, Multimedia Centres, Infocenters or Community Technology Centres). «Early DPS started with a modest goal: giving people a chance to access and learn about technology, a tele-

phone, a photocopier, a computer, the Internet. Yet DPS have evolved. It's no longer just about access and skills» [1, p. 7].

Definitions of Digital Public Spaces vary and evolve with their evolution. Nowadays modern DPS have overcome the early definitions, e.g. [2, p. 366], and are more than «physical centres whose purpose is that of providing connectivity to the public through telephones, computers, the Internet and other devices related to information and communication technologies» [3, p. 1].

Today's definitions are shifting from the technology itself to the development of the community of their users, like in the definition from Bailey and Ojelanki [4, p. 1], «DPS were established in many countries as a means of providing access to information and communication technologies in order to enhance community development» or in the definition by Digital Cooperatives project team [1, p. 7] «DPS use computers and the Internet to do everything from improving public health through extending education to a wider audience to strengthening democracy. Thus, the DPS movement has changed: it aims at helping communities enter the information age and embrace the knowledge economy in their own terms».

For the purpose of this paper we can define Digital Public Space as a «physical building, place, facility, where people can use all kinds of information and communication technologies and internet access, that is provided, for their social, cultural and economic development, where they can obtain information, training and help, and where they can form communities with similar interests» [5, p. 267].

However, we must realize that they cannot be understood solely as a technological space, but also as a space in which new types of relations and social cohesion are generated. Digital Public Spaces thus create not only social networks existing in virtual form, but also face to face relations, which are produced in their premises [6, p. 82].

«European citizens do not yet participate equally in the information society. Of course, Information and Communication Technologies are powerful tools to enhance the social and economic development of society. However they can also be instruments of inequality» [1, p. 6].These inequalities are referred as a social and digital divide. «The work of local and regional authorities has demonstrated a variety of innovative ways that can be used to combat the social and digital divide and has helped to protect the basic rights of the most vulnerable users, such as the right to information» [1, p. 4].

Digital Public Spaces are one of the tools that can help fighting these divides using open model of internet, which «is an ideal tool for anchoring and mediating the interaction and sharing of information and knowledge» [7, p. 16]. According to Oestmann and Dymond [8, p. 1] DPS «have considerable potential for narrowing the digital divide in remote, rural and otherwise disadvantaged communities».

Not only digital Public Spaces, but also the digital divide itself «is transferring from infrastructures to uses and users»[1, p. 6]. Therefore one of their missions should be «to tackle the digital divide and to encourage the use of ICT to promote innovation and local growth and development» [1, p. 6].

Methodology

The methodology is based on and extends the best practice collection of the INTERREG IVC 1038R4 Digital Cooperatives project. Within this project, partners from 12 European Union countries underwent a collection and evaluation of practices from the field of Digital Public Spaces in order to provide comprehensive analysis and create new policies for implementing new forms of DPS. Total of 59 practices were collected, from which 41 were fully described and further analysed in selected areas (Innovation, Transferability, Feasibility, Positive impact, Planning, Evaluation, Citizenship involvement, Rele-

vance, Adequacy, Responsiveness, Coverage, Equity, Sustainability) to determine their features and characteristics.

We reduced our sample to 31 practices due to insufficient data needed for the analysis in several practice description. For the purpose of the analysis of their annual operating costs we sorted the practices to Physical and Web-based (according to the main place of their scope; if the DPS is active on a physical location and also on the internet, it was counted as physical) and to Traditional and Non-traditional (according to their concept; whether they meet only the traditional definition of DPS or the newer ones). Distribution of the sample can be seen in following tables.

Table 1

Distribution of the sample (Non-traditional DPS)

	Non-traditional		
	Physical	Web-based	Total
France	3	2	5
Greece	1	1	2
Hungary	2	1	3
Italy	1		1
Poland	2	2	4
Slovak Republic	1	3	4
Spain		1	1
Sweden		1	1
United Kingdom	1		1
Total	11	11	22

Source: Own processing

Table 2

Distribution of the sample (Traditional DPS)

	Traditional		
	Physical	Web-based	Total
France			
Greece	2		2
Hungary			

Italy	1		1
Poland	1		1
Slovak Republic			
Spain	3		3
Sweden			
United Kingdom	1	1	2
Total	8	1	9

Source: Own processing

Results

We examined annual operating cost of different types of Digital Public Spaces. From the Box-Plot below, we can see differences among Physical (Ph) and Web-based (Wb) practices. Web-based practises need considerably lower finance to cover their yearly operational cost. That results from the fact, that they do not requisite the most costly accounting items of Physical DPS – premises, fixed assets and staff cost (or their need of these items is negligible).

There are also great differences in annual operating costs among Traditional (Tr) and Non-traditional (NT) DPS in both, Physical and Web-based ones. In most cases, Traditional DPS evolved from small centres providing access to basic ICT to complex institutions providing access, support, information, various training for large amount of different social and interest groups, moreover some evolved to incubators etc.

In contrast, Non-traditional spaces usually specialize on specific services, e.g. co-working, tourism or e-learning for smaller (often virtual) groups of users, which does not create such necessity on variability and extent of their operations and services, and thus financing needs. For example, our sample shows that while average annual operational cost of Traditional DPS is 474 017,- EUR, average cost of Non-traditional ones is 125 483,- EUR. Similar situation persists when comparing Physical Traditional (527 020,- EUR/year) and Physical Non-traditional DPS (151 463,- EUR/year).

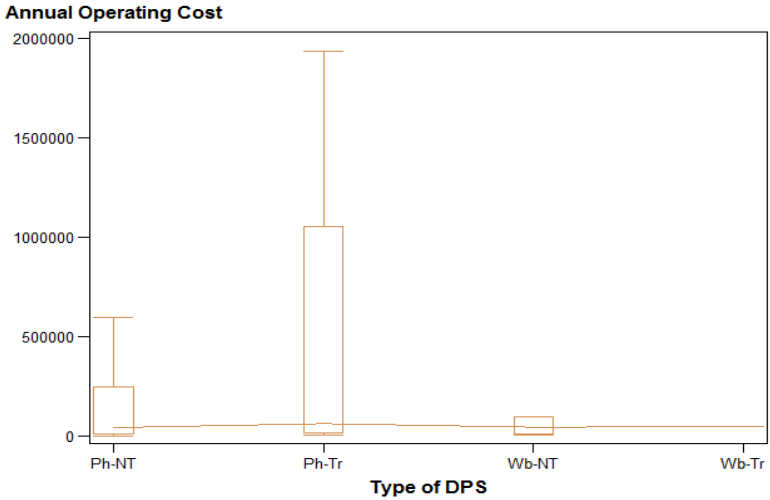

Figure 1 Box-Plot of annual operating cost according to the type of DPS Source: Own processing

Conclusion and Discussion

In this paper we analysed yearly annual operation cost of practices from the field of Digital Public Spaces. We saw great differences among Traditional and Non-traditional DPS, and also within these groups when dividing them to Physical and Web-based. These differences are arising from the scope and extent of their operations, and thus from their specific needs of individual budget lines.

Traditional and Physical Digital Public Spaces seems to be more efficient in narrowing the digital divide, while these DPS seems to create more coherent social groups / communities of users, that are supporting social inclusion, volunteering, mediation, co-creation of new services and thus social, cultural and economic development of the society.

Combined with our previous research on sustainability of DPS [5, p. 267–274], [9, p. 1–9] we see space for involvement of universities in creating new innovative Digital Public Spaces, especially in their initial phase. This phase is usually ac-

companied with high costs (especially while creating Traditional Physical DPS) resulting from the need of premises, equipment and personnel. In this phase, university is able to provide their resources (that are unused after hours) [10, p. 1], what can combined with the use of volunteers [11, p. 1] or new, innovative funding methods lead to successful, sustainable creation of DPS and later to its development and development of the community with side effects of narrowing the digital divide.

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