

This work deals with the importance of the information layer of the city in the processes of urban regeneration. It discusses the new conditions and possibilities of regeneration, resulting from the development of Information and Communication Technologies (ICTs) and their impact on contemporary cities. The development and spread of ICTs is a key element of contemporary civilization and the information society, influencing economy, culture and the way of life, and thus the way cities function and urban space is used.

Urban regeneration is a key issue in contemporary urbanism. Its main goal is improving the quality of life and competitive advantages of a place. Global competitiveness and the emerging market of places enforce the need to seek innovative local regeneration strategies. In brief, places can be divided into connected and not connected to the global information civilization. In such classification the depredated not connected areas which are enclaves of connected cities and have various potential metropolitan relations, have the highest potential for regeneration. Culture plays a significant role in urban regeneration, and local history and identity becomes crucial capital in renewal processes. This interest in heritage is an aspect of contemporary information economy and the network technologies that support it.

ICTs capabilities of activating urban spaces are both functional improvements and linking space with non-physical elements such as heritage and identity, which influence the perception and valorization of place. Telecommunication networks enable new spatial relations and stimulate acceleration, intensification of contact. The urban impact depends on the spread and usage of technologies, as well as the reliability and connections, in order to constitute the necessary critical mass. The activities in the sphere of ICTs do not replace spatial interventions, but can stimulate and complement them. The connection of digital media (projections, displays, sound, interactive street furniture, etc.) with cyberspace enables new possibilities of human interaction in urban public space. Such applications can be used to activate urban space and precede architectural interventions. There are also new possibilities of including the local community through online participation and collaboration. This work examines several realized, experimental and conceptual applications, including the authors own experiences from the Zaragoza Digital Mile project.

In the context of the technological possibilities analyzed in this work it seems reasonable to link the new technologies with urban regeneration needs in Poland. Poland is on the way to being an information society, and regeneration is a very current issue. ICTs can be used to enhance and stimulate regeneration processes at different stages – from analyses and setting up the project, through realization, and to exploitation and evaluation. Applications may include access to broadband Internet, public participation online, location-based information systems and local knowledge bases. Digital media can be used both as design elements of urban landscaping, and temporary installations for activating and scenario testing. It seems that such uses can give extra synergy and multiplier effect to the process. This work concludes with scenarios of ICT use in selected areas in Polish cities, which have been subject to regeneration programs, debates and competitions in the recent years.