

Heritage as an alternative driver for sustainable development and economic recovery in South East Europe

# The Impact of New Information and Communication Technologies on the Creation and Dissemination of Knowledge Inheritance

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## Abstract

If in the beginning the New Information and Communication Technologies were considered important factors for economic growth, nowadays they are synonymous with sustainable development. Their impact on society is on its way to reformulate the equation of national productivity enabling significant improvements in the efficiency the matter and energy are being used with. Their added value resides mainly in the manipulation and diffusion (in many cases free on Internet) of ideas and not of matter or energy. The access to global innovation networks is unfortunately unequal in the various regions of the world. While some regions are considered real knowledge hubs which can connect anytime to the global knowledge flows, there are areas where these remain sporadic. A careful attention should be paid to the sharing of knowledge within virtual communities due to the unprecedented evolution of the Internet and its impact on the information systems.

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*Keywords:* Knowledge Inheritance; ICT; Knowledge in virtual communities; network externalities.

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## 1. Introduction

Throughout history, many specialty papers, conferences and international events focused on the explanation of the huge differences between the poor and the rich countries. The main theories that attempted to explain

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these great discrepancies between the countries' revenues and the different levels of economic development are the following:

- the prevalent role of geographical position (climate and natural resources may determine the level of productivity and indirectly the level of economic growth) – this theory can certainly explain at the most the level of agricultural productivity and that of human resource quality;
- the role of international trade as driver of productivity and incomes. This theory of integration allows participation and obstacles getting in the way of participation to world economy a predominant role in the promotion of economic convergence between the poor and the rich regions. The debates on globalization most often focus on the theory of economic openness and integration;
- the role of institutions and especially the role of the state and property rights.

Perhaps all the three theories may find at least a partial solution through the impact that the Information and Communication Technologies have in the economic growth of the XXI<sup>st</sup> century. An adequate impact, a real openness towards ICTs may ensure the premises of an economic growth, determining at the same time the increase in credibility and the reduction of frictions among countries. An important stage may be represented by the promotion of tangible, intangible, mobile and non-mobile and especially the cultural and spiritual heritage values which by means of the New Information and Communication Technologies can speed up the transfer of knowledge develop and extend the transnational scientific collaboration.

The access to global innovation networks is unfortunately completely unequal in the different regions of the world. While some regions are considered real knowledge hubs that can connect anytime to the global knowledge flows, there are still areas which remain outsiders. We may assess that in the XXI<sup>st</sup> century the development of Information Systems should take into account at least the following three elements:

- the role of companies' strategies and capabilities in the globalization of research and innovation;
- the role of organizations/institutions which support learning and innovation in a region;
- the role of databases in the geography of knowledge flows in order to explain why some industries fail and other succeed.

## **2. The relationship economic development – Information and Communication Technologies**

We have to admit that technology must be seen as a distinct production factor. Obviously, it is not easy to quantify in economic indicators the sales of personal computers or the stocks of microprocessors. It is the more so difficult to establish how much of the expenditures of a country for research-development have real impact on economic growth on a medium and long-term. Moreover, the effects/products obtained through the research-development activity may be rapidly imitated especially in the case of software products and under the circumstance of a flexible law regarding the protection of intellectual property rights. According to the economist David Coe, specialist of the International Monetary Fund, almost a quarter of productivity increases obtained by means of research-development activities in top seven developed countries “are lost” towards other countries - Miller, 2001. This could mean that an increase by 1% of the funding for research-development in the USA, would lead to the increase by 0.25% for the productivity in the rest of the world. The countries which import products from countries with advanced technology will use them to obtain returns for their own industries or they will even try to imitate them.

The questions “And still why are certain countries richer than others?” or “How can we ensure the desired rhythm for economic growth?” are essential issues to which almost all economists attempted to find an answer. Since the XVIII<sup>th</sup> century, numerous theories and models of economic growth have been proposed, having a different echo on the real economic processes. There still is a fierce debate on what is considered to be the determining source of economic development and growth - Marinescu, 2011. *In spite of this, we assess that sharing and disseminating the knowledge inheritance are key-elements for the progress of the XXI<sup>st</sup> century.*

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