

DIGITAL ECONOMY

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Abstract

Contribution presents new trends in transformation of global economy on its way from the economy of goods to economy of knowledge. Based on respectable author's works analysis are presented facts about new main trends in information technology penetration into business. The process of changes in data zpracovat and its interpretation is called digital transformation and its impact is visible in changes in business models and business administration. This contribution wants to provoke to contribute results of Your research work in several further selected essential trends - (1) business trends, (2) smart cities concepts and strategies, (3) Internet of Things, (4) Sharing economy and (5) impact of ICT on management and on human resources management..

1. Introduction

After a queue of regularly sessions “ICT Impact on Economy and Innovation”, which have been included into the IDIMT conference program in 2011, evinces the topic a little change. We are focused more on digitalization of global economy and new trend, which are appearing around us and which are ready completely change our lives.

The digital economy is sometimes called the Internet economy, the new economy or Web economy. But some economists assert that the digital economy is more advanced and complex than the Internet economy, which, under one definition, simply means economic value derived from the Internet. Additionally, the term "digital economy" is not synonymous with earlier terms used to describe the technology-driven changes happening in 20th century economy, such as "information economy" and "network economy." The first step in this trend is visible by Peter Drucker (1992)... **“has become the foundation of the modern economy”** as we have shifted **”from an economy of goods to a knowledge economy”**. Further progress has been realized by increasing networking thanks to Internet connection and also thanks to **changes in business models using this new information technology**. This period is called by authors as digital transformation. What does the word digital

really represents for this period? While there is no common definition available we would like to apply the three main attributes of being digital provided by (Donner, Edelmann, 2015):

- creating value at the new frontiers of the business world,
- creating value in the processes that execute a vision of customer experiences,
- and building foundational capabilities that support the entire structure.

Consequently, digital transformation stands for the overall processes in order to get digitally mature. There are often presented by different authors (f. e. Zimmermann, 2016) following four pillars of digital transformation:

- value creation structures, where we observe emerging structures such as networks and ecosystems,
- value creation processes comprising, e.g., open innovation, mass customization and the new purchasing process based on Online media and social networks (Pavlicek, Bohmova, 2016),
- products and services, where information goods can be freely reconfigured independent of context or infrastructure and where physical products can be enhanced by digital means,
- infrastructure such as technical, market services, and market platform infrastructures

2. ICT Trends in Digital Economy

Thanks the digitalization of all activities are visible new trends in this time period. The first visible trend is in corporate business and it is related to e-everything époque. Further selected trends for this session are smart cities concepts, internet of things and sharing economy.

2.1. Business trends

Also the MIT has developed a respective approach in cooperation with Deloitte (Kane et al, 2015). Beyond those broad models there are also models focusing on specific issues such as electronic invoicing processes (Cuylen et al, 2015) or electronic procurement (Versendaal et al, 2013).

2.2. Smart Cities

Aim of this trend in ICT is to evaluate ambitions of different concepts of smart cities and to present independent researches in this area at the session. These contributions should reflect smart city concepts from various cities, which could be split into two categories (for Czech conditions) – large cities with more than 200.000 population (Prague, Ostrava, Brno and Plzeň) and small cities with lower population. There will be welcomed analysis and comparison in order to get typical (core) functionality and approach to smart city problem solving in the Czech Republic. Based on this analysis is expected to identify trends in this area and to compare it with world ones.

2.3. Internet of Things

Trend in the form of Internet of Things (IoT), is very expected especially in the area of utility supply, but also in other specific branches – connected e-health, smart products, intelligent gateways, smart transportation etc.

There are invited original projects, case studies or researches for presentation in this session. Also welcomed are contributions dealing with security aspects of IoT business.

2.4. Sharing Economy

In the last century, owning things was the marker of the middle class. Those who had more money could own more things. But as manufacturing became less expensive, the barrier to owning a great deal of stuff was lowered. Today, many people living at or below the poverty level own plenty of things, but it isn't a good indicator of their relative wealth. Where Baby Boomers and Gen Xers might have had shelves and shelves dedicated to books, magazines and music in their homes, today we can fit the same amount of media and more onto the pocket-sized computers we anachronistically still call phones.

In the future, we may own much less and share much more. And if we do, it will all be down to big data. (Marr, 2016)

What experience do You have with sharing economy? Some new examples and research related to conditions of Your home country are invited to be presented at the session, but not descriptions of very wide known cases (Uber, Airbnb etc.). Contributions with vase studies and research related to topics like Freelancing, Co-working, Car sharing, Peer-to-Peer lending, Fashion, Sharing resources and other services are welcomed.

To all above presented topics are also welcomed negative and risk oriented contributions, researches or experiences in order to enlarge discussions about new trends in digital economy.

All authors could also present secondary effects of their analysis with recommendations for schools and HEIs in order to identify space and gaps for new courses, knowledge and skills in their curricula.

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