Chapter 61
Emerging Trends and Opportunities for Industry Development at the Sub-National Level in Russia

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ABSTRACT

The authors believe that the transition to Industry 4.0 will have a strong impact on the level of urbanization in Russia. The level of urbanization is influenced by many factors, which include the level of economic development of the country, migration of the population, natural and climatic conditions. The highest level of urbanization is typical for industrialized regions. This suggests that it is necessary to develop industry and move to Industry 4.0. The purpose of this chapter is to show the relationship between urbanization and Industry 4.0, as well as to increase the level of knowledge about digital production, the internet of things, the Industry 4.0, and urbanization. The chapter explains the role of Industry 4.0 in the current changing environment. The chapter deals with the most important problems and opportunities of the fourth industrial revolution.

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INTRODUCTION

In this chapter the authors search for trends, which occur in the traditional sectors of the economy as a result of digitalization, and above all in the labor market, industry and agriculture, financial services and education. Modern information and communication technologies substantially change all social relations, in connection with the notes that now it's the formation of a new, information society, which is called the "digital economy". Despite the somewhat similar properties with traditional economic relations, it differs in some respects from them, which makes its relevance from the point of view of the interest of the scientific community. One of the key areas of the state development is economic. We should understand the "digital economy" as a lever of economic structure and the environment in general. Horizons are expanding, a window of opportunity is opening by the younger generation, which can realize their ambitions and knowledge, creating favorable secure social environment for our future.

BACKGROUND

Contributions to the development of the digital economy have been made by foreign researchers such as Stephen M. Mutula (2010), Ari-Veikko Anttiroiko (2008), Georgios Doukidis, Nikolaos Mylonopoulos, Nancy Pouloudi (2003), Ionica Oncioiu (2013), Elena Druicã (2017).

The use of digital economy in industries has been reflected in the science. In the world of scientific literature, this area of knowledge is presented with such authors as: Nikolaos Mylonopoulos (2003), Bob Ritchie, Clare Brindley, Pedro Isaias (2017), Di Francesco Virgilio (2017), Ionica Oncioiu (2017), Elena Druicã (2017).

However despite the large number of works devoted to digital economy, the specifics of applying it in different industries haven't been given due attention. Innovation and the impact of the digital economy on society provided the theoretical and practical approaches for its development, increasing the awareness of understanding the term "digital economy" and what advantages there are to ensure the information technologies and innovations as basic resources. The publication of Elena Druicã (2017) focuses on rethinking of classical economic theory in the context of new technologies, information and innovation that makes her publication the best research for economists and social researchers, academicians, professionals and practitioners. In the opinion of Ionica Oncioiu (2017) digital technologies support an important tool in the modern economy business. As the economy continues to change, companies are looking for solutions for the expansion and development of its organization.

In the information economy, handling and the exchange of information and knowledge are the basis of its activities. The U.S. economy, works well, because it was due to the revolutions in the field of information technology (IT), which influenced the growth, employment, inflation, and labor productivity. Fundamental factors, driving growth in these new economies include technological innovations, e-commerce and digital conversion, higher education and skills in the IT field, open trade and a balanced budget. According to Pedro Isaias, digital economy is the main driving force of change, innovation and competitiveness for different companies and entrepreneurs. Study of the development of these initiatives can be used as a basic tool for future business success (Isaias, 2017).

According to Di Francesco (2017) in the digital age, numerous technological tools are available to improve business processes. In case of effectively using, knowledge sharing and organizational success increase significantly. According to analysts of Microsoft, a key role in the further development of the