qualities of the business model and the ability to deploy innovation processes. For specific market players, the crisis period has become a window of opportunity to increase market share. For grocery retail of Ukraine, enormous challenges driven by COVID-19 influenced the acceleration of the transition from traditional sales channels to online shopping and unexpected sharp growth of convenience and hard-discount store sector. Consumers had to learn to live with the new reality that changed their shopping behaviors; a large part of them started to shop for groceries via online channels that they had never used before. In the early stages of the pandemic, a large share of players in Ukrainian market started launching their delivery channels, most of them connected to global logistics operators' services. One of the largest Ukrainian grocery retail companies was able to launch its express and scheduled delivery channel in less than three weeks, demonstrating the rapidity of consumer behavior changes and market flexibility to meet new requirements. A significant part of consumers is going to stick to online-channels even after the reopening of brick-and-mortar stores. The objective of this research is to explore how COVID-19 affects the dynamics of the grocery retail market using economic-mathematical modeling. Implementing the Machine Learning methods, the authors offer an approach to assess the effects of restrictions that the Ukrainian government imposed to localize COVID-19 spread. The effects on consumer behavior metrics are modeled and interpreted according to local retailers' business-models, the location qualities of brick-and-mortar objects, and potential shift towards digital sales channels in specific regions.

KEYWORDS
COVID-19 Economic Effect, Grocery Retail, Consumer Behavior, Digital Transformation

INNOVATION POLICY TO SOLVE CONVERGENCE CHALLENGE FOR THE EASTERN EUROPEAN AND BALKAN COUNTRIES

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ABSTRACT
This study is aimed to analyze the economic development processes in emerging the Balkan and Eastern European economies concerning convergency problem. It is showed that both during the transitive period and after the global economic crisis these countries failed to substantially improve their economic situation under criterion of GDP per capita in comparison with developed countries. Analysis showed that existing problem of failure in convergency policy has been forming due to the lack of the strong innovation policy. There has been an unjustified methodologic drift from the basic conceptual guidelines of the Europe 2020 Strategy to the traditional Ricardian paradigm of market competitive advantages, i.e., focusing on the existing structure of production in the country, region. Such approaches that spontaneously formed under the influence of market forces needs to be supported and strengthened through innovation. On this sense the policy of 'smart growth' becomes especially relevant to ensure the radical innovation structural technological changes. The other part of this strategy is a building of the innovation potential of Universities as their ability become as core part of 'triple helix' system. The University innovation ecosystems successfully ensure the achievement of the innovation result, i.e., the commercialization of the academic and technological achievements. The necessity of using the methodology the

building smart innovation economy to overcome problems with convergency for the Balkan and Eastern European countries is actual because this approach focuses on managing future economic processes that may not exist today. This means if countries keep a focus on an innovative model of economic development, they can make a breakthrough in economic growth, regardless of the existing resource base that has developed historically. In this case such countries could overcome the negative inheritance of underdevelopment based on existing production factors and competitive advantages. It is necessary to create and develop a new resource base that will ensure the emergence of innovations. The neoclassical approach directly preserves the historical preconditions for development, when in the recommendations on the economic policy for developing countries the emphasis is on increasing the productivity or efficiency of the use of available resources. It is important to recognize the 'Schumpeter's innovations' must be considered as a special factor for economic growth that generates the increasing the aggregated added value of a countries.

KEYWORDS
Schumpeter's theory of economic development, Convergency problem, Innovation policy, Smart growth, Middle income trap, Catch-up policy

OPPORTUNITIES AND CHALLENGES IN THE USE OF BIG DATA IN HEALTHCARE: A LITERATURE REVIEW

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ABSTRACT
The interest for new and more advanced technological solutions and towards the use of Information and Communication Technologies (ICT) is paving the way for the spread of innovative and revolutionary applications in all business processes (Aceto et al., 2018). In particular, the use of big data is growing rapidly changing the decision making process1. One of the sectors where the use of Big Data has increased a lot is certainly healthcare. Although different basics of Big Data have been formulated in literature, the majority of scholars converge on the "5V" paradigm, that is an evolution of the "3V" paradigm2. According to this interpretation, data streams which can be considered as Big Data must have: Volume (the dimensions of the datasets and their storage tools), Velocity (the speed with which the data are used), Variety (the variability of the pattern with which they are organized: e.g. structured, unstructured, semi-structured), Veracity (the irregularities that may arise on the whole, e.g. bias or gaps) and Value (the potential achievement of hidden connections in very large datasets)3. One of the prerequisites for this transition is represented by the renewed operating procedures of the healthcare sector, which are no longer volume-based but value-based, therefore the activity of the operators must be oriented towards productivity and efficiency requirements 4. Another factor for the development of Big Data, in a sector increasingly dependent on them, is represented by the very high availability of health data of each patient, also thanks to the new technologies (e.g. smartphones, wearable devices) 5. On this basis, both the fields of application within the health sector itself and the technological