



**Yuriy Fedkovych Chernivtsi National University  
Joseph Schumpeter Centre For Economic Research  
Fil. Dr. Jan-U. Sandal Institute**

**JOSEPH ALOIZ SCHUMPETER'S SCIENTIFIC HERITAGE AND TODAY:  
A VIEW FROM THE PAST INTO THE FUTURE**

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The materials of the conference are based on the results of Joseph Schumpeter's research in content of his scientific achievements. Theoretical heritage of scientist and its formation and evolution, modernization mechanisms of socio-economic systems are considered. Also there is a analysis of market transformation, of factors that make economic security of business mare strengthened, of trends that are shaping new parameters of international economic relations, of regional economy and industry markets. Social entrepreneurship is exuded like innovative mechanism of social changes and increasing quality of life.

Authors express their own opinion that is concerning on the solving of actual problems. Most of them are from leading educational institutions of Ukraine, Austria, Norway.

It's for all who conducts economic research: scientists, practitioners, school teachers, postgraduates, students.

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**Olha Halkina**

Yuruy Fedkovych Chernivtsi National University

## **OPPORTUNITIES FOR INNOVATION IN TELECOMMUNICATION TECHNOLOGIES MARKET AND ITS IMPACT ON SOCIAL ENTREPRENEURSHIP**

Telecommunication market in Ukraine like everywhere in the world is evolving very fast. According to the statistics from 2000 to 2015 the number of Internet users increased from 6,5% to 43% of the world population. Today there are approximately 3,5 billion people who use Internet on a daily basis. The higher number of consumers and electronic devices, the need of faster connection and data transfer, better security of computer networks and, of course, more economical way of organizing traffic, all of these factors dictate the demand for innovation both technical and organizational.

The field of telecommunication technologies promises the huge possibilities for entrepreneurship including social entrepreneurship. Development of this market today influences all of the economic systems that depend on the fruits of telecommunication area such as telegraph, telephone Internet etc. As for the social entrepreneurship telecommunication innovation helps to spread the knowledge throughout the world.

Despite of these facts the telecommunication industry has been struggling with few global challenges. In spite of the fact that IT specialist are one of the most wanted in Ukrainian labor market nowadays there is lack of highly qualified and skilled employees. The root of this problem is weak educational system that needs reformation. And this, in its turn, is the consequence of the legislative framework shortcoming and to overcome these problems innovation should be implemented immediately.

The importance of the changes can be proven by some statistics. Growth rate of the information and communication technologies market in Ukraine have escalated

from 18% to 37% in the last decade. Economic development of Ukraine will have a big impact from enterprises working in this market. Hence one of the main goals for Ukraine is to create favorable conditions for innovations and investments in telecommunication technologies, to support scientific institutes working on technical and economic development of this domain.

Joseph Schumpeter divides motivation to a three different factors. First is the dream to owe something in other words to be a modern lord or king. Second one is the will to conquer, to occupy the higher place in society, to show others yours success. And the third factor is the joy of creating, of getting things done as you planned, of coordinating work, it means enjoying not the result but the process. Think about famous Maslow's pyramid that described hierarchy of needs, what stands on the top, self-actualization. In our case the possibility to invent and to create, to stand on the top of society as one of the most intelligent and to owe something is a way of self-actualization. Given these facts motivation is a mover for innovation, creative destruction and economic development.

Innovation is a key factor for economic growth that is especially important in time of economic recession and stagnation. By one of the definitions innovation is an idea transformed into a good or [service](#) that has [value](#) and what previously doesn't exist or wasn't implemented in a specific market. In other words innovation is something that wasn't done before or at least not so efficient. It can be a product, technology or even strategy. The father of innovation economist Joseph Schumpeter (1912) described the 5 areas of innovation "(1) the introduction of a new. (2) The introduction of a new method of production. (3) The opening of a new market. (4) The conquer of a new source of supply of raw materials or half-manufactured goods. (5) The carrying out of the new organization of any industry. By this he wanted to show that innovation doesn't necessary have to be a product only that often is perceived subconsciously.[1]

Another definition given by Joseph A. Schumpeter suggests innovation is a new combination of the input factors of the production function, namely, land and labor. [2]

Another term strongly related with innovation and motivation is entrepreneurship and one of its form social entrepreneurship. The difference between them lies in the value proposition. Roger L. Martin and Sally Osberg have pointed out "For the entrepreneur, the value proposition anticipates and is organized to serve markets that can comfortably afford the new product or service, and is thus designed to create financial profit. The social entrepreneur, however, neither anticipates nor organizes to create substantial financial profit for his or her investors – philanthropic and government organizations for the most part – or for himself or herself. Instead, the social entrepreneur aims for value in the form of large-scale, transformational benefit that accrues either to a significant segment of society or to society at large." [3]

We finally come up to the consequence of all the phenomena we have discussed previously that is an economic development. Coming back to Schumpeter's work we learn "By development, therefore, we shall understand only such changes in economic life as are not forced upon it from without but arise by its own initiative,

from within”. [1] What was meant is that there is no such phenomena as economic development that one can describe with economic theory, rather the economy itself changes with time as the aftermath of natural evolution of the world.

### **Innovation in Telecommunication technologies market**

Now when we have given the main definitions that corresponds to our topic such as innovation, social entrepreneurship and economic development we can go ahead and try to determine whether the theory coincide with the today’s situation on the market.

Talking about telecommunication market in 2016, three main business models should be mentioned as the most significant with the highest level of income and the most attractive for investments. These include Internet of Things or Internet of Everything applications, Video Streaming and Mobile Payment.

However not only the Internet industry continues to grow up, digital smart devices remain at the peak of their stock. Except familiar to us smartphones there is an increase in demand for wearables like smartwatches and fitness bands. According to the Global Mobile Consumer Survey 74% of consumers use smartwatches and 66% of consumers make use of fitness bands on a weekly basis.

But engineers went even further and invented smart clothing that are able to detect heartbeat, muscle activity and breathe rate. On the Korean market you can already buy smart suits. Another big achievement did an American company Owlet who created smart sock for babies that monitor their heart rate and oxygen level. This little device literally saves lives, constant monitoring of heart beat during sleep is especially crucial for premature babies and the children under 1 year, the main SIDS (sudden infant death syndrome) group risk. [3]

Moreover, a new trend appears on the construction market namely “smart homes” and even “smart cities”. Smart home is a combination of energy management with smart sensors technologies. Such technical solutions helps in solving such problems as multi-sensing, heating and air-conditioning system, smart light and energy control for smart home. Smart homes use innovative technologies that improve living standards thus bringing the social value as stated in the definition of social entrepreneurship. [2]

Smart cities are another bright example of social entrepreneurship in practice. It starts with the motivation to make the cities more ecological, economical and comfortable for life, to make the city alive. The combination of these factors creates innovation, in the case of smart cities it appears to be innovative network that connect all the city streets together, smart lighting determines the presence of moving objects on the street, park assistance helps to find a free parking slot with your smartphone application, even garbage cans are equipped with sensors that alert waste collection companies, constant monitoring, flow management, WI-FI connection, automatic watering these are only small part of the advantages that makes smart city so admired today.

Given these fascinating innovations that bring us to the new telecommunication era let’s try to compare it with the theory we have already presented above in the introduction part. One important question remains unanswered “Do these new

technologies correspond to the classical definition of innovation and if they do which of the five areas of innovation they are?”

The first invention we have mentioned before is “wearables”. Smart watches, smart cloth, fitness bands etc. didn’t exist on the market before so we can consider them an innovation specifically from the 1-st area of those explored by Schumpeter. Smart homes together with the smart cities also can be counted as innovation but in contrast with the first example their areas of innovation are not so easily detected. We can look on them as on the combination of the first and third areas because they combine introduction of a new good and emerging of a new market. Pursuant to this conclusion we now can define whether they are entrepreneurship. The innovation itself cannot be an entrepreneurship but the organizations that use them surely are. For instance Owlet Company we introduced before is a social entrepreneurship, it makes entrepreneur profit and in the same time it brings social value to the society.

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