# Problems of IT startups' development in Ukraine

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This article contains researched features of the formation and development of the IT startups in Ukraine; potential of the domestic Internet market from the standpoint of creating startups; problems and prospects of Ukrainian startups' advancement in the transitional economics are analyzed and the main ways of stimulation of their development are proved. A special attention is paid to the article assessment of technology transfer of IT startups. The article includes a comparative analysis of the experience of existence IT startups all over the world and in Ukraine.

The novelty of this article lies in justification and guidelines systematization to encourage local IT startups, as well as in the approaches to diagnose trends on the Internet market based on prediction.

Key words – IT startups, technology transfer, Internet market, transitional economics.

### I. Introduction

Information technology (IT) has rapidly come into our lives for a short period of time. Radically changing the ways and methods of management, they have made to think over approaches to gain knowledge, have transformed foundation for scientific and technological activities, have given an impetus to the creation of a huge number of new business models of enterprises, etc. In the virtual space it is possible to get almost all kinds of information and most of the services, you can perform financial operations and you can participate in stock trading and auctions, etc. Easy access to communicate with colleagues and family who are far away (*Skype*) can not be overemphasized.

Among the various Internet opportunities, the creation of technological innovations and new software in virtual space is of particular importance. One of the major promoters of IT innovation on the Internet market is a startup company.

According to [1], a startup company or startup is a company, a partnership or temporary organization designed to search for a repeatable and scalable business model. These companies, generally newly created, are in a phase of development and research for markets. Otherwise speaking, startups — is the process of entering the market the newly established companies with innovative projects, usually in a short-term period and with minimal investment.

In Ukraine startup companies doing business in the global virtual network have their own peculiarities of formation and development. On the one hand, characteristics of local startups are due by globalization processes, but on the other hand – features of the national economics. Taking into consideration that the IT startups are one of the most important factors of influence on development of innovative, the problem of local startup companies of virtual space is undoubtedly relevant and practically a significant subject for researches.

# II. Potential and the factors of development of Ukrainian IT startups

It is useful to analyze the dynamics of global Internet network in order to identify potential of the boundaries of IT startups (from the standpoint of sizes and the spread of Internet market), and the possible time limits of operation (at which stage of development of the Internet market are startups).

According to statistics [2], in 2012 in Ukraine were registered 33.7% of Internet users, in 2010 – 23.3%, in 2008 – 11% and in 2006 – 4.5%, respectively. Statistics Internet usage has been conducted since 1990, but the first significant rate of Internet extension (over 1%) was recorded in 2001 – 1.24%. So, Internet usage rate has increased more than 27 times for twelve years, and continues to grow.

In Europe and Central Asia, population indicators to using the virtual space of the Internet are the following: in 2012 - 43.44%, in 2010 - 33.52%, in 2008 - 23.79%, in 2006 - 14.61%, in 1999 - 1.35%. Thus, during the period 1999-2012, the number of Internet users has increased 32.18 times.

The situation is somewhat different in North America: in 2012 81.59% of the population used the Internet, while in 1990 (early extension of Internet) -0.74%. Over 22 years the rates of Internet usage in North America have increased over 110.25 times.

Data presented above indicate that in Ukraine there is a wide field for the creation and development of IT startups. Based on comparative data, it can be argued that the market for IT startups has a large capacity; it is characterized by tendency to expand. The increase in the number of Internet users in Ukraine points out that IT projects startups are a fertile ground for implementation.

Startups emerged in their current form back in 1939 in Silicon Valley, when two Stanford University graduates gave rise to the startup Hewlett-Packard which still enjoys worldwide recognition.

The establishment of company and promotion of its products via the Internet no longer needs substantial investment. Earlier, for the creation of technological startup it was necessary to draw 1.5-3 million Euros, but now such expenses can be limited to a few hundred thousand Euros. With the development of the Internet technology startup the establishment of startup has begun to be more accessible and easier.

The important factor of creating the effective IT startups is a rapid growth of social networks with the help of which it became much easier to promote innovative ideas. Social networks allow you to find a range of stakeholders in a short term who can act as testers of any innovation (programs or scientific and technical invention, etc.).

Among the most prominent IT startups are: Facebook, Vkontakte, Twitter, Odnoklassniki, MySpace, Bebo, Wikipedia, Google, Microsoft, Apple Computer inc, PayPal, Ryanair, video hosting YouTube, photo hosting Flickr etc. Among the Ukrainian IT startups there are also successful projects that have entered the global market – Viewdle, sold for \$45 million.

Ukrainian market of IT startups is in its infancy, it is immature. On one hand, the development of IT startups slows the difficult financial and economic situation of the country in general reduces investment activity and more. On the other hand – potential participants of IT startups face challenges of

technological character: these startups produce the programmatic innovation but to be competitive in IT field, it is necessary to regularly update equipment, accessories etc. In the industrialized countries such equipment is often made by startups or their companies-partners.

In Ukraine the situation is more complicated. Obsolescence of hard and soft of national laboratories, urgent need to modernize fixed assets of scientific research institutions – these and other problems make it difficult to produce effective innovative solutions in the IT industry.

It is quite difficult to estimate the Ukrainian market of IT startups because most transactions are hidden from outsiders, official statistics are not maintained. Based on the data [3], from 300 and 500 new startups appear on the Ukrainian market every year. Total number of startups, that are continuously available on the market and that have not gone bankrupt is about 900 projects, from among approximately 600 startups per year 150 – are serious projects, of which only a few dozen (20-40) survive.

One the most important tasks faced by domestic IT startups is to rationale of economic efficiency of future innovation project. Startupers even before start of their activity have to evaluate all aspects of the contemplated transfer their technology: the price of an idea; expenses of startup for its implementation; on what conditions IT products will be transmitted to the buyer and what future benefits of its implementation might be.

Technology transfer is a complicated and multifaceted concept, on which depends the success of the proposed startup innovation on the market. However, the problem is that now there are not necessary and sufficient quantities organizational and methodological developments for evaluating all phases of technology transfer IT startups. There are methodological works by both domestic and foreign scholars. But very often they do not take into account the specifics of the Internet market, and some obligatory criteria indicators of innovation in the field of IT, they are often regarded indirectly in the context of other topics.

Diminution of importance of developing organizational methods of technology transfer for IT startups leads to slower development of the industry. One problem leads to another – groundlessness assessments of the transfer of IT often reduces the number of potential investors (the overpriced cost of the project discourages investors and the understated one might be biased). In turn, slower development of the IT startups slows down the innovative development of Ukraine on the whole.

## III. Ways of the development of IT startups in Ukraine

Even at the time of transition economics, IT startups could be more. Among the specific features of local IT startups there is such a tendency: a potentially successful IT projects, though created in Ukraine, but their further development and investment happening in the USA (such as the case with *Viewdle*). To create in Ukraine IT startups that could potentially become a global company is possible, but to develop and spread it abroad Ukraine is almost impossible now. It is due to the current situation of IT market in Ukraine. All over the world global projects are covered by the classical scheme: first, they are used in that place where

there is a critical mass of people who use new technologies in their daily lives (e.g. in California). Then this technology is spread around the world. In Ukraine, there are only a few people have to say about the real market Internet technologies. In turn, it slows down the development of IT startups. The situation resembles a vicious circle.

Among the problems of creating an IT startups in Ukraine should be noted the fact that the state doesn't have a wide client base, which enables to design expensive and innovative projects. The temps of spread of the Internet in Ukraine are amongst the lowest in Europe, approximately 43.9% (2013). Domestic projects, aimed at the domestic market, make it impossible to use development at the global level. Ukrainian market is characterized by transparency. These and other problems are typical for the countries with economics in transition. This difficult financial and economic situation is an evolutionary form of our economics, so it is important to use all available reserves to overcome it. Among the areas of development encouragement of the IT startups, distinguish the following.

- 1) Implementation of special programs of stimulation the small business in particular IT fields. International experience argues the existence of startups that IT projects are generated mostly in small groups of entrepreneurs rather than large corporations.
- 2) Modifying the existing legal framework in terms of the interests of IT startups, particularly about granting privileges.
- 3) Development of organizational and methodological support for the transfer of IT startup companies.
- 4) Increasing the level and quality of IT professionals. Educational institutions provide basis for the development of IT startups. Universities produce IT professionals and just there it is initially necessary to pay attention to the provision of professional expertise.
- 5) Development and implementation of activities that simplify the involvement of people in IT startups.
- 6) Public stimulation about testing of new IT projects, created by startups (this is used mostly by social networks) that will be the impetus for their development.

#### Conclusion

On the basis of the conducted researches it can be predicted that the market for IT startups in Ukraine will grow with the increasing number of Internet users. Particularly at the time when 50% of the populations use the Internet, the creation and growth of IT startups will accelerate. According to the current trends, it will happen in the next two years. IT startups in the country will be in greater demand. At the same time, the market of Smartphone users will rise too, indicating the need for the development of new IT projects (in particular for applications in a variety of mobile devices).

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