

## Development of Self-Employment in the Context of Digital Economy

**Svetlana Zhura\***

Northern (Arctic) Federal University named after M.V. Lomonosov, Northern Dvina Emb., 17, Arkhangelsk, 163002, Russia

**Lidiya Ilyina**

Institute of Management, Uritskogo Str., 43, Arkhangelsk, 163060, Russia

**Kristina Polozova**

Institute of Management (Ivanovo Branch), Tashkentskaya Str., 90-A, Ivanovo, 153032, Russia

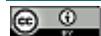
**Anatoly Yezhov**

Institute of Management, Uritskogo Str., 43, Arkhangelsk, 163060, Russia

### Abstract

Over the recent years one can see the growth of self-employed people. This process is caused by the development of information infrastructure. The further growth of self-employed people can be expected because countries have entered a new type of digital economy which is based on Internet technologies and high levels of people's skills and competences. At the same time, the Russian economy is characterized by a rather large informal sector, that demands to take measures to legalize the activity of self-employed people and to bring them out of the shade. The authors' research is aimed at studying the notion of self-employment and the criteria defining self-employed people. The authors reveal the forms, causes and factors for development of self-employment in the context of digital economy. Distinctive features that make it possible to separate the traditional forms of self-employment from new ones are determined. This study will help to establish measures to legalize self-employment in Russia that would in turn strengthen entrepreneurship in future.

**Keywords:** Self-employment; Criteria defining self-employment; Self-employment forms; Causes and factors of self-employment development; Digital economy.



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### 1. Introduction

Humanity has entered an era of global change. Currently, one can talk about the development of a new type of economy – digital economy, which is based on information-communication technologies and digital infrastructure. Digital economy has an impact on many sectors of economy. There are fundamental changes that occur in the banking system, trade, education, energy, logistics, etc. Many spheres of life, economic and business ties are fully redrawing under the digitalization process. Digital economy sets a new paradigm for the development of the country, economy and the society as a whole.

The working activity of people is becoming independent and mobile, but fulfilling the job responsibilities requires mastering a lot of competences among of which lifelong learning and digital literacy are of great importance. Moreover, analysts predict an inevitable growth of self-employed people, because emerging online services create a new reality for working people and give them the opportunities which they could barely imagine before – a greater income, independence from the authorities, free time, mobility. But the things are not so simple. Nowadays, the employment level in the informal sector of the Russian economy has reached a record size according to the results of 2016 at least since 2006. As RBC reported with reference to Rosstat, 15.4 million people or 21.2% of the total number of employed had been engaged in the informal economy in 2016 ([Tenevaya zanyatost v Rossii dostigla rekordnyh razmerov, 2018](#)). Compared to 2015, the informal sector has increased by more than half a million people. It has been growing continuously since 2011 and has increased by 4 million people since then. At the same time, there is still no officially established concept of self-employment. Consequently, there are no conditions for state registration of these categories of citizens and moving them out of the shade. This study investigates the concept and criteria defining self-employed people, as well as the forms, causes and factors of self-employment development in the context of digital economy.

### 2. Literature Review

In order to study the self-employment determinants different approaches reflecting sociological, psychological and economic factors at varying degrees have been developed. The scientists investigating self-employment as a simple form of entrepreneurship claim that medium-sized companies have appeared from small businesses organized by self-employed people ([Blanchflower and Oswald, 2000](#)). The authors identify the factors influencing on self-employment. The study has showed that a chance for a person to become self-employed depends much on receiving inheritance or gifts. It is important to state that self-employed people are the most satisfied with their jobs and lives.

Study of the factors that motivate people to voluntarily become self-employed is paid special attention in the literature. This could be striving for independence and adaptability. Self-employment may also be caused by the absence of alternative conditions in the labour market, such as unemployment and the economic crisis. The analysis of self-employment development in European countries has shown that self-employment is directly related to the strictness of employment protection legislation (Taylor, 2011).

The motivation for entrepreneurship is very multifaceted. There are significant differences between men and women, while women's choice is most associated with the lifestyle and less with the financial gain (Dawson *et al.*, 2009).

Some authors Evans and Jovanovic (2009) consider the effectiveness of subsidy programmes depending on the category of persons who get financial support (poor, women, entrepreneurs). Increasing or decreasing the effectiveness of programmes is related to the entrepreneurial abilities of the beneficiaries.

Other authors use the models based on econometric functions. They investigate the individual heterogeneity (i.e. supply side effects) and the heterogeneity of employment type (i.e. demand side effects). These studies make it possible to determine the character of a self-employed person.

The most interesting and topical in the current context are the studies related to the possibility of immigrants to become self-employed (Andersson and Wadensjö, 2004). Immigrants have a weak position in the labour market in most European countries. Many people experience problems entering the job market, and their hourly wages are generally lower than would be expected from their age, sex, education, etc. Many people have to rely on social welfare payments, including social assistance. One way to avoid problems in getting a job for them is to become self-employed.

Studying self-employment, economists use different criteria for its characteristics: the degree of personal and economic dependence (Kremneva, 2002), a special kind of participation in public work (Udaltsova *et al.*, 2005), the use of hired labour (Toksanbaeva, 1998), a set of different criteria (Zharebin and Ermakova, 2002).

Despite the work conducted in this direction, it should be noted that the concept and criteria defining self-employment are viewed ambiguously, the role of self-employment in the digital economy has not been identified.

### 3. Methods

According to the recommendations of the International Labour Organization, employers (business owners who use hired labor); individual entrepreneurs operating both individually or by engaging unpaid labour of family members; members of producers' cooperatives; persons engaged in the production of goods and services for own consumption are considered to be self-employed.

Self-employment is a very diverse phenomenon. Patterns of self-employed people in their professional and qualification characteristics are also diverse. There is no regulative framework for the self-employment definition in Russia. There is a notion of employment. Employment of people is the most important economic basis for living standards. Employment includes social and economic relations, in which people come together to participate in socially useful work.

In accordance with the legal framework of the Russian Federation, employment is defined as the activity of citizens, which is associated with the satisfaction of personal and public needs and which should not contradict the regulatory framework, and which, as a rule, brings income (labour income).

Those employed are the persons employed under the labour contracts; registered as independent entrepreneurs; employed under the commercial contracts; the members of farm enterprises, etc. Therefore, the following features related to employed could be identified: first, the activities should be carried out to meet personal and social needs, secondly, such activity should not be contrary to the requirements of the law, third, the activity must be compensated, i.e., provide earnings, not necessarily in cash (possibly in kind).

Ensuring employment of citizens is an important issue which is solved by the state (Maksimovich, 2006). For this purpose, the employment centres (employment services) have been established, which help people to find a job or to organize their own business through the interaction with employers.

The authors come to the conclusion that mainstreaming to the reproduction process and production activities is an important criterion of self-employment. The employed person is included in the reproduction process by the employer. Self-employment presupposes the inclusion of the individual in the process of expanded reproduction independently. It can be noted that self-employed people determine their workplace in the system of social production by themselves, but on the other hand, the method of social division of labour is also being changed taking into account the professional competence and personal qualities of the person.

Self-employment is associated with business activities. A person is either employed and works for an employer, or works for himself / herself at his / her own risk (engaged in entrepreneurship). In the second case, it can be stated that this person, organizing his business, is no longer employed, but self-employed. Differentiation and clarification of the notion of self-employment is extremely important from the view of labour regulations improvement, activity personification and development of work activity in different spheres, including business.

Self-employment could not be associated only with business activities. This category includes the people, whose activities meet three main criteria: first, the person organizes the activities himself/herself, second, this activity brings them an income, and third, the person is engaged in public reproduction by the way of the production of goods, works and services as well as by their public exchange and consumption.

## 4. Results

The authors suggest the following criteria for defining self-employment.

The first criterion characterizes a citizen's ability to organize own business. It should be pointed out that it is possible to provide assistance to a citizen by third parties in the arrangement of self-employment, for example, assistance from the employment centre.

The second criterion is defined by the income. Its amount is associated with the subsistence minimum because it depends on the region and could vary depending on the cost of consumer basket as the income from self-employment should provide at least basic human needs. However, in our opinion, there may be exceptions in the cases when a citizen has the basic income (wage, pension), and self-employment brings additional income, which may be lower than the subsistence minimum. But, if income from self-employment is the only source of income, its size should not be below the subsistence level.

The income does not have to be received in cash only. It could be received in kind, but it must be expressed in money equivalent.

The third criterion needs to be characterized according to the stage of the reproduction process, because goods, works or services could not be only produced but also exchanged and consumed by a society.

Self-employment can also be a non-entrepreneurial activity. For example, activities at private farms producing and processing agricultural products on their own or rented plots of land in order to satisfy their own food needs are considered to be self-employment as they match all the three criteria mentioned above.

At the same time, the households are usually considered in the context of the owners of residential premises and the overall budget availability. In this case, the households are not classified as self-employment until they match all criteria mentioned above. The issue of households is very important, because they could be a prerequisite for the development of not only self-employment, but also the organization of small businesses. It is the households on the basis of which guest houses, private small cafes, shops, service centres could establish. We have systemized the self-employment criteria (see Table 1).

**Table-1.** Self-employment criteria

| Self-employment criteria                         | Definition   | Characteristics   |
|--|--|---|
| 1. Setting up the own business (a place of work) | The level of independence in workplace arrangement | 1. A citizen sets up his business by himself without any assistance.<br>2. A citizen is supported in workplace arrangement  |
| 2. Generating income                             | 1. The amount of income                            | 1. If the income from self-employment is the only source, its amount should not be below the subsistence minimum rate.<br>2. If the income from self-employment is the extra source, its amount may be lower. |
|  | 2. A kind of terms                                 | 1. In monetary terms<br>2. In volume terms  |
| 3. Participation in social reproduction          | Participation in production stages                 | 1. Production<br>2. Social exchange<br>3. Consumption   |

The forms of self-employment are currently divided into traditional and new ones. Traditional forms of self-employed include people engaged in entrepreneurial activities, working at the farm enterprises, private farms, cooperative members. This form of activity are widely developed among handicraft workers and citizens who produce crafts, engaged in the collection of herbs, wild forest products and carrying out activities in other original areas.

The new forms of self-employment include freelancers, self-employed in different areas. The transition to digital economy based on Internet technologies and information platforms would enhance the development of this form in future.

The choice of self-employment forms depends on both objective and subjective factors, and they can also be divided into internal and external. Objective internal factors include: the person's educational background, skills and competencies. The objective external factors include first of all the economic situation in the country (availability of jobs, unemployment rate, demand and supply of certain goods and services). Subjective internal factors are personal and psychological characteristics of a person (the desire for self-realization, self-sufficiency, the opportunity to risk). Subjective external factors, in our opinion, would be social, moral and spiritual values recognized by the society (promotion of individual or public work, attitude to entrepreneurship, etc.) (see Table 2).

Table-2. Forms, causes and factors of self-employment development

| Self-employment forms  | Causes   | Factors  |
|--|--|--|
| <p><b>Traditional forms:</b><br/>people working in their private farm households, cooperative members</p> <p><b>New forms:</b><br/>freelancers</p> | <p><b>1. Causes that are affected by the country's economic situation:</b></p> <ul style="list-style-type: none"> <li>- dissatisfaction with job demand;</li> <li>- job loss (dismissal);</li> <li>- low wages, pensions, scholarships that do not meet the necessary economic and social needs, late payments;</li> <li>- the need to obtain a higher source of income (or additional income).</li> </ul> <p><b>2. Causes that are not affected by the economic situation:</b></p> <ul style="list-style-type: none"> <li>- the desire to self-realization, including by organizing their own business (entrepreneurship);</li> <li>- the desire to organize their own time and manage it (freelancers)</li> <li>- the desire to get a higher source of income</li> </ul> | <p><b>Objective internal:</b><br/>the level of education of a person, his/her skills and competencies to carry out certain functions;</p> <p><b>objective external:</b><br/>the economic situation in the country (availability of jobs, unemployment level, demand and supply of goods and services);</p> <p><b>subjective internal:</b><br/>personal and psychological characteristics of a person (the desire to self-realization, self-sufficiency, the opportunity to take the risk);</p> <p><b>subjective external:</b><br/>social, moral and spiritual values recognized by the society (promotion of individual or public work, attitude to entrepreneurship, etc.).</p> |

As we have noted earlier, self-employment requires certain skills (competencies), as well as different resources, depending on the kind of activity. Let's investigate the forms of self-employment depending on the required financial resources and competencies to do the work. For this purpose, we have divided the self-employment forms into four groups.

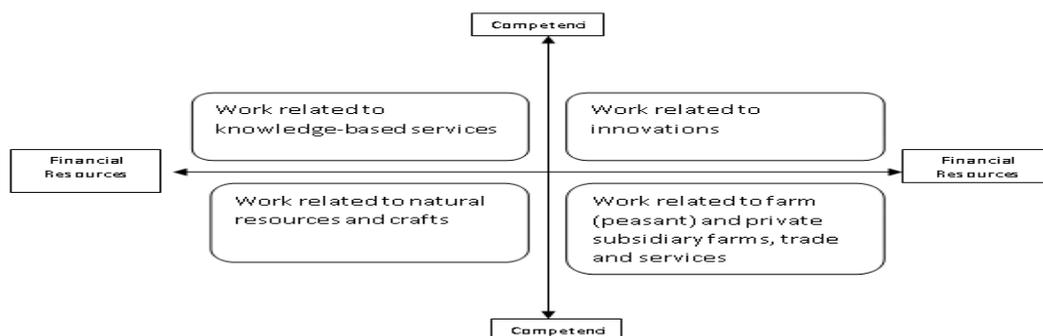
**Low level of competence – low level of required financial resources.** These requirements are inherent to the traditional form of self-employment organization, in particular, collecting. In this case, there is no need to have special education or special skills, but the key condition for this form is natural resource endowment. This form is widespread in rural areas. Folk crafts, craftsmanship could also be included to this category.

**Low level of competence – high level of required financial resources.** These requirements are also inherent to the traditional form of self-employment. The work is based on simple skills, but the costs are higher than in the previous form. In particular, this is the activity in the private subsidiary or peasant farm. In this case, it is required a capital to purchase agricultural machinery. Exchange of goods and services could be also included to this form.

**High level of competence – low level of required financial resources.** These requirements are inherent to the new forms of self-employment, which require good competence and skills (accounting, computer, information, etc.), but at the same time it doesn't require high costs to do the work (to have a computer with Internet access is enough). In particular, it could be the work of freelancers. This activity is widely developed in cities, as citizens in this case must constantly improve their knowledge, which becomes possible in the central cities.

**High level of competence – high level of required financial resources.** These requirements are referred to a new innovation form of self-employment – innovative one. Creating an innovative product is required the high level of knowledge and skills as well as additional financial resources to support research and development. This form is most promising in terms of income generation and high capitalization opportunities, but it has a significant disadvantage, which hinders the development of this direction – a high risk. This group includes only the new forms of self-employment (Fig. 1).

Figure-1. The forms of self-employment depending on the required competencies and financial resources



There is a distinctive feature that makes it possible to separate traditional forms of self-employment from new ones, that is the level of competencies. Traditional forms are based on low levels of competencies, while new forms require the latest knowledge, skills and abilities. Consequently, improving the educational level of the population, including through lifelong learning and digital literacy, will enhance the development of new self-employment forms.

The public services such as financial, banking, engineering, educational, healthcare and tourism are widely developed in practice. Today, at the time of establishing digital economy, based on intellectual resources and technology, the innovative self-employment should be the key direction for self-employment development (innovations in different areas), that would make it possible to apply completely new approaches both to the production of goods and services and to the mechanism of business organization.

In the works of different authors (Sankova, 2009) one can find such term as innovation-based employment. Broadly speaking, this is labour relations based on the new quality of the work, which are transformed into different types of innovation (technological, food, information) at all levels of the economic system development. In a narrow sense, the innovation-based employment is the forms of work appeared for the first time or which have been improved earlier and based on the use of innovative potential.

The authors consider innovative self-employment as the work, based on the use of different innovations (organizational, technical, information, etc.) in order to generate income and to participate in socially useful reproduction.

Thus, the use of new forms of self-employment is associated with the intellectualization of social work and the transition to a new type of digital economy.

## 5. Discussion

According to ePayments, in Russia the number of webmasters and freelancers working on the Internet increased 3.3 times in 2014-2016. On YouDo.com the demand for services in the spring of 2016 amounted to 279 million rubles, and in the fall, it was already 1,023 billion. The total cost of services hosted through the platform increased by 700 percent. According to preliminary estimates, the growth reaches 7.5 billion rubles in 2017.

The development of the self-employment market has spurred the growing popularity of online services exchanges and microenterprise. These figures show the development of new forms of self-employment, based on high levels of competencies, which makes it possible to predict an increase the number of self-employed people in the transition to digital economy.

## 6. Conclusion

It can be stated that self-employment is a step towards entrepreneurship. Special attention should be focused on legalizing self-employed people, providing, in particular, their legal registration and payment of taxes, which is especially important for Russia.

Developing the measures to legalize self-employment the authors' study will have practical relevance for the definition of self-employment criteria. The definition of a self-employed citizen has not been recognized under the Russian legislation at present. The new category of employees as self-employed people with the rights and obligations clear legislated is needed to be established. At the same time, the tax system should be simplified for them, not preventing, but rather stimulating to bring them out of shadows.

Thus, self-employment is an independent form of employment, the development of which is closely associated with the formation of digital economy. Self-employment facilitates the initiation of the entrepreneurship development. Further research on the subject is of scientific interest and could be aimed at developing a mechanism for transforming self-employment into small business in the context of the transition to digital economy.

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