

Development of e-commerce, transport and logistics in rural Russia: attitudes and obstacles

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Abstract. The objective of the paper is to research the attitudes of local people of the countryside of one Karelian typical village towards the development of e-commerce and remote work. E-commerce and remote work are seem to be a solution for local people to find new jobs and earn more or some extra money. Moreover, abovementioned can be the way to find new markets for selling some good, products and even “not-importables”, which are seen to be the must to be created to revitalise the economic system of rural areas. Except the lack of knowledge on the the theme, the main obstacles for e-commerce are bad roads and bad Internet connections. The delivery and logistics system should be revised.

1 Introduction

Russian Federation possesses a large surface of territory with idle resources. Another problem which interconnected with the first statement is that a great amount of villages suffer from out-migration from the countryside to cities. The main reason for the outmigration is low salaries, unemployment, and lack of housing, medical and educational services.

On the other hand, the era of digitalization influence the mode of life of rural locals. New possibilities of getting medical and educational services, new possibilities of employment should be revised and used to help the countryside stay up-to-date and revitalize. We see the bottom-up development as one of the most viable strategy for rural development [1]. And to reach the objectives of the bottom-up development an assortment of new entrepreneurs should be created on the ground. That helps to fight with the problem of unemployment, which is according to Vlasov S. D. [2], despite the low official level of unemployment in rural area, its real numbers are high in reality, due to the fact that locals do not want to be registered as unemployed. We also assume that locals do not register as unemployed, because they do not know where and what for they should register.

For sure, new entrepreneurs should commercialize their products and skills in different ways and strive to find off-farm incomes to diversify their profit ant rural economy at its whole. Sheresheva M. Yu. et al. [3] propose to diversify the rural economy considering the advantages of a territory. As Lisova O. et al. [4] argue nevertheless the rise need in

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agricultural food and commodities rural economy so to find possibilities for off-farm incomes the authors propose to determine priority zones of the Russian territory to identify their need of support. Another point is that new and existent rural entrepreneurs should strive to find new markets to sell their goods and services. We suppose that e-commerce may be a solution [5]. Locals of the countryside can work either remotely or sell their goods and products with the help of Internet services and earn money. For now, the problem is that rural people do not aware of the tools Internet to earn money.

Ro research the attitudes of rural people towards remote work we undertook the interview among rural people to research the familiarization with the phenomenon of remote work and the interest in earning money with the help of Internet.

2 Options to develop rural e-commerce in Russia and tables

The development of e-commerce could help to alleviate rural poverty and make rural economic system more sustainable. Moreover, we assume that self-employed individuals are more interested in preserving the environment and expressing its civil position.

According to Tikhonova T., Shik O. [6] the rural households' incomes from off-farm incomes grow all over the world. Off-farm sources of income make approximately 40-45 % in the countryside of Latin America and in some countries of Africa, South Asia, Central and Eastern Europe. Off-farm incomes overcome the agricultural incomes in the OECD countries.

According to Bahaman A. S. et al. [7] thanks to the advantages of the digitalization era an individual can sell his or her products and services from any place of the world. So the point is idea which takes place in creating a new product or a new service to be sold. Moreover, as F. Islam et al. [8] argue “ the poverty reduction cannot happen in an information-deprived environment”.

Internet also opens the wide range for off-farm income because the worldwide markets can be reached. The only need is an original idea to be realized which is able to create product or services with higher added value. As far as the ideas take the first place in creating such products and services, talented individuals are urgently needed to be attracted to the countryside. Another option is to cultivate and educate talents and idea on the ground.

As assert Cherkasov V.E. & Vakhovsky E.V. [9] in the realm of post-industrial economy nonstandard forms of employment is an option to overcome poverty and unemployment in the countryside. The raise of nonstandard employment and remote work in Russia with the share of 9-10 % approximately is proven by researches of implemented by Tonkikh N.V., Kamarova T.A. [10] and Musayev B.A. [11]. As we see from the research of Strebkov D., Shevchuk A. [12] and the data of the First and the Second Russian census of freelancers [13,14] at the present time self-employed freelancers need to be transformed into entrepreneurs.

The priority of remote work and e-commerce, as its example, can be proven by the priority of “exiting job for good money” with the share of 80 % demonstrated by the researches of the HSE and the data of the First Russian census of freelancers [13,15].

Great examples of the development of e-commerce in rural areas are demonstrated by China. From the research of the A. H. F. Li [16] we see some villages in China with outstanding results. Such villages, where e-commerce in China succeeded to realize were called “Taobao villages” and got the government support, which is very important to take in mind, in case we are talking about the bottom-up development concept. It also should be mentioned that the majority of “Taobao villages” are situated in “relatively developed provinces”. That should be taken in mind as far as the objective of our research is to boost the developing of the remote work and e-commerce in less-favored villages which are quiet

remote from the center. Another example of the e-commerce development in the country is Thailand. According to Sukasame N. et al. [17] the country showed tremendous development with “an annual economic growth rate of 8% in 1976 – 1996”. Boosting the growth of SMEs with great share of start-ups on the base of e-commerce was of importance to grapple with the World economic crisis and creating new job opportunities. One of the crucial roles in the e-commerce development in Thailand was government support also.

Believing Malone T., Laubacher J. that the main issue of the new economy is a human-being (cited from Radaev V. [15]) we assume that the main role in creating a e-commerce system in the countryside is devoted to individuals. So human capital should be encouraged and fostered. We can assess the human capital with the help of the model proposed by Plotnikov V., Pirogova O., Vertakova Y. [18].

Locals can create their on-line shops selling their agricultural products, products of forest and lakes, selling tours to their cultural places, educational courses on traditional culture, local history or workshops. Another promises for e-commerce is selling different services connected both with handicrafts, culture and other educational services. So we can name those services as “non-importables” [19].

So the main hypothesis is that with the help of the Internet locals of the countryside can create sustainable entrepreneurial ecosystem which is capable of bottom-up development.

According to interview of the Center for Social Policy and monitoring of rural development Federal State Budget Scientific Institution “All Russian Scientific Research Institute of Agrarian Economics” in 2011 among the most preferable kinds of self-employment were rural entrepreneurship, taking share of 45 %, commercial activity, taking share of 39 %, public services – 14 %, rural tourism and crafting and trade, taking share of 4-6 (20). Regarding the results of the research abovementioned [20] and the research implemented by VCIOM in 2017 (Russian Public Opinion Research Center) [21] the need in the first financial aid and the fear to lose money are the main bottlenecks in developing the entrepreneurship.

According to the research of Neustroyeva A.B. and Popova O.V. [22] the majority of unemployed rural population makes the youth from 25 years and middle-aged people from 56 years old. It is also should be mentioned that the problem of unemployment and low salaries takes place not only among the youth. As a rule, the youth migrates to big cities. But middle-aged people very often prefer to stay or return to their native place or to immigrate to calmer place from a big city. That is why the problem of unemployment is also very important for them. This ascertain is proven by the research implemented by Sukneva et al. [23] and our own field studies. Sukneva et al. assume that the risk of poverty and the dissatisfaction by the quality of life makes rural people start farming (88 %), and middle-aged people close to the retirement takes 36.9 % share of them.

As assume Sorokina E.S. and Glazunova O.A. [24] the share of enterprises who use the Internet to sell their good and products is different in Russia but always is from 70 % to 90 %. According to the Russian research agency Data Insight [25] for the period from 2011-2019 the on-line sales in Russia increased from 240 to 1620 billion ruble or from 8 to 24.9 billion American dollars.

The average cheque for B2C sales in 2019 makes 3 800 rubles and the average cheque for C2C in 2019 makes 3 210 rubles. It should be mentioned, that during the last two years we can see high increase among sellers from regions. The most active Russian region with the highest share of C2C sellers is the Northwestern Federal District with the share of 21 %. The number of on-line consumer makes 22 million people and its rate is estimated to rise.

3 Need in cooperation

Looking at the research of M. Zeng [26], concerning e-commerce in Chinese villages, we also find that the allocation of a village take an important role in the developing of e-commerce due to the circumstances of last mile delivery and the service of delivery at its whole. Bad roads and undeveloped or unorganized infrastructure of logistics and delivery hamper e-commerce to succeed.

Regarding the problem of logistics and delivery in China and taking in mind that it is the great agricultural country C. X. Zhai et al. [27] propose to construct well-planned rural logistic with the help of crowdsourcing. As far as, firstly, the development of rural e-commerce can cause even higher environmental impact due to increase in freight transport and, as a result, higher emissions. Secondly, as far as the development of freight logistics needs investment the idea seems to be not viable for locals of the countryside. Thirdly, the backward freight infrastructure and logistics of delivery also increase the price of products of rural sellers. That puts them into unfavorable position in comparison to urban sellers. That is why the crowdsourcing issue is believed to be a solution, notably, at its initial steps.

Crowdsourcing is impossible without both communication and cooperation among rural locals. As it is demonstrated in the research of J. Oláh et al. [28] communication takes the pivotal role in supporting the sustainability of the phenomenon of e-commerce. We also add that the lack of communication hampers the developing of e-commerce at its whole.

One of the ways of cooperation is networking which is of great importance to create a new business and in search of new markets. We can see the research implemented by Makkonen T. et al. [29] revealing weak or moderately connected economic actors. Another research of by F. Islam et al. [8] is an example of connecting rural people with the help of mobile phones and organizing community's e-centers. The author indicates the governmental concern about the e-commerce development in Bangladesh, where access to the Internet in the countryside is lower in comparison to urban places. At the same time the author highlights the lack of infrastructure as the prominent constraint downplaying rural e-commerce in Bangladesh.

So we can see that the development of e-commerce faces two problems, firstly, bad or lack of Internet connection, and secondly, bad roads preventing delivery and logistics services. The first problems can be solved with the help of mobile phones, which are used more and more at the present time or with the help of governmental support. The second problem needs governmental support and great investment or cooperation among locals to organize efficient logistic and delivery service.

4 Methodology

For the research the village Velikaya Guba of Medvezhiegorsky District of the Republic of Karelia was chosen. According to the statistics data of the Republic of Karelia the population of the whole Medvezhiegorsky District amounts 27 934 and its rural share takes 7 401 people. The population the village Velikaya Guba on the 1th of January 2019 amounted 1 654 people.

The research was implemented according to the stratified sampling with the use of proportionate allocation strategy. Then simple random sampling was applied within each stratum. The survey was implemented by the Internet and with the help of telephone calls. Two main groups of people were interviewed. The first group of people is from 25 to 45 years old and another group is the middle-aged people who are close to the retirement or are retired but almost everybody are still working. The interview was arranged with the closed-ended and one open-ended question.

For the question "Do you want to earn extra money?" (Fig. 1) 100 % of women at the age of 25 – 55 years old expresses their wish to earn extra money, and 35.3 % at the age of 56 – 70 years old also gave the positive answer. The share of 64.7 % of women at the age

of 56 – 70 years old does not want to earn extra money at the moment. But we see that the younger women are the more likely they are in search of extra income.

As to the men, the share of 100 % of men at the age of 25 – 45 years old does not want to earn extra money. The answer is the reverse for the share of men at the age of 46 – 55 years old. And then only the share of 23.5 % of men at the age of 56 – 70 years old wants to earn extra money. We can suppose that in Russia it is still easier for men to find a well-paid job, notably in a rural area. So all capable and ready-to-work men are relatively well-paid and cannot allow themselves other sources of income due to high occupancy.

For the question “Are you earning money with the help of Internet” 94.6 % of all respondents of all ages answered “No”. So we can see that the popularity of remote employment or selling good and products via Internet is not so popular in Velikaya Guba.

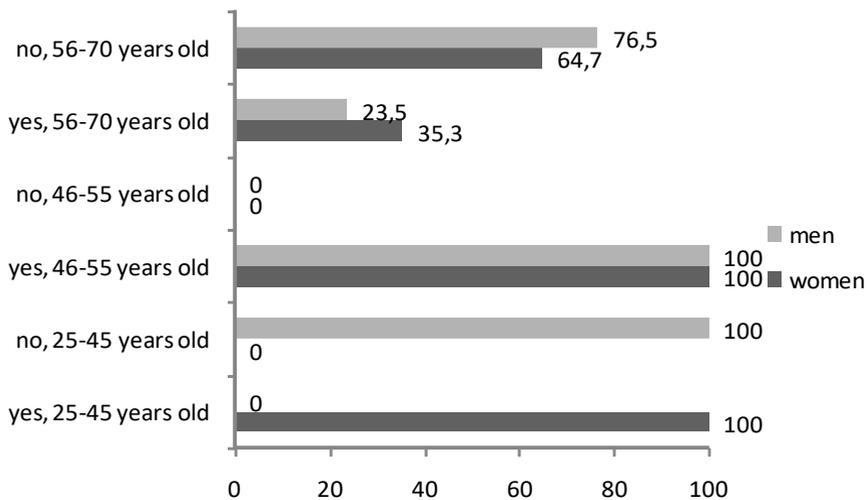


Fig. 1. Do you want to earn extra money? (%).

The Figure 2 demonstrates attitudes of the locals’ at the age of 25-45 years old to job opportunities via the Internet. As we see, men are interested both in finding job via Internet and in acquisition of new knowledge to earn money via Internet. The share of 5.4 % is earning money via the Internet now.

The share of men of 64.9 % is not interested in earning money via Internet. And the shares of 16.2 % and 13.5 % gave positive answers, correspondingly, either they want to improve their skills and to earn money either, at the present time, and they do not nothing about the process.

At the same time, the majority of women are interested in earning money via Internet. The share of 48.6 % know nothing about it and has never tried, and the share of 27 % wants to improve their skills. Only the share of 24.3 % is not interested in earning money via Internet at all.

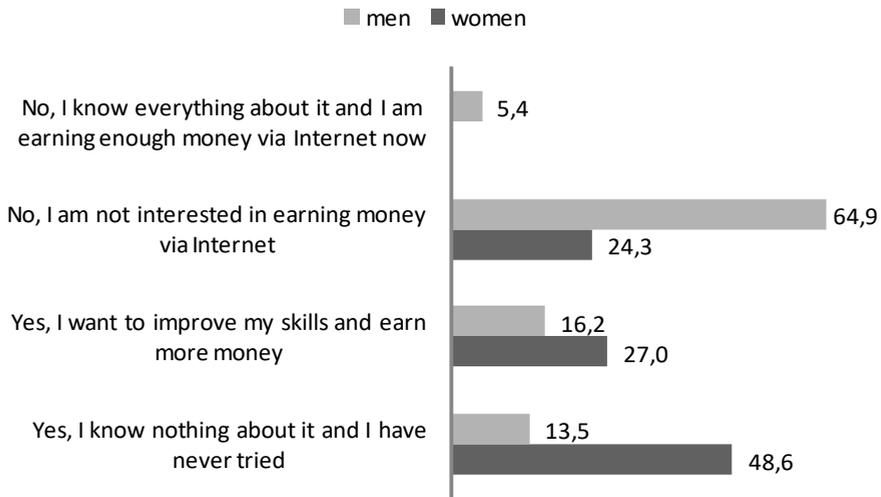


Fig. 2. Do you want to learn earning extra money with the help of Internet? (% ,respondents of 25 – 45 years old).

As to the respondents at the age of 46 – 55 years old, everybody answered that they are interested in earning money via Internet. We can suppose that those respondents have more free time and more open to new opportunities due to their life experience and need in extra money. The Figure 3 shows the perceptions of the countryside's locals at the age of 56 – 70 years old towards earning extra money via Internet. As for the men, the share of 76.6 % is not interested in earning money via Internet. Only the share of 23.5 % gave the positive answer. The share of 5.9 % knows nothing about the process and the share of 17.6 wants to improve their skills.

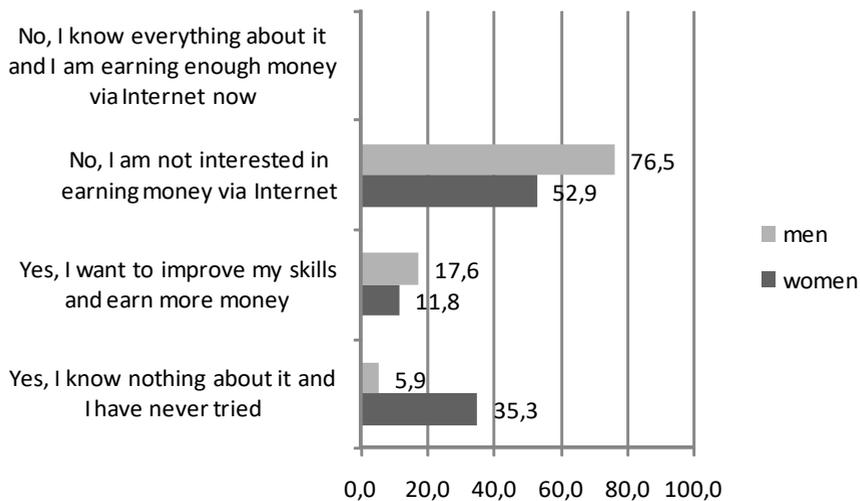


Fig. 3. Do you want to learn earning extra money with the help of Internet? (% ,respondents of 56 – 70 years old) .

As to the women (Fig. 3), almost the half of women is not interested in earning money via Internet. Its share makes 52.9 %. And the share of 11.8 % wants to improve their skills and the share of 35.3 % gave positive answer about earning money via Internet, but up to now they know nothing about it and have never tried.

In spite of positive answers about the wish to earn extra money not everybody answered positively to the question “Do you want to learn earning extra money with the help of Internet?” (Fig. 2). As we can see, the women are more interested in Internet possibilities to earn money via Internet. The share of men is lower. We also see that 5 % of men at the age of 25-45 year old are earning money via Internet at the moment. Unfortunately, this share is very little even for a village. But we can assume that for the middle-aged men and women is more difficult to start earning money via Internet due to the lack of knowledge in this sphere (“Yes, I want to improve my skills and earn more money”, “Yes, I know nothing about it and I have never tried”). As to the men, we also assume that there is another mental difficulty which takes its roots from rural life, the first one is conservatism, and the second one is the fear of gossips and being called a slacker.

5 Conclusion

In the era of post-industrial economy where the digitalization plays the core role in the development and propose a wide range of new jobs' opportunities new strategies and policies should be chosen to develop regional communities to make them prosperous. We see good examples of Chinese villages realizing the concept of “Taobao villages” and developing e-commerce from less-favored areas. We also see examples of Thailand and Bangladesh, which are less-developed than Russia, but succeed to realize the concept of developing of e-commerce for rural territories to make them more sustainable. According to the implemented interview we also see that there is an interest and strong need in earning extra money and the Internet, e-commerce, notably could be the solution. But the main problems are the lack of knowledge which is to be solved with the help of business incubator, for example, and the second one is bad roads making obstacles for efficient logistic and delivery service. To allow greater room for the solution of the first and the second problems cooperation and networking among locals should be popularized and cultivated.

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