

# Development of Financial Competences of Entrepreneurs under Conditions of Economy Digitalization

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**Abstract.** The study is devoted to development of digital financial competencies of entrepreneurs engaged in production and sales activities in the global economic environment with the involvement of financial intermediaries - domestic and foreign banks, Fintech, factoring companies, etc. The use of the integrated systems approach to theoretical and field research allows covering the spectrum issues related to the development of digital competencies of entrepreneurs in the field of search and employing services of financial intermediaries, justifying their choice and expediency of employing. The study represents the conclusions about the level of digital financial competencies of entrepreneurs, their compliance with the requirements of modern business conditions, and the recommendations on their further development.

**Keywords:** banking services, competence, digitalization, entrepreneur, financial competence, small business.

## 1 Introduction

Economy digitization significantly changes the business ecosystem. One of the important changes is the increasing role of small and medium-sized businesses and changing requirements for the competences of entrepreneurs. In order to adequately respond to these changes, the Government of the Russian Federation adopted the “Strategy for the Development of Small and Medium-Sized Business in the Russian Federation until 2030”, approved by Decree of the Government of the Russian Federation of June 2, 2016 No. 1083-p [1]. This document notes that despite the great work carried out in the framework of the action plans (“road maps”) of the national entrepreneurial initiative, the dynamics of the development of small and medium-sized businesses is negative.

The share of small and medium-sized enterprises in the turnover of enterprises in the economy is progressively decreasing as a whole. In the Russian Federation, only 4.7 percent of citizens of working age are first-time entrepreneurs. In BRICS countries, a higher value of the indicator is recorded (Brazil - 17.2 percent, China - 15.5 percent, India - 6.6 percent, South Africa - 7 percent. In the USA, the share of citizens starting their own business in the total working population is 13.8 percent). A great amount of scientific works is devoted to financial literacy of entrepreneurs, including the interaction on digital technology platforms [2-11].

With the inclusion of Russian entrepreneurs in global value chains, the issues of both banking policy and the financial competence of entrepreneurs, especially in the area of raising financial resources using modern tools of the digital economy, become very important. Moreover, under conditions of economy digitalization, competencies change qualitatively.

## 2 Problem Statement

The main purpose of the study is to identify new knowledge and skills that an entrepreneur must have when carrying out production and sales activities in the foreign and domestic markets. Over the years, the authors have carried out an extensive program of research on entrepreneurial activity, one of the important aspects of which is the interaction of businessmen with resource providers, including financial ones. Research under this program covers various aspects of business activities and it is related to the study of the structure of modern financial structures and the products they offer. This study was conducted using the example of construction materials enterprises. Production of construction materials is developing steadily and dynamically, which is explained by the growth of capital construction of production and non-production facilities in Russia, including in the Samara region.

## 3 Research Questions

The studied financial competencies are classified into 2 groups:

### 1. Associated with the search for banking services / products.

1.1. Ability to choose a financial intermediary - a bank for financial transactions.

1.2. Knowledge of the types of digital banking services and the ability to select the desired banking services / product.

1.3. Ability to adapt to new banking services / products.

**2. Related to financial and settlement transactions through a financial intermediary-bank.**

2.1. Knowledge of digital technologies to employ banking services.

2.2. Ability to use technologies to employ banking services, including through digital technology platforms.

2.3. Skills of planning and choosing a specific type of service.

To this end, twice in December 2017 and December 2018, 227 experts of small enterprises of the constructing materials industry of the Samara region were surveyed on the following issues:

1. Are you aware of banking services / products?
2. Do you use digital technology platforms to design online banking services?
3. Do you use consultant banking managers to choose a financial service / product?
4. Which financial intermediary services do you use most often?

The survey findings of entrepreneurs in the field of development of competencies when conducting banking operations are presented in Tables 1-4. The survey revealed new competencies in the field of digital technologies that entrepreneurs need to successfully conduct business in the global environment and in the domestic market.

**Table 1.** Entrepreneurs' awareness of banking services / products

| Question                                       | Answers, people                    |                                      |                                   |   |
|--|------------------------------------|--------------------------------------|-----------------------------------|---|
|  | I know about all banking services. | I know about basic banking services. | I don't know about most services. | I don't know anything about banking services. |
| Do you know about banking services / products? |                                    |                                      |                                   |   |
| 2017   | 56                                 | 198                                  | 22                                | 0   |
| 2018   | 55                                 | 218                                  | 5                                 | 0   |

Source: compiled by the authors.

The survey findings presented in Table 1 allow us to conclude that entrepreneurs are well aware of the banking market. In 2017 - 87 % of respondents confirmed their knowledge of basic banking services, and in 2018 - 96% of respondents.

**Table 2.** The use of various types of banking services by entrepreneurs

| Question                                  | Answers, people |                  |       |                |                  |                        |                                    |                              |
|---|-----------------|------------------|-------|----------------|------------------|------------------------|------------------------------------|------------------------------|
|   | Current account | Currency account | Loans | Bank transfers | Letter of credit | Collection of payments | Transactions with foreign currency | Transactions with securities |
| How actively do you use banking services? |                 |                  |       |                |                  |                        |                                    |                              |
| 2017                                      | 227             | 25               | 231   | 264            | 168              | 141                    | 76                                 | 53                           |
| 2018                                      | 227             | 57               | 189   | 238            | 154              | 90                     | 62                                 | 35                           |

Source: compiled by the authors.

The fact that entrepreneurs use a variety of banking services in the course of their activities can be argued by considering the survey findings presented in Table 2. The widespread use of banking technologies, to one degree or another, testifies to the high level of digitization of servicing the operating room, as well as the strategic investment and innovation activities of Russian small business entrepreneurs.

**Table 3.** The digital technology proficiency when using banking services by entrepreneurs

| Question   | Answers, people |  |                                       |                             |                               |
|--|-----------------|--|---------------------------------------|-----------------------------|-------------------------------|
|  | Loans           | Payments for the maintenance of operating activities | Sale / purchase of products, services | Sale / purchase of currency | Sale / purchase of securities |
| Do you use digital technology platforms to design online banking services? |                 |  |                                       |                             |                               |
| 2017   | 68              | 194  | 109                                   | 39                          | 2                             |
| 2018   | 135             | 224  | 156                                   | 30                          | 7                             |

Source: compiled by the authors.

According to the survey findings presented in Table 3, it can be argued that entrepreneurs successfully used banking services online in 2017, when almost 85% of respondents served conducted operating activities on a digital technology platform, and in 2018 their number increased to 99%. There was an increase in the level of use of the electronic digital platform in 2018 compared with 2017 for all services.

**Table 4.** The use of various types of lending by entrepreneurs

| Question                  | Answers, people           |            |                        |     |  |
|---------------------------|---------------------------|------------|------------------------|-----|--|
|                           | Working capital financing | Investment | Refinancing:           |     | Execution of the contract, including a foreign one |
| to increase the loan term |                           |            | to cover existing debt |     |  |
| 2017                      | 206                       | 42         | 4                      | 5   | 98   |
| 2018                      | 190                       | 20         | 81                     | 105 | 116  |

Source: compiled by the authors.

The survey findings presented in Table 4 show that entrepreneurs prefer to take a loan. Under current business conditions, when there is not enough money for expanded reproduction, a loan to finance working capital dominates. Moreover, in 2018 over 90% of respondents took loans for these purposes, compared to 2017 - over 83%. On the second place is taking a loan for the execution of the contract. In 2017, it was preferred by 43% of respondents, and in 2018 - 51%.

**Table 5.** The involvement of banking managers - consultants when choosing financial services by entrepreneurs

| Question | Answers, people |              |                                     |  |
|----------|-----------------|--------------|-------------------------------------|--|
|          | I often use     | I seldom use | I do not use, but I am going to use | I do not use and I am not going to use |
| 2017     | 9               | 58           | 122                                 | 87                                     |
| 2018     | 12              | 67           | 124                                 | 72                                     |

Source: compiled by the authors.

According to Table 5, it can be argued that small business entrepreneurs rarely consult with bank managers when choosing financial services / product. In 2018, there was the positive dynamics of involving bank managers when choosing financial services, but it was insignificant.

**Table 6.** The choice of financial intermediary by entrepreneurs

| Question | Answers, people |               |         |                   |                  |                     |
|----------|-----------------|---------------|---------|-------------------|------------------|---------------------|
|          | Russian banks   | Foreign banks | Fintech | Leasing companies | Investment funds | Factoring companies |
| 2017     | 208             | 11            | 16      | 24                | 21               | 33                  |
| 2018     | 223             | 2             | 25      | 39                | 29               | 48                  |

Source: compiled by the authors.

Analysis of the data in Table 6 indicates that domestic banks are the main financial intermediary. Such intermediaries as Fintech are not popular among small businesses. Due to sanctions that began in 2014, cheap loans from foreign banks have become almost inaccessible. Investment funds, factoring and leasing companies are also not in demand.

**Table 7.** The use of banking services by entrepreneurs with no funds

| Question | Answers, people           |                    |  |   |
|----------|---------------------------|--------------------|--|---|
|          | I will refuse the project | I will take a loan | I will save some money until I have enough | I will borrow some money from individuals |
| 2017     | 24                        | 205                | 8  | 0   |
| 2018     | 58                        | 169                | 3  | 1   |

Source: compiled by the authors.

The reaction of entrepreneurs to the question of continuing business activities when they have no funds is an important characteristic of the role of banks in carrying out production and sales activities. Lending is still a universal

and reliable form of raising bank funds for the implementation and development of business. In 2017, 205 people (90% of respondents) did not have funds for the implementation of the project and they raised funds in the form of a loan. The cost of lending increased in 2018, but despite the fact that loans have risen in price, 169 people took loans in 2018, more than 74% of respondents.

**Table 8.** Bank selection criteria

| Question   | Answers, people |                   |                               |                      |                              |                         |   |
|--|-----------------|-------------------|-------------------------------|----------------------|------------------------------|-------------------------|---|
|  | Reliability     | Low interest rate | Convenient servicing schedule | Minimum of documents | Fast processing of documents | Possibility of training | Bank participation in sales support actions |
| What do you pay attention to when choosing a bank? |                 |                   |                               |                      |                              |                         |   |
| 2017   | 68              | 206               | 9                             | 98                   | 0                            | 15                      | 44  |
| 2018   | 137             | 141               | 6                             | 123                  | 3                            | 72                      | 127   |

Source: compiled by the authors.

The ability to choose a reliable financial intermediary is the basis of risk-free business financing. Using means from the outside Russian businessmen developed the criteria which allowed involving services of the reliable financial intermediary. This system of criteria includes not only the assessment of the risk-free component of banking services (bank reliability), but also the convenience of using it. The authors added the “Low interest rate” indicator to the usual selection criteria. The survey findings presented in Table 8 suggest that the low interest rate provided by the bank turns out to be preferable to reliability and convenience indicators. Such a result is natural for a business to operate in the uncertain economic environment, where cash savings dominate when choosing a financial intermediary. Nevertheless, it can be concluded that entrepreneurs have become more experienced and cautious. The conclusion about the development of competencies can be made on the basis of the emergence of independent conclusions of respondents. For example, in 2018, we could notice the requirements of users of banking services, namely: entrepreneurs declared the need for training by the bank in offering banking services and bank participation in sales support. In 2018, a smaller number of respondents preferred a low interest rate - 62%, compared with 91% in 2017. And the choice of a reliable bank became more popular (60% of respondents in 2018 compared to 30% in 2017).

## 4 Purpose of the Study

The purpose of this study is to formulate and assess relevant digital financial competencies when entrepreneurs carry out production and sales activities that involve raising and spending money through financial intermediaries - Russian banks. The respondents have minimal basic competencies based on classical approaches to the development of financial institutions and products. Also, the issues addressed do not include topics related to government support measures carried out through credit organizations.

## 5 Research Methods

The methodological and theoretical basis of the study is:

- A method of complex analysis, which made it possible to cover the key financial competencies and problems of their development under conditions of economy digitalization;
- A method of system analysis, by means of which the nature and compliance of financial competencies, including digital, financial support functions of business activities are studied;
- A concept of rational behavior of market subjects, the principles of which allow identifying the benefits of the development of digital financial technologies for business activities.

## 6 Findings

According to the results of the study, it can be concluded that small business entrepreneurs have the competences to search and employ digital banking services, which are necessary for carrying out activities in the foreign and domestic markets in the current and strategic perspective.

This is evidenced by data obtained as the survey findings of entrepreneurs in 2017 and 2018:

- Knowledge of the types of banking services and the ability to choose the required banking services / product (Tables 1, 2, 4, 7);
- Ability to choose a financial intermediary - a bank for financial transactions (Tables 5, 6, 8);
- Ability to adapt to new banking services / products (Tables 3, 4);
- Knowledge of digital technologies to employ banking services (Table 3);
- Ability to use technologies to employ banking services, including through digital technology platforms (Table 3).

## 7 Conclusion

Further digitalization of business, the emergence of new digital technology platforms and new types of banking services, new technologies of interaction between financial market agents and entrepreneurs will require the further development of professional competencies of entrepreneurs. In the process of the study, the authors concluded that a new competence of entrepreneurs - "The ability to form requests for new types of banking support" is under development. This competence is shaped by the conditions of a particular business, when the entrepreneur offers a bank to provide not single services, such as servicing a current account, but also to join the entrepreneur's salary project, etc., for a lower bank fee for servicing the local service package formed by a particular entrepreneur.

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