

## **WOMEN DIGITAL SKILLS ANALISYS**

The aim of the development is to analyze the digital competencies of women entrepreneurs in Bulgaria and Italy in order to identify the areas in which further training is needed. To achieve this, the following tasks need to be addressed: to clarify the nature of the digital competences needed and to make a comparative analysis in the two countries.

Jan van Dijk and Aleksander van Deursen state that there are four steps in the process of providing access to digital technologies: motivation - material access - access to skills acquisition (strategic, content creation, communicative, informative, formal and operational) and the usage of acquired skills. In their view, competences are a set of knowledge and skills [6].

Christov and al. analyze the supply and demand for digital skills in Bulgaria, Greece and Romania, concluding that at this stage, supply in all three countries provides free spaces and opportunities for developing new digital marketing programs and trainings [2].

In the Annex to the Council Recommendation on Key Competences for Lifelong Learning, digital competency means confident, critical, responsible usage and commitment to digital technologies for ongoing learning at workplace and participation in society. An important part of the competencies needed is the ability to initiate innovation, including and digital [7]. It includes informative and data literacy, communication and cooperation, media literacy, digital content creation (including programming), safety (including prosperity in the digital environment and cybersecurity competencies), intellectual property issues, solving problems and critical thinking [3].

A. Ferrari perceives the following definition of digital competences as a leading one: " Digital Competence is the set of knowledge, skills, attitudes (thus including abilities, strategies, values and awareness) that are required when using ICT and digital media to perform tasks; solve problems; communicate; manage information; collaborate; create and share content; and build knowledge effectively, efficiently, appropriately, critically, creatively, autonomously, flexibly, ethically, reflectively for work, leisure, participation, learning, socializing, consuming, and empowerment [5].

The definition given by the European Parliament and the Council is as follows: Digital competence involves the confident and critical use of Information Society Technology (IST) for work, leisure and communication. It is underpinned by basic skills in ICT: the use of computers to retrieve, assess, store, produce and exchange information, and to communicate and participate in collaborative networks via the Internet [4].

K. Ala-Mutka is developing a conceptual model for digital competence that focuses on: 1) instrumental knowledge and skills for digital tools and media use; 2) advanced skills and knowledge of communication and collaboration, information management, training and problem solving and meaningful participation; 3) the use of strategic skills in a multicultural, critical, creative, responsible and autonomous way [1].

To measure the psychological profile of the women entrepreneur, a five-step Likert scale of type Strongly agree, Agree, Disagree, Strongly disagree, DK / NA is used. The number of women interviewed in Tsenov Academy was 105, in Italy – 101, with over 97% of the surveys being completed without missing cases. Questionnaire processing was performed using the SPSS software product, where descriptive statistics, frequency distributions were used.

Female entrepreneurs' digital competencies have the following scope:

- The degree of use of different search engines to find information and use some filters when searching;
- Use of collaboration tools and some features of online services;
- Creating complex digital content in different formats (text, tables, etc.);
- Installing device security programs and using them when accessing the Internet;
- Ability to solve common problems that arise when using digital technologies;
- Use of data, information and digital content;
- Interaction through digital technologies;
- Creating digital content (programming).

In Bulgaria, the level of use of different search engines for finding information and the use of some search filters is the highest competence of the surveyed women in the field of services (3.80). The lowest average rating for this competence is indicated by women starting a business in agriculture (3.42). The women surveyed in Italy indicate that this competence is the highest in industrial production (5) and the lowest in Services (3.59) and Logistics (3.6).

The use of cooperation tools and some features of online services is the highest in women in the field of industrial production in Bulgaria, with the lowest value indicated by women wishing to do business in Logistics (3.00). from E-commerce (3.14) and Commerce (3.34). The results from Italy are relatively identical, with the highest average being women active in Industrial Production (5.00) and the lowest average being for women working in Services (3.63), Ecommerce (3.78) and Logistics (3.90).

The creation of complex digital content in various formats (text, tables, etc.) has the highest average ratio among Bulgarian women starting a business in the field of Logistics - 3.33. The lowest is the average for women wishing to develop in the Services sector (2.93), followed by the E-Commerce and Commerce businesses by 3.00. A survey of women from Italy shows that the highest average is the creation of complex digital content in various formats (text, tables, etc.) in the field of industrial production. On the opposite end, women with e-commerce (2.78) and logistics (2.90) have the lowest average score.

Installing device security programs and using them when accessing the Internet has the highest average rate for Bulgarian women starting businesses in the Services sector - 3.53, with the lowest average competency score being women,

starting in the field of industrial production (3,00). Next, the women announced that they would start a logistics business. In Italy, women working in commerce have the highest competence in installing device security programs and using them when accessing the Internet (4.17). The lowest rates are for women in the service sector (3.26).

The possibility to solve common problems arising from the use of digital technologies has the highest average ratio among Bulgarian women wishing to start a business in the field of industrial production (3.50), and the lowest is the average value for women start-ups in logistics (2.50), followed by services (2.8). For women surveyed in Italy, the results are similar - the highest average ratio is found in developing businesses in industrial production (5.00) and the lowest in women in the logistics sector (3.30).

The use of data, information and digital content by women surveyed in Bulgaria has the highest average score for start-ups in the industrial sector (3.75) and the lowest average score is for e-commerce (3.00), followed by trade (3.24). The women surveyed in Italy indicated similar answers - the highest average score in this competence is women working in industrial production (5.00) and the lowest average is women starting in the field of logistics (3.30).

Interaction through digital technology is rated by women surveyed in Bulgaria as the highest average in industrial manufacturing (3.50), and the lowest by women who intend to launch in the e-commerce sector (2, 71), followed by Services (2.85) and Trade (2.88). The women surveyed in Italy indicated that the highest average level of competence in "digital technology interaction" is that of industrial workers (4.67) and the lowest is the ratio of women working in logistics (3, 70).

As a result of the study of the digital competencies of women entrepreneurs, the following more important results can be systematized:

- The presence of similar low average results implies directing efforts to increase the competencies in the use of cooperation tools and some features of online services;
- under the competence of "creating complex digital content in different formats (text, tables, etc.)" women do not have enough knowledge and skills, which is a prerequisite for their promotion;
- emphasizes the need to increase the knowledge and skills of the target group about the opportunities to solve common problems that arise when using digital technologies;

#### **References:**

1. Ala-Mutka, K. Mapping Digital Competence: Towards a Conceptual Understanding, European Union, 2011, p. 6. [ftp://jrc.es/pub/EURdoc/JRC67075\\_TN.pdf](ftp://jrc.es/pub/EURdoc/JRC67075_TN.pdf)
2. Christov, A. and al. Digital Skills Demand and Supply: The Case Three EU Neighboring Countries Bulgaria, Greece and Romania, Economic Alternatives, Issue 4, 2015, p. 117- 118.
3. European Commission, Brussels, Council Recommendation of 22 May 2018 on Key Competences for Lifelong Learning [https://eur-lex.europa.eu/legal-content/BG/TXT/PDF/?uri=CELEX:32018H0604\(01\)&from=EN](https://eur-lex.europa.eu/legal-content/BG/TXT/PDF/?uri=CELEX:32018H0604(01)&from=EN)
4. European Parliament and the Council. (2006). Recommendation of the European Parliament and of the Council of 18 December 2006 on key competences for lifelong learning. Official Journal of the European Union, L394/310.
5. Ferrari, A. Digital Competence in Practice: An Analysis of Frameworks, 2012, [http://jiscdesignstudio.pbworks.com/w/file/55823162/FinalCSReport\\_PDFPARAWEB.pdf](http://jiscdesignstudio.pbworks.com/w/file/55823162/FinalCSReport_PDFPARAWEB.pdf)
6. van Dijk, J., van Deursen, A. Digital skills unlocking the Information Society, Palgrave Macmillan, New York, 2014.
7. Перков, В. Влияние на институционалните промени върху аграрното предприемачество. Икономика и управление на селското стопанството, бр. 5/2008, стр. 11-14.