

DIFILIM PROJECT

PROJECT RESULT 1: Research on the needs and impact of Digital Financial Literacy on enterprises in each Partner Country



This report summarizes the main findings of pilot surveys among the partner countries to document the level of digital financial literacy of microentrepreneurs and map the link between financial literacy core competencies and firm-level well-being. This is motivated by OECD's guidance that highlights a range of financial literacy outcomes that may be important to sustain or improve the financial literacy of owners and managers of microenterprises and of potential entrepreneurs in their experience of starting, running or growing a business. Such financial literacy competencies are intended to complement and deepen broader entrepreneurial skills, and to complement more general financial literacy competencies that young and adult consumers need for their own financial wellbeing. Going forward, the survey outcomes will inform the development the learning and training needs to foster awareness, knowledge, understanding and skills pertaining to digital financial literacy among members of microenterprises.

Cyprus University of Technology June/2022



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Introduction

Micro, small and medium enterprises (MSMEs) make up the majority of enterprises in EU, with rates exceeding 90% (whilst such countries also present very high solo self-employment shares) providing employment and contributing significantly to national incomes. They can play an important role in sustainable, inclusive economic growth and development and improved financial stability, given appropriate conditions and timely support. Successful development and growth of MSMEs depends on supply- and demand-side factors, including adequate financial knowledge and skills. However, the momentum for firms in these countries has not looked particularly favorable over the last decade. Specifically, European countries like Cyprus were hit by two substantial shocks, one asymmetric (the debt crisis) and one symmetric (the recent Covid-19 pandemic). Overall, the pre-crisis paradigm did not contribute to the emergence of innovative and financially resilient firms in countries like Cyprus, which are the main attributes of value in the post-pandemic economic system.

In fact, the era of financial technology (FinTech) is changing the financial services industry at a rapid pace, with consumers and "small investors" becoming increasingly more exposed to new financial products. Managing personal finances today is more complicated and time-consuming, yet more important than ever. People need to have an ever-increasing financial awareness to effectively use products offered through digital channels. The digital age demands for "digitally smart" people for their effective participation in the new economy. At the same time, the Covid-19 pandemic has highlighted the significance of digital technologies for the resilience of firms in turbulent times.

However, in certain European countries coupled with weak digital skills, the adaptation to financial technologies is quite challenging. In Cyprus and other European countries, firms across sectors underperform in the field of technology adoption and digitalization. As another example, according to DESI 2020 the Latvian business sector still fails to take advantage of the opportunities offered by digital technologies. The country ranks 23rd on the integration of technology by business. Only 8% of companies use big data, 19% have social media activities and 11% rely on cloud services. In addition, only 11% of SMEs sell online and only 5% of SME turnover is from e-commerce.

Thus, since digitalization is nowadays the most crucial factor for a country's economic recovery and growth, measuring and enhancing digital financial literacy is a task of upmost importance (for the case of Cyprus see Andreou and Anyfantaki 2021). It entails going beyond its narrow metrics (i.e., digital skills, number of digital financial services available) and accounting for the way people and entrepreneurs actually use their financial knowledge and digital skills as well as the ecosystems that are supportive to it. The financial resilience of European enterprises in the Covid-19 era, the lack of coverage in terms of benefits and government subsidies for enterprises and employees, and the



opportunities that might arise in the period of recovery, along with the availability of novel FinTech instruments, make the proposed agenda of utmost interest and importance for policymakers.

The ultimate purpose of the DIFILIM project is to contribute towards enhancing digital financial literacy/inclusion in certain European micro enterprises. The following question is of paramount interest: Does digital financial literacy of the entrepreneur affect the firm's well-being? The aims of the first project result (PR1) are to identify the existing gaps in the financial and digital skills of entrepreneurs and to inform the development of training materials and learning outcomes that are tailored to the current needs of micro entrepreneurs in Europe, with a particular focus on the five countries represented by the project partners, namely Latvia, Cyprus, Italy, Portugal and Netherlands (henceforth referred to as the DIFILIM partner countries). In order to do so, this report proposes which digital and financial literacy skills should be addressed in the DIFILIM training program and resources, as well as the most appropriate duration, mode/s and method/s of delivery of the program. These are based primarily on the results of an online survey conducted in each of the DIFILIM partner countries following a review of extant literature and past research. Through an analysis of the needs of entrepreneurs and the entrepreneurship programs it will identify the fundamental competencies required in the two disciplines and the gaps in existing provision. The project will then design and apply a curriculum to deliver these skills in a combination of methods including an elearning platform. The aim is developing attractive, training program in country language that will allow digital financial literacy enhancement. The DIFILIM project seeks to deliver a curriculum to meet the real needs of entrepreneurs in the areas of financial literacy and digital skills.

The main findings of the report can be summarized as follows: (i) The financial literacy of micro entrepreneurs is relatively low in most participating countries. On average across DIFILIM participating countries, only 11% of microenterprises' owners with up to 9 people and 19% of microenterprises' owners with 10-49 people showed high levels of financial literacy. (ii) Although the digitalization of many microenterprises is high, most microenterprises' owners report lack of skills to support the digital transformation process. On average across DIFILIM countries, fewer than 40% of microenterprises with up to 9 people indicated that they have the necessary workforce and skillset. Relatively few businesses have a clear road map for implementing Industry 4.0 or knows exactly what to do when it comes to digital transformation. (iii) At the same time, 43.28% of respondents responded that their business has received some form of support introduced due to the pandemic.

This report is structured over four sections. Following this Introduction, the next section provides background information on the economic landscape and performance parameters defining SMEs and micro-enterprises in the DIFILIM partner countries, based on the European Commission's SBA (Small Business Act) Fact Sheets (2021). Next, the findings of the 'Digital and Financial Literacy'



survey that was conducted in the DIFILIM partner countries are presented. This section identifies the skills currently held by micro-entrepreneurs in digital and financial literacy, as well as their training needs and preferences. A copy of the survey instrument is provided in Appendix. Last section provides a discussion on the main insights gained, together with concluding reflections and recommendations on the contents and delivery of the planned DIFILIM training programme.

SBA Fact Sheets: Countries overview

SMEs and micro-enterprises are considered to play an important role in the 'non-financial business economy' in the DIFILIM partner countries. The SBA Fact Sheets of the European Commission provide insight into the economic landscape defining SMEs and micro-enterprises, outlining the state of entrepreneurship in Europe. Through an analysis of SBA Fact Sheets (2021), this section provides an overview of entrepreneurship in the DIFILIM partner countries.

Latvia

SMEs in Latvia have been badly affected by the COVID-19 pandemic and the policy measures taken to fight the pandemic and support the economy. In 2020, SME value added and SME employment were well below their 2019 levels. The downturn in 2020 is expected to be followed by a partial recovery in 2021. Forecasts expect SME value to grow by 7.3% and SME employment by 2.2% compared to 2020. Accordingly, SME value added will exceed its 2019 level by 3.1% in 2021, while SME employment will remain 0.4% below its 2019 level. SMEs generated 72% of value added and 78.7% of employment, outstripping the respective EU averages of 53% and 65.2%.

In 2020, Latvia ranked 26th out of 190 economies in the World Bank's Ease of Starting a Business rankings. Latvia's start-up ecosystem is among the most competitive in the Baltic and in the EU according to EIT Digital, Europe's digital innovation community. Latvia ranks 18th out of 27 EU Member States in the 2020 Digital Economy and Society Index, performing particularly well on digital public services and connectivity. The quality of e-government services continues to improve. SMEs can benefit from fully online tax services, construction process coordination and approval, as well as from the standardisation of e-invoices, introduced in 2019. However, the integration of new technology by business remains low compared to the EU average. Only 8% of companies use big data, 11% of SMEs sell their products and services online and 5% of SME turnover is from ecommerce. According to the 2020 Digital Economy and Society Index, only 43% of people aged 16 to 74 have at least basic digital skills (EU average 58%), and only 24% have advanced skills (EU average 33%).

Cyprus

The COVID-19 pandemic and ensuing measures have had a major impact on SMEs in Cyprus. Consequently, SME value added, and employment dropped significantly in 2020. However, in 2021,



these indicators are forecasted to grow by 6.8% and 2.5%, respectively. While SME value added is predicted to remain below its 2019 level, SME employment is forecasted to exceed its 2019 level by 1.9%. In 2020, Cypriot SMEs employed an average of 4.0 people, slightly more than the EU average of 3.7. Their annual productivity, calculated as value added per person employed, was EUR 30 200, around three quarters of the EU average of EUR 40 000.

Cyprus performs well in entrepreneurship. Entrepreneurial intentions in the country are among the highest in the EU, with almost 1 in 4 Cypriots reporting their intention to start a business within 3 years. Cyprus has had mixed results in terms of digitalization of its SMEs and businesses. Cypriot businesses perform below the EU average in some indicators, such as the share of companies with a website or the share of SMEs selling online. However, the share of businesses that have bought cloud computing services or software specifically tailored to their needs is relatively high, but with room for improvement, as reported by Eurostat and CEDEFOP.

Italy

The COVID-19 pandemic, combined with the policy decisions taken in response to it, significantly affected SMEs in Italy. In 2020, SME value added, and employment fell rapidly. A partial recovery is expected in 2021, with SME value added growth of 3.5%. In contrast, SME employment is forecast to fall by 1.1% during the same period. Both are expected to remain significantly below their respective 2019 levels. The average productivity of Italian SMEs was approximately EUR 38 300 in 2020, slightly below the EU average. The average of 3.1 people employed by Italian SMEs was also slightly below the EU average of 3.7.

In recent years, innovation has been a major policy priority for the Italian government. On the other hand, Italy performs well below the EU average in entrepreneurship, with only 6.2% of the population intending to start a business in the next 3 years, against an EU average of 15.6%. Limited access to managerial and technical skills is a major issue for Italian SMEs, which are also lagging in digital skills, according to Deloitte Italy. According to the Italian National Statistical Institute, nearly 80% of SMEs do not invest in ICT. However, e-commerce is increasing, with SMEs accounting for 56.1% of total national online sales, as reported by Italia Online. National incentives (vouchers and subsidized funds) in place may have contributed to this growth.

Portugal

SMEs are of particular importance for Portugal's 'non-financial business economy' (99% share of all enterprises). However, their productivity, calculated as value added per person employed, was approximately EUR 23,300, around half the EU average. The COVID-19 pandemic and ensuing policy decisions made 2020 a particularly challenging year for SMEs in Portugal. As a result, SME value added, and employment experienced a drop: 10.1% and 3.9% decrease respectively. Over 100,000 companies



applied to temporarily lay off staff in 2020, as reported in an International Labour Organisation report. In April 2020, 25% of companies were not able to make payments beyond 1 month, with this number rising to 50% in the accommodation, restaurant, or hospitality sector, according to the Bulletin for the Portuguese Economy.

Portugal is one of the EU's strongest performers in entrepreneurship. Its vibrant entrepreneurial ecosystem is based on tech-based start-ups and is supported by vouchers, dynamic non-governmental organizations (e.g. Beta-i), and training activities. In addition, the government has incorporated entrepreneurship into the education curriculum, and it now receives significant media attention. According to the European Innovation Scoreboard 2020, Portuguese SMEs are relatively strong innovators. More than half of them innovate in-house and/or have introduced product and process innovations, compared to only 3 in 10 SMEs on average in the EU. Despite some progress, the Portuguese population has a low level of digital skills, as reported by the Digital Economy and Society Index. There is also a concern about the level of skills of workers in SMEs and the digitization of SMEs. In 2020, the government approved a new action plan for digital transition built on the previous policies. The plan gives clear priority to digital skills.

Netherlands

In 2020, Dutch SMEs were affected by the COVID-19 pandemic and the policy decisions taken to combat it, but the severity of the impact depended on the sector. While the crisis badly affected the accommodation and food services sector, with value added dropping by 31.9%, the construction sector performed remarkably well, generating 7.9% growth in SME value added. For 2021, estimations point to a standstill in SME employment, which is set to remain below its 2019 level. In 2020, SMEs generated 62% of overall value added in the 'non-financial business economy' (EU average 53%). Average SME productivity, calculated as value added per person employed, was approximately EUR 63 400, significantly higher than the EU average of EUR 40 000.

The Netherlands has an excellent business climate. According to the World Economic Forum, it has the most competitive economy in Europe. Digitization of Dutch SMEs is progressing well, with three quarters of them using it for their administration tasks and half regarding it as an opportunity for their business. A regular inventory carried out by the Dutch Employee Insurance Agency continues to see structural shortages of qualified professionals in technology, ICT, education and healthcare.

DIFILIM Online Survey Results

This section presents the findings of the online survey that was conducted in each of the DIFILIM partner countries. The aims of this survey were to identify which digital and financial literacy



skills should be addressed in the DIFILIM program and resources, as well as the most appropriate duration, mode/s and method/s of delivery of the program.

The survey was made up of five sections, namely: Demographics of the firm and the respondent, Financial Products and Business Finances, Financial knowledge and attitude, Digitalization and preferred way of training. It was originally prepared in English on the basis of the OECD (2020). OECD/INFE survey instrument to measure the financial literacy of MSMEs and a literature review on relevant topics and then translated into the national languages of each of the project partners.

The survey covered micro-entrepreneurs based in the DIFILIM partner countries, including self-employed people and one-person businesses, employing fewer than 50 people (including owners, managers, all types of part-time and full-time employees regardless of their job contract, but excluding unpaid family members). The survey focused on businesses for profit and excludes not-for-profit organisations. Respondents were recruited by emailing the survey link to prospective participants through the project partners' networks and personal contacts. This survey was conducted in accordance with the Research Ethics and Data Protection procedures. An introduction to the survey clearly specified that participation was voluntary and anonymous, that participants will not be asked to divulge any personally or commercially sensitive information, and that they could discontinue participation by exiting the survey.

This section is subdivided into four sub-sections. The first provides an overview of the demographic characteristics of survey participants, the second outlines the financial literacy skills of respondents, the third discusses the digital skills of micro- enterprises in the DIFILIM partner countries, while the fourth explores the training preferences of respondents.

General Demographics and Background of Respondents

The 'Digital Financial Literacy for Microenteprises' survey, which was distributed online, received a total of 134 responses (after a cleaning process of deleting all responses that did not meet the criteria and after deleting those that did not complete the full questionnaire). This section describes the sample in terms of key demographics and background information.

The majority of the respondents who took part in this survey were located in Portugal (n=31, 23.13%), followed by Cyprus (n=30, 22.39%), Latvia (n=30, 22.39%), Netherlands (n=22, 16.42%) and Italy (n=21, 15.67%). Male respondents accounted for over half the sample (n=89, 66.4%), and survey participants were aged between 16-18 (n=1), 19-29 (n=7), 30-39 (n=39), 40-49 (n=50), 50-59 (n=31). 60-96 (n=2), 70-79 (n=2), 80 and over (n=1). This was a highly educated sample, with a significant proportion of respondents in possession of a postgraduate degree (n=46, 34.33%) or an undergraduate degree (n=47, 35.07%).

Figure 1: Respondents by country

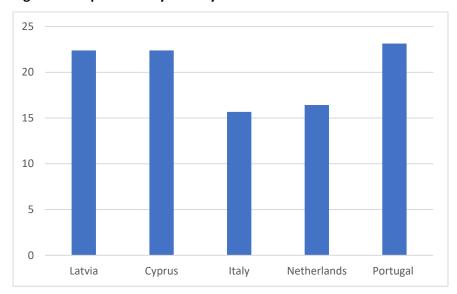
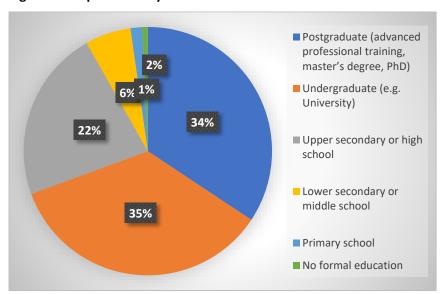


Figure 2: Respondents by Level of Education



In terms of the type of the respondents' organizations, the majority responded that their business is an autonomous profit-oriented business, making independent financial decisions (86.6%). Most are micro-enterprises with 1 to 9 employees (n=109, 81.34%), most of the organizations represented in this survey are in their start-up stage, with 28.36% (n=38) being in their first two years of operation, and another 17.91% (n=24) having been in operation for 2- 5 years. The organizations operate in a wide range of industries, mainly the business services (n=22, 16.42%), wholesale and retail trade (n=15, 11.2%) and construction and real estate (n=12, 17.3%), and business services (n=22, 8.9%).

Financial Products and Business Finances

Respondents were given a list of financial products and services and asked to indicate whether they have obtained new financing using any of these sources of financing. The top three sources of

new financing used to obtain financing by respondents included a business loan from a bank (n=40, 29.85%), leasing or hire-purchase (n=40, 29.85%), and retained earnings (n=37, 27.61%). The two least popular financing tools amongst respondents included mezzanine finance (n=9, 6.72%) and corporate bonds (n=11, 8.21%).

35 30 25 20 15 10 5 0 Angel ingestnendle tidges angeling Bank overdraft of death line. Eurolia of the brief of the Business Dan Front 3 trans. Weldning mance Initial Coin Offering ILO Condituding Subsidised leane Public Edute Corporate bond Peet to peet lending Trade credi

Figure 3: Sources of new financing

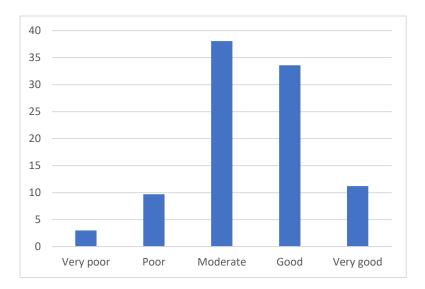
Moreover, 24.63% of respondents indicated that in the last 12 months or since business inception if the business existed for less than 12 months, the business has confronted with situations where funds were insufficient to cover cash outflows or to pay for expected expenses of the business. At the same time, 43.28% of respondents responded that their business has received some form of support introduced due to the pandemic.

Financial Literacy

To assess financial literacy, respondents were asked to rate themselves on a 5-point Likert scale, ranging from very poor (1) to very good (5) on their perceived financial literacy. As shown in Figure 4 below, the mean self-rating of respondents was of 3.42. This indicates that, on average, respondents are satisfied with their financial literacy. In fact, the majority of respondents rated their financial literacy as moderate (n=51, 38.06%), good (n=45, 33.58%) or very good (n=15, 11.19%). Only 12.68% of the respondents (n=17) rated their financial literacy as poor or very poor.

Figure 4: Respondents' Financial Literacy Self-Assessment





As for the OECD/INFE financial literacy survey of adults, the overall financial literacy score will be computed as the sum of the financial knowledge, financial attitudes, and financial behavior scores. The knowledge score is expected to be computed as the number of correct responses to the financial knowledge questions, according to Table 1 of the Appendix, which include a mix of questions specifically about business finance (understanding of balance sheet, return on assets, dividends, meaning of equity) and more general financial knowledge (simple and compound interest, inflation, risk and return). The sum of points will range between 0 and 8. The behavior score is expected to be computed as the count of "financially savvy" behaviors, according to Table 2 in the Appendix. The sum of points will range between 0 and 6. Other non-optional variables will be analyzed to obtain insights into the financial behavior of the business owner (e.g. question about seeking help and advice), but they are not included in the score because they do not lend themselves to a clear distinction between financially savvy and non-savvy behavior. Finally, the attitudes score is expected to be computed as the count of "financially savvy" attitudes, according to Table 3 in the Appendix. The sum of points will range between 0 and 4. The overall financial literacy score will be based on the sum of the knowledge, attitude and behavior scores. The sum of the three components is expected to range from 0 to 18 points, and the overall financial literacy score will be expressed in percentage of the maximum possible score (e.g. a sum of 18 points will be rescaled to give an overall financial literacy score of 100%).

In terms of financial knowledge, Figure 5 shows that most respondents understood well the concept of risk, with over 80% of respondents on average across participating countries correctly indicating that the statement "If a financial investment offers the chance to make a lot of money it is likely that there is also a chance to lose a lot of money" is true. Most respondents also understood well the meaning of inflation ("High inflation means that the cost of living is increasing rapidly"). There is significant variation across small and large micro-entrepreneurs concerning the extent to which



owners understand the meaning of dividends (by correctly identifying that the statement "Dividends are part of what a business pays to a bank to repay a loan" is false). Relatively fewer respondents (less than 60% of respondents on average across DIFILIM countries) showed familiarity with the meaning of equity ("When a company obtains equity from an investor it gives the investor part of the ownership of the company"). What is striking however is that most owners tend to score low on basic competencies such as short-term financial management since only 28% of respondents understand what describes the Returns on Assets ratio ("Could you please tell me which of the options below best describes the Returns on Assets ratio (ROA)").

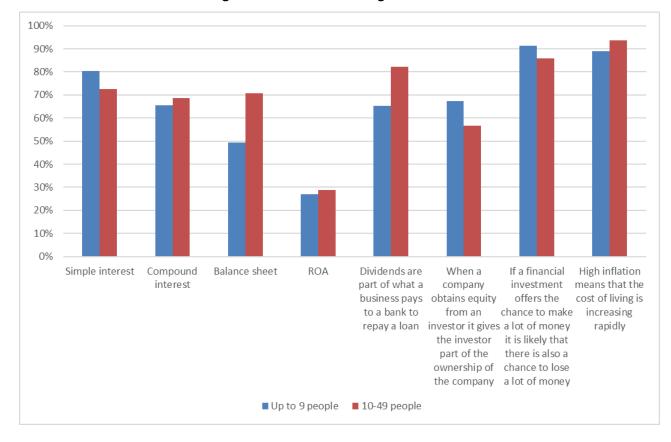


Figure 5: Financial knowledge score

In terms of financial behavior, Figure 6 shows that over 85% of micro-entrepreneurs on average across participating countries reported keeping track of financial records in formal ways (in paper or electronic form, or thanks to an accountant). Depending on the size of the business, many owners monitor company's income and expenses on a regular basis, and engage in positive behaviors, as they indicated that they consider that is necessary for the business to have a (written) financial plan. However, few respondents indicated that they shop around for financial products and services for the business (46% in firms with up to 9 people and 56% in firms with 10-49 people).

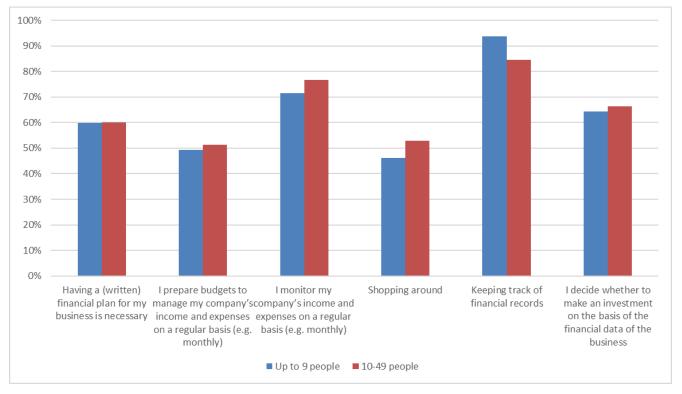


Figure 6: Financial behavior score

In terms of financial attitudes, Figure 7 indicates that most respondents show long-term attitudes, as they report to set long term financial goals for the business and strive to achieve them. Fewer respondents in firms with up to 9 people indicated that they are confident to approach banks and external investors to obtain business finance. Depending on the size of the business, relatively few respondents disagreed with the statement "I prefer to follow my instinct rather than to make detailed financial plans for my business".

Overall, the results show that the financial literacy of micro-entrepreneurs is relatively low in most participating countries. On average across DIFILIM countries, micro-entrepreneurs score less than 65 points (out of 100), and only up to 15% micro-entrepreneurs display high financial literacy levels. On average across participating countries, owners of smaller micro-entrepreneurs (up to 9 people) score 60 out of 100 points, and owners of larger micro-entrepreneurs (10-49 people) score 65 out of 100. While averages in some countries are relatively high, it is important to keep in mind that the questions used to build the scores look at fairly basic knowledge, behavior and attitudes. Country level results show that the percentage of micro-entrepreneurs who showed relatively high levels of financial literacy (meaning that they scored above 80 out of 100) is low on average across participating countries, with only 11% of micro-entrepreneurs with up to 9 people and 19% of micro-entrepreneurs with 10-49 people showing high financial literacy.

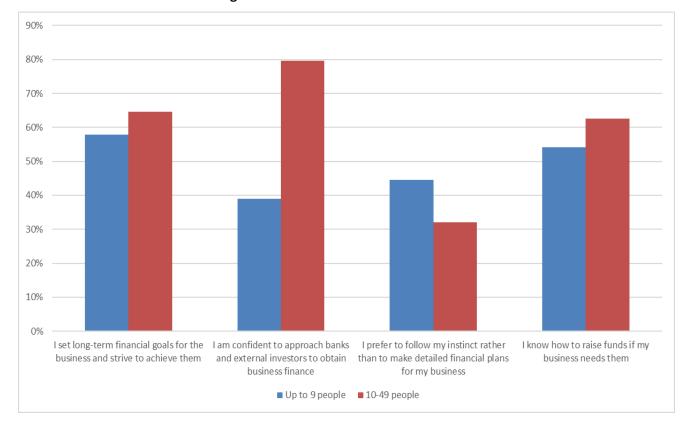


Figure 7: Financial attitude score

Digitalization

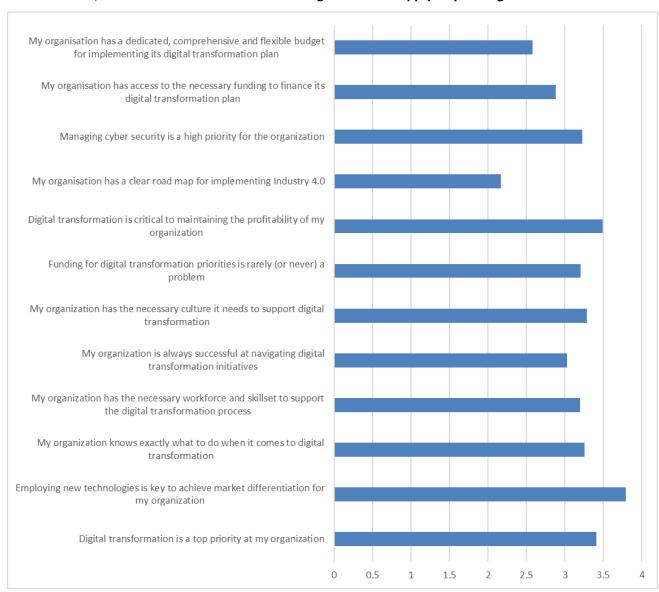
The fourth section of the DIFILIM survey was concerned with assessing digital trends in enterprises in the DIFILIM partner countries. Figure illustrates that when asked to what extent their company utilize specific (digital) tools, most respondents indicated that the tools they use to a great extent include e-invoicing, social media platforms and cloud computing. These options were selected by 52.99% (n=71), 40.29% (n=54), and 39.55% (n=53) of respondents respectively. In addition, results reveal that 21.64% (n=29) of respondents do not make use of e-commerce which, in turn, might be due to the fact that 20.15% of this sample reported that their business is either offline or mainly offline.

The next section of the survey asked respondents to rate on a 5-point Likert scale (1=not at all, 5= to a great extent) whether specific statements related to digital transformation apply to their organization. On average 56% of the micro-entrepreneurs indicated that "digital transformation is a top priority" to a great extent or to a large extent. The mean scores are illustrated in the following Figure. The figure indicates that micro-entrepreneurs are not adequately prepared for the digital transformation of their business since the mean scores range from 2.16 to 3.79. The highest score has been achieved for the statement that "employing new technologies is key to achieve market differentiation for my organization" while the lowest mean scores is for the statement "my



organization has a clear road map for implementing Industry 4.0". Theses could reveal that although digitalization is deemed to be important, firms have not formed yet a clear road map. Moreover, 54% of micro-entrepreneurs stated that to a great or to a large extent their organization does not have the necessary workforce and skillset to support the digital transformation process. This could be combined with the fact that only a 56% of respondents indicated to have received a Computer Science/ Programming seminar compared to for example 81% of respondents having received a marketing/management course.

Figure 8: Using a scale from 1 to 5, where 1 stands for "not at all" and 5 stands for "to a great extent", answer to what extent the following statements apply to your organization?





Training preferences

In the fifth part of the survey, respondents were asked several questions regarding their preferences in terms of training programs. As shown in Figure 9 below, when respondents were asked to indicate their preferred training delivery method, the highest preference was blended learning (n=45, 33.58%), followed by classroom led training (n=29, 21.64%), e-learning (n=26, 19.40%), one-to-one training (n=15, 11.19%) and live webinar (n=13, 9.70%). When asked how many hours they would be willing to invest in training on financial and digital literacy, the largest proportion of survey participants indicated that they would most likely be willing to spend between 0 to 5 hours on training (28%). This was however followed by 20.9% of respondents who indicated that they would be willing to dedicate more than 41 hours on such course.

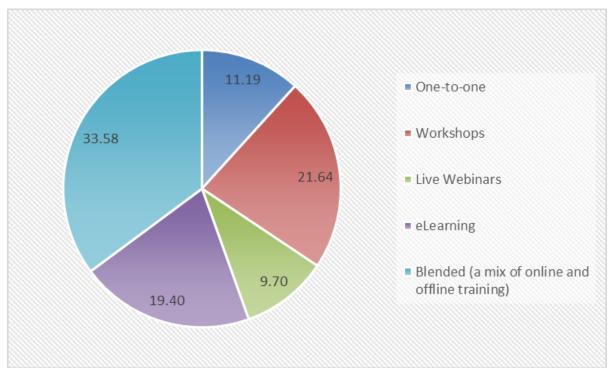


Figure 9: Preferred course delivery method

Recommendations and Conclusions

As outlined in the Introduction, the aims of the DIFILIM project are to identify the existing gaps in the financial and digital skills of entrepreneurs, and to develop a set of online resources to address these gaps and enable entrepreneurs to expand their businesses. This report was prepared in order to inform the development of these online resources, to ensure that they are tailored to the current needs of micro entrepreneurs in Europe, with a particular focus on the countries represented by the project partners.



It is noteworthy that the demographic profile of the DIFILIM survey respondents indicates that this was a relevant sample made up largely of the DIFILIM program's target market, namely present and future micro-entrepreneurs, including ones who were interested in digitization of their business. Although many respondents consider themselves to possess adequate financial literacy, they indicated that they would be interested to be trained in. Similarly, although the respondents make regular use of a variety of digital tools, they indicated that they don't have a clear road map for implementing Industry 4.0. The following recommendations are therefore based on the survey findings, which was in turn informed by past research and literature.

To conclude, the recommended financial skills for the DIFILIM training program are listed in Table 1 (the correspondence between question and competence area follows from Tables A1-A3 of the Appendix) along with the statements that show that readiness towards the digital transformation process is low as mentioned by the respondents:

Table 1: Recommended Financial Skills and Digital Skills to be addressed in DIFILIM program

| Financial skills | Readiness towards the digital transformation |
|------------------------------------|---|
| | process is low |
| Short-term financial management | Lack of a clear road map for implementing |
| | Industry 4.0 |
| Risk and insurance | Lack of knowledge when it comes to digital |
| | transformation of the organization |
| Planning beyond the short-term | The micro-entrepreneurs are not always |
| | successful at navigating digital transformation |
| | initiatives for their organization |
| Basic payment and deposit services | Lack of necessary workforce and skillset to |
| | support the digital transformation process of the |
| | organization |
| Financing the business | |

As a large number of skills are identified as being important for running a business and interesting for training purposes, it is advisable for the DIFILIM consortium to adopt an incremental approach in designing the program. This should begin by focusing on the topics recommended above and gradually developing the program to include more skills, if the resources allow it.



Finally, it is recommended that the DIFILIM program should be delivered in a flexible and modular format. This would provide course participants with the ability to pick and mix topics according to their needs, whilst also allowing them to be flexible in terms of their availability by attending courses depending on their schedule. As a result, certification could be tailored to reflect each individual participant's attainments.

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Appendix A

Table A1. Financial knowledge score

| rable / Lz. r manetar knowneage seere | | | |
|---------------------------------------|-------------------|-----------------|-----------------------------|
| Question number | Label | Core | Value towards financial |
| | | competency | score |
| | | area | |
| FKS0INF1 | Simple interest | Short-term | 1 for correct answer [|
| | | financial | less than today i.e. 3], 0 |
| | | management | in all other cases |
| FKS0INT1 | Compound interest | Planning beyond | 1 for correct answer |
| | | the short term | [over 110 euros i.e. 3], 0 |
| | | | in all other cases |
| FKS0DEF1BS | Balance sheet | Keeping records | 1 for correct answer [A |
| | | and accounting | financial snapshot i.e. 1], |
| | | | 0 in all other cases |



| | | 1 | T |
|-----------------|--------------------------------|---------------|---------------------------|
| FKS0DEF2RETURN | ROA | Short-term | 1 for correct answer [An |
| | | financial | indicator of the firm's |
| | | management | performance i.e. 3], 0 in |
| | | | all other cases |
| FKS0DEF3EQUITY1 | Dividends are part of what a | Financing the | 1 for correct answer |
| | business pays to a bank to | business | [False i.e. 2], 0 in all |
| | repay a loan | | other cases |
| FKS0DEF3EQUITY2 | When a company obtains | Financing the | 1 for correct answer |
| | equity from an investor it | business | [True i.e. 1], 0 in all |
| | gives the investor part of the | | other cases |
| | ownership of the company | | |
| FKSORISK2 | If a financial investment | Risk and | 1 for correct answer |
| | offers the chance to make a | insurance | [True i.e. 1], 0 in all |
| | lot of money it is likely that | | other cases |
| | there is also a chance to lose | | |
| | a lot of money | | |
| FKS0INF2 | High inflation means that the | External | 1 for correct answer |
| | cost of living is increasing | influences | [True i.e. 1], 0 in all |
| | rapidly | | other cases |

Table A2. Financial behavior score

| Question | Label | Core competency | Value towards financial |
|------------|------------------------------------|-----------------|-----------------------------|
| number | | area | score |
| FB0FM4BE | Having a (written) financial plan | Keeping records | 1 for agreeing [4 or 5], 0 |
| | for my business is necessary | and accounting | in all other cases |
| FB0FM2BE | I prepare budgets to manage my | Planning beyond | 1 for agreeing [4 or 5], 0 |
| | company's income and expenses | the short-term | in all other cases |
| | on a regular basis (e.g. monthly) | | |
| FB0FM6BE | I monitor my company's income | Planning beyond | 1 for agreeing [4 or 5], 0 |
| | and expenses on a regular basis | the short-term | in all other cases |
| | (e.g. monthly) | | |
| BF0FCHOICE | Shopping around | Basic payment | 1 for shopping around |
| | | and deposit | [1,4], 0 in all other cases |
| | | services | |
| BF0TRACKB | Keeping track of financial records | Keeping records | 1 for keeping track |
| | | and accounting | formally [1,2,3,5,6,7], 0 |
| | | | in all other cases |
| FKSORISK7E | I decide whether to make an | Financing the | 1 for agreeing [4 or 5], 0 |
| | investment on the basis of the | business | in all other cases |
| | financial data of the business | | |

Table 3. Financial attitude score

| Question number | Label | Core competency | Value towards |
|-----------------|-------------------------------------|-----------------|----------------------|
| | | area | financial score |
| FA0STF1BE | I set long-term financial goals for | Planning beyond | 1 for agreeing [4 or |
| | the business and strive to achieve | the short-term | 5], 0 in all other |
| | them | | cases |
| FA0CONF7BE | I am confident to approach banks | Financing the | 1 for agreeing [4 or |
| | and external investors to obtain | business | 5], 0 in all other |
| | business finance | | cases |



| FB0FM4BEV | I prefer to follow my instinct | Risk and | 1 for prudent |
|----------------|---------------------------------|---------------|-------------------------|
| | rather than to make detailed | insurance | attitude [1 or 2], 0 in |
| | financial plans for my business | | all other cases |
| FKS0FINANCE1BE | I know how to raise funds if my | Financing the | 1 for agreeing [4 or |
| | business needs them | business | 5], 0 in all other |
| | | | cases |

Prepared by: Panayiotis Andreou (Cyprus University of Technology)

This version: 02 March 2022

| | Business Contact Information | |
|-------------------------|------------------------------|--|
| | [Optional] | |
| Name [NAMEB]: | | |
| Location [LOCATIONB]: | | |
| Legal status [STATUSB]: | | |

The survey covers owners of MSMEs, including self-employed people and one-person businesses, employing fewer than 50 people (including owners, managers, all types of part-time and full-time employees regardless of their job contract, but excluding unpaid family members). The survey focuses on businesses for profit and excludes not-for-profit organisations.

Instructions: Please answer ALL questions below by ticking or circling the answer that best describes your situation.

Explanations for question coding:

Beginning with:

D Demographics FΡ **Financial Products** BF **Business Finances** DL **Digital Literacy** DA **DIGITAL ATTITUDE** DTECH **Digital Environment FTRAIN Financial Training** MOTIVE Motivation

FKS Financial Knowledge and Skills

FA Financial Attitude
FB Financial Behaviour
FRAG Financial Fragility

Ending with:

B Business Related

E Variable should be estimated

V Verification – Cross Validation Purpose



A. Demographics of the firm and the respondent

1. [DOWNERSHIPB] Do you own this business (alone or with others)?

| Yes, I am the sole owner | 1 |
|--------------------------|-----|
| Yes, I am a co-owner | 2 |
| No | 0 |
| Refused | -99 |

[IF Q 1 = 0 (RESPONDENT IS NOT AN OWNER) OR -99 then STOP INTERVIEW]

2. [DDECISIONB] Are you involved in taking financial decisions for this business?

[NOTE: 'financial decisions for the businesses may include decisions around taking a loan for the business, looking for sources of funding, paying taxes, deciding how to solve cash flow issues, etc]

| Yes, I personally take the financial decisions | 1 |
|---|-----|
| Yes, I take the financial decisions with others | 2 |
| No | 0 |
| Don't know | -97 |
| Refused | -99 |

[IF Q_2 = 0 or -97 or -99 (RESPONDENT NOT INVOLVED IN FINANCIAL DECISIONS / DOES NOT KNOW / REFUSES TO ANSWER) then STOP INTERVIEW]

3. [DTYPEB] How would you characterise your business, is it ...?

| A pranch of another business | [Branches are controlled by a parent company and are not separate legal entities] | 2 |
|----------------------------------|---|-----|
| A subsidiary of another business | [A separate, distinct legal entity that is part of a profit- oriented business] | 3 |
| A non-profit business | [Foundation, association, semi-government] | 4 |
| Don't know | | -97 |
| Refused | | -99 |

[IF $Q_3 = 2$ (BRANCH) or = 4 (NON-PROFIT) then STOP INTERVIEW IF $Q_3 = 3$ (SUBSIDIARY) then MAKE THE FOLLOWING REQUEST: In your replies to all the following questions, please respond on behalf of the subsidiary and not of the larger business or mother company.]

4. [DEMPLOYEESB] How many full-time equivalent employees work in this business, including yourself?

[NOTE: please clarify that the respondent can include owners, managers, all types of part-time and full-time employees, and seasonal workers, but excluding unpaid family members. "Full-time equivalent" means that, for instance, two people working half of the time count as one full-time equivalent person.]

| 1 employee | 1 |
|-------------------|---|
| 2 – 4 employees | 2 |
| 5 – 9 employees | 3 |
| 10 – 19 employees | 4 |



| 20 – 29 employees | 5 |
|------------------------|-----|
| 30 – 50 employees | 6 |
| More than 50 employees | 7 |
| Don't Know | -97 |
| Refused | -99 |

[IF Q_4 LARGER THAN 50 or -99 then **STOP INTERVIEW/SURVEY**]

5. [DINCEPTIONB] In which year did your business begin operations?

[NOTE: "beginning of operations" means practically starting business activities, such as opening a shop, or setting up an office. It does not include starting thinking about the business idea. The beginning of operations can be before the official registration of the business for tax purposes.]

| Less than a year ago | 1 |
|------------------------|-----|
| 1 – 2 years ago | 2 |
| 2 - 5 years ago | 3 |
| 5 – 9 years ago | 4 |
| 9 – 20 years ago | 5 |
| More than 20 years ago | 6 |
| Don't know | -97 |
| Refused | -99 |

6. (a) [DLFYREVENUESA] What was the approximate annual turnover (revenues) of this business in the previous fiscal year?

[NOTE: this question is asked only for research purposes, and we will not share any data]

| Up to €10,000 | 1 |
|---|-----|
| More than €10,000 and up to €50,000 | 2 |
| More than €50,000 and up to €100,000 | 3 |
| More than €100,000 and up to €500,000 | 4 |
| More than €500,000 and up to €1 million | 5 |
| More than €1 million and up to €2 million | 6 |
| More than €2 million and up to €10 million | 7 |
| More than €10 million and up to €50 million | 8 |
| More than €50 million | 9 |
| Don't know | -97 |
| Refused | -99 |
| | |

(b) [DNFYREVENUESB] What is the approximate annual turnover (revenues) of this business that you expect in the next fiscal year?

[NOTE: this question is asked only for research purposes, and we will not share any data.]

| Up to €10,000 | 1 |
|---|---|
| More than €10,000 and up to €50,000 | 2 |
| More than €50,000 and up to €100,000 | 3 |
| More than €100,000 and up to €500,000 | 4 |
| More than €500,000 and up to €1 million | 5 |
| More than €1 million and up to €2 million | 6 |
| More than €2 million and up to €10 million | 7 |
| More than €10 million and up to €50 million | 8 |



| More than €50 million | 9 |
|-----------------------|-----|
| Don't know | -97 |
| Refused | -99 |

7. [DACTIVITYB] What is the main activity of your business?

| • , , | |
|--|-----|
| Agriculture/ forestry and fishing | 1 |
| Manufacturing | 2 |
| Construction and real estate | 3 |
| Wholesale and retail trade | 4 |
| Transportation/ shipping/ storage | 5 |
| Accommodation/ food and beverage services | 6 |
| Education | 7 |
| Other personal services such as beauty/ repairs/ laundry | 8 |
| Catering/ entertainment/ tourism and hotel | 9 |
| Business services such as legal/ accounting/ advertising/ cleaning | 10 |
| Software & IT Services | 11 |
| Finance | 12 |
| Bank/ Insurance | 13 |
| Healthcare | 14 |
| Communication/ media & publishing | 15 |
| Utilities | 16 |
| Other [please specify] | 17 |
| Don't know | -97 |
| Refused | -99 |

8. [DGENDER] What is your gender?

| Male | 1 |
|---------|-----|
| Female | 2 |
| Other | 3 |
| Refused | -99 |

9. [DAGE] Which of these age bands you fall into?

| 16-18 | 1 |
|-------------|-----|
| 19-29 | 2 |
| 30-39 | 3 |
| 40-49 | 4 |
| 50-59 | 5 |
| 60-69 | 6 |
| 70-79 | 7 |
| 80 or older | 8 |
| Refused | -99 |

10. [DEDUCATION] What is the highest educational level that you have completed?

| Postgraduate (advanced professional training, master's degree, PhD) | 1 |
|---|---|
| Undergraduate (e.g. University) | 2 |
| Upper secondary or high school | 3 |
| Lower secondary or middle school | 4 |
| Primary school | 5 |



| No formal education | 6 |
|---------------------|-----|
| Refused | -99 |

11. [DEDUCRELEVANCE] How closely do your studies relate to economics and/or finance?

| Not at All | Slightly | Moderately | Very | Extremely | Don't know | Refused |
|------------|----------|------------|------|-----------|------------|---------|
| 1 | 2 | 3 | 4 | 5 | -97 | -99 |

12. Have you received any training on the below topics?

[Multiple Answers]

| | - | Last | 1-2 | 3-4 | 5 | Never | Refused |
|-------------------|----------------------|------|-----------|-----------|-----------|-------|---------|
| | | Year | years ago | years ago | years ago | | |
| [DCOURSESOFINOE] | Corporate Finance | 1 | 2 | 3 | 4 | 5 | -99 |
| [DCOURSES0ECON0E] | Personal Finance | 1 | 2 | 3 | 4 | 5 | -99 |
| [DCOURSESOOF0E] | Other finance topics | 1 | 2 | 3 | 4 | 5 | -99 |
| [DCOURSESOMNG0E] | Management | 1 | 2 | 3 | 4 | 5 | -99 |
| [DCOURSESOHRMOE] | Human Resource | 1 | 2 | 3 | 4 | 5 | -99 |
| | Management | | | | | | |
| [DCOURSESOMRKOE] | Marketing | 1 | 2 | 3 | 4 | 5 | -99 |
| [DCOURSESOPCOE] | Computer Science/ | 1 | 2 | 3 | 4 | 5 | -99 |
| | Programming | | | | | | |
| [DCOURSESOPSY0E] | Psychology | 1 | 2 | 3 | 4 | 5 | -99 |
| [DCOURSESOOPDOE] | Other Personal | 1 | 2 | 3 | 4 | 5 | -99 |
| | Development Topics | | | | | | |

13. [DEXPORTB] How much of your total revenue income in the previous fiscal year related to export income?

| r * | |
|--------------------------------------|-----|
| Zero (no exports) | 1 |
| Less than 1/3 of total revenue | 2 |
| Between 1/3 and 2/3 of total revenue | 3 |
| More than 2/3 of total revenue | 4 |
| Don't know | -97 |
| Refused | -99 |

B. Financial Products and Business Finances

14. Have you obtained new financing using any of the following sources of financing? [Tick the ones that apply]

| | | Yes | No | Don't know | Refused |
|--------|--|-----|----|------------|---------|
| [FP1B] | Bank overdraft or credit line (for the business) | 1 | 0 | -97 | -99 |
| [FP1] | Leasing or hire-purchase | 1 | 0 | -97 | -99 |
| [FP2] | Retained earnings | 1 | 0 | -97 | -99 |
| [FP2B] | Business loan from a bank | 1 | 0 | -97 | -99 |
| [FP3] | Subsidised loans | 1 | 0 | -97 | -99 |
| [FP4] | Mezzanine finance | 1 | 0 | -97 | -99 |
| [FP5B] | Public Equity | 1 | 0 | -97 | -99 |
| [FP6B] | Corporate bonds | 1 | 0 | -97 | -99 |
| [FP7] | Micro-credit | 1 | 0 | -97 | -99 |
| [FP8] | Peer-to-peer lending | 1 | 0 | -97 | -99 |
| [FP9B] | Trade credit | 1 | 0 | -97 | -99 |



| [FP10B] | Factoring | 1 | 0 | -97 | -99 |
|---------|----------------------------------|---|---|-----|-----|
| [FP11B] | Venture capital | 1 | 0 | -97 | -99 |
| [FP12B] | Other Private Equity | 1 | 0 | -97 | -99 |
| [FP13B] | Angel investment/Business angels | 1 | 0 | -97 | -99 |
| [FP14B] | Crowdfunding | 1 | 0 | -97 | -99 |
| [FP15] | Initial coin offering (ICO) | 1 | 0 | -97 | -99 |

15. [BF0FCHOICE] Which of the following statements best describes how you made your most recent choice about a financial product or service for the business?

| I considered several options from different financial providers before making my decision | 1 |
|---|-----|
| I considered the various options from one financial provider | 2 |
| I didn't consider any other options at all | 3 |
| I looked around but there were no other options to consider | 4 |
| Don't know | -97 |
| Refused | -99 |

16. [BFOHELP] In the past 12 months [or since business inception - in case the business existed for less than 12 months], has any of these people helped you to take financial decisions for the business?

[NOTE: "help" may include any form of formal or informal advice from family, friends, accountants, or other professional advisors. "Financial decisions" may be related to taking out a loan for the business, paying taxes, keeping track of expenses, accounting, or managing cash flow]

[Multiple answers]

| [ividitiple aliswels] | |
|-------------------------------|-----|
| Business partner | 1 |
| Bookkeeper | 2 |
| Accountant | 3 |
| Auditor | 4 |
| Financial advisor/ consultant | 5 |
| Friend | 6 |
| Family member | 7 |
| Someone else [please specify] | 8 |
| Don't know | -97 |
| Refused | -99 |

17. [BF0TRACKB] How do you keep track of the financial records of the business?

[You can tick up to 3 choices]

| In MS Excel format | 1 |
|---|-----|
| In other electronic format (e.g. dedicated software) | 2 |
| In paper form (e.g. noting them in a notebook; keeping receipts and invoices) | 3 |
| I keep track of financial records in my head | 4 |
| Assign task to a professional (e.g. an accountant) | 5 |
| Using an App | 6 |
| In another way [please specify] | 7 |
| I do not usually keep track | 8 |
| Don't know | -97 |
| Refused | -99 |



18. [FRAG3B] In the last 12 months [or since business inception - if the business existed for less than 12 months], has the business been confronted with situations where funds were insufficient to cover cash outflows or to pay for expected expenses of the business (such as paying suppliers, paying taxes, repaying debt...)?

| Yes | 1 |
|------------|-----|
| No | 2 |
| Don't know | -97 |
| Refused | -99 |

19. [BF0COVIDSUPPORTB] Please indicate whether your enterprise has received any of the following forms of support introduced due to the pandemic.

| [a.c.p.e a.ie.re.e] | |
|---|-----|
| Government support to alleviate the wage bill | 1 |
| Tax cuts and tax moratoria | 2 |
| Debt moratorium (ex lege or private) | 3 |
| Other government support scheme | 4 |
| Does not apply for my business (didn't get any support) | -96 |
| Don't know | -97 |
| Refused | -99 |

C. Financial knowledge and attitude

20. [FKS0INT1] Suppose you have €100 in a savings account and the guaranteed interest rate was 2% per year (no fee, tax free). You don't make any further payments to this account, and you don't withdraw any money. How much do you think you would have in the account at the end of five (5) years?

| € 110 exactly | 1 |
|-----------------|-----|
| Less than € 110 | 2 |
| Over € 110 | 3 |
| € 102 exactly | 4 |
| Don't know | -97 |
| Refused | -99 |

21. [FKS0INF1] Suppose the interest rate on your savings account was 1% per year and inflation was 2% per year. After one (1) year, how much would you be able to buy with the money in this account?

| More than today | 1 |
|------------------|-----|
| Exactly the same | 2 |
| Less than today | 3 |
| Don't know | -97 |
| Refused | -99 |

22. [FKS0DEF1BS] Could you please tell me which of the options below best describes a balance sheet?

| A financial snapshot, taken at a point in time, of the firm's assets and liabilities | 1 |
|--|-----|
| A record of profits and losses of the firm in a certain period of time | 2 |
| A record of the flow of financial resources over time | 3 |
| None of these | 4 |
| Don't know | -97 |



| Refused | -99 | l |
|---------|-----|---|
| | | |

23. [FKS0DEF2RETURN] Could you please tell me which of the options below best describes the Returns on Assets ratio (ROA)?

| An indicator of the firm's capital structure | 1 |
|--|-----|
| An indicator of the firm's liquidity | 2 |
| An indicator of the firm's performance | 3 |
| None of these | 4 |
| Don't know | -97 |
| Refused | -99 |

24. Do you think the following statements are true or false?

| - | | True | False | Don't know | Refused |
|-------------------|--|------|-------|---------------|---------|
| [FKS0LOAN2] | A 15-year mortgage typically requires higher monthly payments than a 30-year mortgage, but the total interest paid over the life of the loan will be less. | 1 | 2 | -97 | -99 |
| [FKS0DEF3EQUITY1] | Dividends are part of what a business pays to a bank to repay a loan | 1 | 2 | -97 | -99 |
| [FKS0DEF3EQUITY2] | When a company obtains equity from an investor it gives the investor part of the ownership of the company | 1 | 2 | -97 | -99 |
| [FKS0INF2] | High inflation means that the cost of living is increasing rapidly | 1 | 2 | -97 | -99 |
| [FKSORISK2V] | An investment with a high return is likely to be high risk | 1 | 2 | -97 | -99 |
| [FKSORISK3] | If the interest rate rises, bond prices should rise as well | 1 | 2 | -97 | -99 |
| [FKSORISK2] | If a financial investment offers the chance to make a lot of money it is likely that there is also a chance to lose a lot of money | 1 | 2 | -97 | -99 |

25. [FRAG2B] For how long your annual business expenses are covered by the cash and cash equivalent (savings, chequing account, etc) without seeking further loans or money from family or friends?

| less than one month | 1 |
|---|-----|
| at least for one month but no more than three months of expenses | 2 |
| at least for three months but no more than six months of expenses | 3 |
| more than six months | 4 |
| Don't know | -97 |
| Refused | -99 |



26. [FRAG2B0COVID] How would you have answered the previous question prior to the pandemic outbreak?

| less than one month | 1 |
|---|-----|
| at least for one month but no more than three months | 2 |
| of expenses | |
| at least for three months but no more than six months | 3 |
| of expenses | |
| more than six months | 4 |
| Don't know | -97 |
| Refused | -99 |

27. Using a scale from 1 to 5, where 1 stands for "strongly disagree" and 5 stands for "strongly agree", please answer to what extent the following statements apply to you:

[Don't know: -97 Refused: -99]

| [FB0FM4BE] | Having a (written) financial plan for my | | | | 4 | 5 | -97 | -99 |
|------------------|--|---|---|---|---|---|-----|-----|
| | business is necessary | | | | | | | |
| [FKS0FINANCE1BE] | I know how to raise funds if my business | 1 | 2 | 3 | 4 | 5 | -97 | -99 |
| | needs them | | | | | | | |
| [FA0CONF3BE] | I am very good at taking day-to-day | 1 | 2 | 3 | 4 | 5 | -97 | -99 |
| | financial decisions | | | | | | | |
| [FAOSTF1BE] | I set long-term financial goals for the | 1 | 2 | 3 | 4 | 5 | -97 | -99 |
| | business and strive to achieve them | | | | | | | |
| [DPERSOTRUST2BE] | I trust professionals for my firm's | 1 | 2 | 3 | 4 | 5 | -97 | -99 |
| | investment decisions because they | | | | | | | |
| | always act in my businesses' interest | | | | | | | |
| [DPERSORISKOBE] | I prefer high-risk and high-yield projects | 1 | 2 | 3 | 4 | 5 | -97 | -99 |
| | rather than low-risk and low-yield | | | | | | | |
| | projects | | | | | | | |
| [FKSORISK7E] | I decide whether to make an investment | 1 | 2 | 3 | 4 | 5 | -97 | -99 |
| | on the basis of the financial data of the | | | | | | | |
| | business | | | | | | | |
| [FB0FM4BEV] | 4BEV] I prefer to follow my instinct rather than | | 2 | 3 | 4 | 5 | -97 | -99 |
| | to make detailed financial plans for my | | | | | | | |
| | business | | | | | | | |
| [FKS0FINANCE2BE] | I know how to access government | 1 | 2 | 3 | 4 | 5 | -97 | -99 |
| | financial support for my business | | | | | | | |
| [FB0FM2BE] | I prepare budgets to manage my | 1 | 2 | 3 | 4 | 5 | -97 | -99 |
| | company's income and expenses on a | | | | | | | |
| | regular basis (e.g. monthly) | | | | | | | |
| [FB0FM6BE] | I monitor my company's income and | 1 | 2 | 3 | 4 | 5 | -97 | -99 |
| | expenses on a regular basis (e.g. | | | | | | | |
| | monthly) | | | | | | | |

28. [FA0CONF7BE] Using a scale from 1 to 5, where 1 stands for "strongly disagree" and 5 stands for "strongly agree", please answer to what extent the following statement applies to you: " I am confident to approach banks and external investors to obtain business finance"

| Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree | Don't know | Refused |
|----------------------|----------|---------|-------|-------------------|---------------|---------|
| 1 | 2 | 3 | 4 | 5 | -97 | -99 |



29. [FA0CONFG2E] On a scale of 1 to 5, where 1 stands for "very poor" and 5 stands for "very good", how would you rate your financial literacy in general?

| - 7 | · | | <u> </u> | | | | |
|-----|-----------|------|----------|------|-----------|------------|---------|
| | Very Poor | Poor | Moderate | Good | Very good | Don't know | Refused |
| | 1 | 2 | 3 | 4 | 5 | -97 | -99 |

30. [MOTIVEB] How much time do you spend daily to gather information about economic and financial issues your business faces?

| 1000000 | |
|---------------------------|-----|
| Almost none | 1 |
| Less than 30 minutes | 2 |
| Between 30 and 60 minutes | 3 |
| Between 1 and 2 hours | 4 |
| More than 2 hours | 5 |
| Don't know | -97 |
| Refused | -99 |

D. Digitalisation

31. [DTECH1B] On a scale of 1 to 5, where 1 stands for "Offline" and 5 stands for "Online", how would you describe your current business activities:

| Offline | Mainly Offline | Mix | Mainly Online | Online | Don't know | Refused |
|---------|-------------------|-----|------------------|--------|------------|---------|
| 1 | 2 | 3 | 4 | 5 | -97 | -99 |

32. [DTECH2B] Have you maintained or increased the level of digitization of business processes/functions (e.g., taking orders online, online payments) within the last 12 months?

| Maintained | 1 |
|------------|-----|
| Increased | 2 |
| Don't know | -97 |
| Refused | -99 |

33. What was the average share of staff working remotely on a given day before and during the pandemic? And what do you think the share of total staff working remotely would be once the pandemic is over?

| | [DTECH3aB] (a) Before the pandemic | [DTECH3bB] (b) During the pandemic | [DTECH3cB] (c) Once the pandemic is over |
|--------------------------|------------------------------------|------------------------------------|--|
| Share of total staff (%) | pariaerine | pariaerine | |
| Refused | -99 | -99 | -99 |

34. On a scale of 1 to 5, where 1 stands for "not at all" and 5 stands for "to a great extent", to what extent the following factors hinder employee remote working?

[Don't know: -97 Refused: -99]

| [DL0ENV1BE] | Lack or inadequate technological | | 2 | 3 | 4 | 5 | -97 | -99 |
|-------------|---|---|---|---|---|---|-----|-----|
| | infrastructure (e.g. computers, cloud, etc) | | | | | | | |
| [DL0EMP1BE] | Employees lack or inadequate digital skills | 1 | 2 | 3 | 4 | 5 | -97 | -99 |
| [DL0EMP2BE] | Employees lack or inadequate confidence in | 1 | 2 | 3 | 4 | 5 | -97 | -99 |
| | applying digital skills | | | | | | | |
| [DL0ENV2BE] | Many tasks cannot be carried out remotely | 1 | 2 | 3 | 4 | 5 | -97 | -99 |
| | for technical reasons (e.g. because the | | | | | | | |



| | production process requires the physical presence of workers) | | | | | | | |
|-------------|---|---|---|---|---|---|-----|-----|
| [DLOENV3BE] | Difficulties in organizing work remotely (e.g. in monitoring the tasks being performed and/or in organizing work based on a target-oriented approach) | 1 | 2 | 3 | 4 | 5 | -97 | -99 |
| [DL0EMP3BE] | Employees' lack of access to stable internet connection | 1 | 2 | 3 | 4 | 5 | -97 | -99 |
| [DL0ENV4BE] | Cybersecurity attacks | 1 | 2 | 3 | 4 | 5 | -97 | -99 |
| [DL0EMP4BE] | Employee Culture | 1 | 2 | 3 | 4 | 5 | -97 | -99 |

35. On a scale of 1 to 5, where 1 stands for "not at all" and 5 stands for "to a great extent", to what extent does your company utilise the following (digital) tools?

[Don't know: -97 Refused: -99 Never heard of this tool before: -98]

| [DLOTOOLS1BE] | Internet of Things (IoT) | 1 | 2 | 3 | 4 | 5 | -98 | -97 | -99 |
|---------------|---|---|---|---|---|---|-----|-----|-----|
| [DL0TOOLS2BE] | E-invoicing | 1 | 2 | 3 | 4 | 5 | -98 | -97 | -99 |
| [DL0TOOLS3BE] | Cloud Computing | 1 | 2 | 3 | 4 | 5 | -98 | -97 | -99 |
| [DL0TOOLS4BE] | Videoconferencing | 1 | 2 | 3 | 4 | 5 | -98 | -97 | -99 |
| [DL0TOOLS5BE] | E-commerce | 1 | 2 | 3 | 4 | 5 | -98 | -97 | -99 |
| [DL0TOOLS6BE] | Big data and data analytics | 1 | 2 | 3 | 4 | 5 | -98 | -97 | -99 |
| [DL0TOOLS7BE] | Digital marketing | 1 | 2 | 3 | 4 | 5 | -98 | -97 | -99 |
| [DL0TOOLS8BE] | 3D printing | 1 | 2 | 3 | 4 | 5 | -98 | -97 | -99 |
| [DL0TOOLS9BE] | Social media platforms (for the business) | 1 | 2 | 3 | 4 | 5 | -98 | -97 | -99 |

36. Using a scale from 1 to 5, where 1 stands for "not at all" and 5 stands for "to a great extent", answer to what extent the following statements apply to your organisation:

[Don't know: -97 Refused: -99]

| | <u> </u> | | | | | | | |
|--------------|--|---|---|---|---|---|-----|-----|
| [DLOAT1BE] | Digital transformation is a top priority at my | 1 | 2 | 3 | 4 | 5 | -97 | -99 |
| | organization | | | | | | | |
| [DLOAT2BE] | Employing new technologies is key to achieve | 1 | 2 | 3 | 4 | 5 | -97 | -99 |
| | market differentiation for my organization | | | | | | | |
| [DL0CONF1BE] | My organization knows exactly what to do when | 1 | 2 | 3 | 4 | 5 | -97 | -99 |
| | it comes to digital transformation | | | | | | | |
| [DL0CONF2BE] | My organization has the necessary workforce and | 1 | 2 | 3 | 4 | 5 | -97 | -99 |
| | skillset to support the digital transformation | | | | | | | |
| | process | | | | | | | |
| [DL0CONF3BE] | My organization is always successful at navigating | 1 | 2 | 3 | 4 | 5 | -97 | -99 |
| | digital transformation initiatives | | | | | | | |
| [DL0CONF4BE] | My organization has the necessary culture it | 1 | 2 | 3 | 4 | 5 | -97 | -99 |
| | needs to support digital transformation | | | | | | | |
| [DTECH4BE] | Funding for digital transformation priorities is | 1 | 2 | 3 | 4 | 5 | -97 | -99 |
| | rarely (or never) a problem | | | | | | | |
| [DLOAT3BE] | Digital transformation is critical to maintaining | 1 | 2 | 3 | 4 | 5 | -97 | -99 |
| | the profitability of my organization | | | | | | | |
| [DTECH5B] | My organisation has a clear road map for | 1 | 2 | 3 | 4 | 5 | -97 | -99 |
| | implementing Industry 4.0 | | | | | | | |
| [DLOAT4BE] | Managing cyber security is a high priority for the | 1 | 2 | 3 | 4 | 5 | -97 | -99 |
| | organization | | | | | | | |
| | | | | | | | | |



| [DLOFINANCE1BE] | My organisation has access to the necessary funding to finance its digital transformation plan | 1 | 2 | 3 | 4 | 5 | -97 | -99 |
|-----------------|---|---|---|---|---|---|-----|-----|
| [DL0BUDGET1BE] | My organisation has a dedicated, comprehensive and flexible budget for implementing its digital transformation plan | 1 | 2 | 3 | 4 | 5 | -97 | -99 |

37. [DTECH6] Who is currently leading your firm's digital transformation process?

| Chief Executive Officer (CEO) | 1 | Other [Please specify role] | 5 |
|---------------------------------|---|--|-----|
| Chief Information Officer (CIO) | 2 | No digital transformation plan is in place | 6 |
| Chief Technology Officer (CTO) | 3 | Don't know | -97 |
| Third Party | 4 | Refused | -99 |

38. [DLOPLAN1E] Have you created and maintained a comprehensive incident response plan to help guide your action during an unwanted cybersecurity event?

| Yes | 1 |
|------------|-----|
| No | 2 |
| Don't know | -97 |
| Refused | -99 |

39. [DLORESILIENCE1BE] Have any of the following breaches or attacks happened to your organisation the last 12 months?

[Multiple answers]

| [Mattiple allswers] | |
|--|-----|
| Fraudulent emails or being directed to fraudulent websites | 1 |
| Others impersonating organisation in emails or online | 2 |
| Other phishing attacks | 3 |
| Viruses/ spyware/ malware | 4 |
| Ransomware | 5 |
| Hacking or attempted hacking of online bank accounts | 6 |
| Unauthorised use of computers/ networks or servers by staff or outsiders | 7 |
| Other breaches or attacks [please specify] | 8 |
| Don't know | -97 |
| Refused | -99 |

E. Training preferences

40. [FTRAIN1] What is your preference in terms of training delivery method?

| , , | • |
|--|-----|
| One-to-one | 1 |
| Workshops | 2 |
| Live Webinars | 3 |
| eLearning | 4 |
| Blended (a mix of online and offline training) | 5 |
| Don't know | -97 |
| Refused | -99 |

41. [FTRAIN2] How much personal time would you be willing to invest in training on financial literacy and digital literacy (including online and independent learning) per annum?

| 0-5 hours | | 1 |
|------------|--|---|
| 6-10 hours | | 2 |



| 11-20 hours | 3 |
|--------------------|-----|
| 21-40 hours | 4 |
| More than 41 hours | 5 |
| Don't know | -97 |
| Refused | -99 |

[End of Questionnaire

Thank you for your participation]