DIGITUP

DIGITAL UPGRADE SKILLING

Policy Brief

A policy brief for VET educators and providers about Digital Upgrade skilling of SMEs and self-enterprises

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EXECUTIVE SUMMARY

Since we live in the era of Industry 4.0 and advanced technologies, there is an increasing need to equip VET practitioners and educators with the knowledge and tools to effectively train SME managers and self-entrepreneurs in the realm of digital skills and industry best practices. This policy brief has been specially designed within the framework of the DigitUp project and seeks to address the above identified need.

As part of its objectives, the policy brief draws on the valuable findings and results from the DigitUp project, to deliver insights into policy recommendations and actionable strategies for VET providers seeking to address high-quality training experiences aligned with the digital transformation needs of SMEs and based on the main activities, findings and results from the partner countries in the project.

By utilising the resources and guidance provided in this policy brief, VET practitioners can enhance their e-readiness and capabilities, ultimately improving their ability to effectively train and support SME managers in their digital transformation journey.

1. INTRODUCTION

1.1 About the project

Digitalisation is amongst the various challenges that **European Small and Medium- Sized Enterprises (SMEs)** face in today's climate. A major number of SMEs, report that they do not possess basic digital skills, resulting in a positive link between **digital skill levels** and **turnover growth**. SMEs deal with several difficulties towards developing an **online presence**, they have a lack of awareness about the benefits and opportunities available related to digital resources, they are not familiar with **digital platforms** implementation, they do not have the solid knowledge to understand and assess digitalization transformation, digital formations, and online tools and platforms, and thus, they do not engage in **Industry 4.0.**

The **DigitUp project** aimed to develop an **innovative training course**, **a serious game**, and **assessment tools** that will make it practical for VET educators and teachers to train and transform managers of SMEs and self-entrepreneurs into the future managers, armed with **cutting-edge digital skills** that will enable them to achieve digital transformation using Industry 4.0 frameworks and **BIC technologies**.

Through the DigitUp project, the participants will have access to and use innovative teaching and learning practices. By supporting measures that strengthen **ecosystems** and structurally increase the supply of necessary skills, as well as facilitate organizational development and high performance, European SMEs can adopt **disruptive tech-based practices** in greater numbers. In terms of supporting **vocational education and training**, DIGITUP project pursuits to strengthen capacity among VET educators in implementing technological, digital, and other skills addressing their need to adopt also new knowledge upon digital transformation, including **innovative pedagogic and educational methods**, building also a **network of qualified VET educators**.

The consortium bringing to life the DigitUp project comprises the coordinating organization based in the Czech Republic, the European Development Agency (EUDA) as well as its 6 other partner organizations. These are Innovation Hive in Greece, GEInnova in Spain, Synthesis Center for Research and Education in Cyprus, Prios Kompetanse in Norway, Consorzio Hypatia in Italy, and finally Balkan Bridge in Bulgaria. The consortium is dedicated to bringing the vision and mission of DigitUp to life, ensuring quality in every project result it delivers throughout the life cycle of the project.

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1.2 Project objectives

The DigitUp project seeks to support the digital transformation in Vocational Education and Training (VET) and empower small and medium-sized enterprise (SME) managers with cutting-edge digital skills. Moreover, the DigitUp project aims to develop a comprehensive set of resources, including an accessible training course, a serious game, assessment tools, and piloting activities.

DigitUp has the following concrete **objectives**:

1. Identify the digital skills that are highly demanded by SMEs and self-enterprises
2. Provide cross-sectoral inputs towards the future digital skills
3. Communicate to SMEs' managers and self-enterprises breakthroughs in emerging technologies
4. Provide free access to high quality and up-to-date information, material, training, and support
5. Develop assessment tools for digital skills measuring
6. Provide training material relevant to SMEs digitalization
7. Highlight the importance of digitalization for SMEs' and self-enterprises
8. Expand digital skills policy, highlight transferable skills
9. Develop a detailed and systematic methodology for VET educators
10. Support VET educators and trainers with proper resources and materials
11. Run pilot sessions with VET educators, trainers, managers, supervisors, and self-entrepreneurs
12. Perform dissemination and validation of the project outcomes
13. Ensure the access to and use of innovative teaching and learning practices by the users
14. Increase and enhance public debate about digital for SMEs, microbusinesses, and self-enterprises

The project is expected to have a significant impact on the project participants, partners, target groups, regional and national stakeholders, and project countries. The Project's target group (e.g. SME managers, self-entrepreneurs, managers, and supervisors of small businesses) is expected to be equipped with all the necessary digital skills and modern capabilities, participating in a series of piloting activities. The activities of the project will lead to a positive long-term impact on the target groups in that it will prepare them with the necessary means to identify the types of digital skills that are highly demanded by SMEs and self-enterprises.

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1.3 Project partners

EVROPSKA ROZVOJOVA AGENTURA, S.R.O. EUDA, Czech Republic

European Development Agency EUDA is a Prague-based private company specialising in accessing and managing European funds. EUDA core activities are project consultation, creation, and management. EUDA assists its clients and partners throughout the projects' life cycle writes research-based projects; searches for partners; tackles submission processes; consults with stakeholders; coordinates projects' implementation; conducts periodical quality assurance; and produces summative and evaluative reports. EUDA also performs educational activities; facilitates transfers of know-how via international mobilities and traineeships; and coordinates EUDA Network. EUDA operates with entities from European Union Member States, Eastern Partnership and Western Balkan countries. EUDA worked with programmes like Erasmus+, Europe for Citizens, Visegrad Fund, Interreg Europe, EEA-Norway Grants, and national Operational Programmes within European Structural and Investment Funds. EUDA has experience in projects on, inter alia, youth, adult, and higher education; Vocational Education and Training; employment; social inclusion; social and technological innovation; health literacy; sustainable, urban, and regional development.

SYNTHESIS Center for Research and Education, Cyprus

Established in 2002, SYNTHESIS Center for Research and Education is a pioneering organization which designs and implements research and educational projects with social impact. SYNTHESIS is one of the leading institutions in Cyprus in the fields of social innovation and social entrepreneurship; it founded Hub Nicosia, a social innovation hub which houses and supports entrepreneurs and organizations with a social mission. In a world surrounded with conflict and exclusion of many forms, SYNTHESIS aspires to take part in actions that improve individual lives, enhance social inclusion, and contribute to a green and sustainable future, for the people and the planet.

INNOVATION HIVE, Greece

Innovation Hive is a private non-profit organization located in Greece, specialized in the fields of research and innovation. Our actions aim to enhance the economic and social cohesion of European societies while our goal is to find solutions to the new innovation challenges, achieve growth, sustainability and maximize the impact to the society. The organization's philosophy to achieve these goals is based on co-creation methodologies and a quadruple helix approach. The engagement of stakeholders from industry, science and society is aiming to create links between the businesses, the academia and the civic actors to develop a combination of knowledge, skills, tools, values and motivation. The final goal is to make a difference in local societies and to succeed at the highest level the principles of social innovation concepts.

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GESTION ESTRATEGICA GEINOVA, Spain

Gestión Estratégica e Innovación (GEInnova) is a training center specialized in the areas of entrepreneurship and leadership, e-learning and e-learning platforms that was created with the aim of increasing the quality of education and entrepreneurship of the promoters, with innovative approaches in the educational and social fields and gender perspective. In addition, it has an expert team in European project management, which brings its experience in the development of courses and training activities. Through the development of a digital platform, they help companies, organizations and public administrations, with expert advice and training. They also promote and support the sustainable development of local communities and the empowerment of people through education and training in the fields of leadership and entrepreneurship.

BALKAN BRIDGE, Bulgaria

Balkan Bridge is an organisation aiming to bring together the societies of Balkans and to achieve cooperation and growth. The mission of the organization is to cover the gaps of the Balkan area in terms of professional training, networking and research activities with the goal to transform Balkans to a sustainable ecosystem with a highly skilled human capital and businesses able to adapt to the needs of the society and the global trends. To achieve its goals, Balkan Bridge is providing consultancy services, training for the improvement of professional skills to individuals and corporate training for businesses to achieve teams' growth and empowerment.

PRIOS KOMPETANSE, Norway

Prios Kompetanse AS (Prios) is a Norwegian research-based company. The most important sectors and activities Prios operates in are briefly: – Prios is recognised as a national study center and our educational activities are focused on adult students and training services within basic skills, vocational subjects, training for entrepreneurs and tailored training for companies. – Our software department supports our educational activities and develops new digital solutions based on customers' needs or specification from various projects we participate in. We developed and own the FollowUp® concept. – Our consulting activities mainly support our customers within internal innovation processes, HR processes, financial advice, green transition, circular economic development and management support. – Our international department develops, coordinates and participates in various international projects

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CONSORZIO DI RICERCA HYPATIA, Italy

Hypatia is a private research consortium aiming to promote, develop and exploit the results of scientific, technological and human resources. Hypatia is born from the collaboration and partnership among Universities, Research Centres and Enterprises to start up and promote R&D projects with sustainable goals. The network of the Consortium has the role of collector among know-how holders and industrial organisations, taking care of the topics of the technology transfer and the matching between R&D laboratories and productive organisations. Hypatia's strengths is based on the creation of shared spaces within Research Centres, Academia and enterprises operating to find common interests and synergies, promoting the technology transfer as appropriate method for growth, encourage the collaboration between scientific and industrial world.

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2. Status, gaps, needs and good practices related to VET and Digital Upgrade skilling of SMEs and self-enterprises

Vocational Education and Training (VET) providers and educators are willing to delve into digitalisation, however, there is an evident lack of resources to support their uptake of systematic training for digitalisation of SME managers across Europe.

Towards this end, the **VET Practitioner Handbook** was developed as part of the DigitUp project, and incorporates valuable horizontal findings and presents the results from the seven Partnership countries involved in the DigitUp project:

It covers a wide range of topics related to BIC technologies, digital tools, online learning, and innovative teaching methodologies as well as aims to serve as a comprehensive guide that offers practical insights, strategies, best practices and resources that have been carefully designed to facilitate VET practitioners in delivering high-quality training experiences aligned with the digital transformation needs of SMEs and based on the main activities, findings and results from these countries:

- the "State of Play Reports" on digital transformation
- a summary of a survey conducted on digital skill needs among European SMEs and self-entrepreneurs
- a taxonomy on the relevant digital technologies for the transformation process
- practical best practices showcasing successful digitalization processes in SMEs and self-entrepreneurs.

By utilizing the resources and guidance provided in this handbook, VET practitioners can enhance their e-readiness and capabilities, ultimately improving their ability to effectively train and support SME managers in their digital transformation journey.

To gain insights into the practices, gaps and needs related to Digital Upgrade skilling of SMEs and self-enterprises, **'The State of Play of the Digital Transformation'** reports on digital transformation were conducted within the countries of the participating partners of the DigitUp project (Bulgaria, Cyprus, Czech Republic, Italy, Greece, Norway, Spain).

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The findings ensuing from the aggregate national desk research feed into the creation of the DigitUp **online self-assessment tool**, for the measurement of digital skill levels. **Competency-based education is identified as a best practice towards support of VET educators for digital transformation.** Adopting a competency-based approach to education and training, focusing on the development also of specific skills, knowledge, and abilities is required for a particular occupation.

The DigitUp innovative assessment tool for SMEs managers and self-entrepreneurs, takes the above into consideration to incorporate digital skills profiling; in particular, it seeks to measure and assess the digital skills level, digital literacy and tech-based competences of SMEs managers and self-entrepreneurs.

Methodology: Partners engaged in primary (online surveys) and secondary research (desk research) to deliver the handbook. For the national 'state of play' reports, the chosen research items ought to provide a representative, topical, and up-to-date overview of the institutional set-up and policy framework in the partners' countries. The online survey on Digital Transformation skills of managers of small and medium-sized enterprises (SMEs) and self-employed entrepreneurs was conducted in the countries of the project partners. The survey was designed on the most relevant parts of digital transformation topics, as identified in the "State of Play Reports" and European best practices for digital investigation needs.

Data analysis: The desk research was based on comparable research items and indicators. Moreover, to cover a similar time horizon, the research covered institutional and policy developments from the past 10-20 years in each partner country. The online surveys were analysed thematically, based on the project objectives and scope. The survey was administered to at least 5 SMEs' managers and self-entrepreneurs per country partner for a total of at least 35 participants and the collected data has been analysed to provide insightful information and knowledge on:

- the digital level and potential needs of SMEs' managers and self-entrepreneurs on the digital transformation;
- inputs for developing the Online assessment tool for SMEs managers and self-entrepreneurs and piloting activity;
- raise awareness and increase the know-how of all partners involved in the project;
- guidance for developing the present VET Practitioner Handbook.

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Final report: DigitUp State of Play Report is intended to be a cross-country, individually- sensible, yet collectively representative material. In other words, DigitUp State of Play Report will act as a mapping of needs in SME managers and self- entrepreneurs in relation to digital transformation. The findings from the online surveys with SME managers are incorporated in the VET Practitioner handbook.

Findings:

The European Union has defined its ambition: reaching a digitalisation rate of 75% by 2030, for Small to Medium size Enterprises (SMEs). These form the backbone of European economies, but great development discrepancies exist between all the EU's members. Some regional patterns exist, such as among the Visegrad group, which have similar levels of digital intensity.

SMEs, however, are generally not adopting digital transformation and digitalization. SMEs are engaging in digitalization on their own to some extent, but it is an expensive and time-consuming process that impedes their growth. Everyone agrees that to facilitate digital transformation, infrastructure and technology are lacking; many rural areas of Europe still need improved Internet access. Furthermore, there exists a significant deficiency in numerous crucial facets of digitalization, including inadequate comprehension of the advantages, insufficient backing from the government, insufficient financial resources to support such a costly shift, inadequate knowledge of the cyber domain and cybersecurity, and insufficient human capital in the form of expertise and abilities. Still, not only the commercial sector is affected by these problems; governmental services and state infrastructures also urgently require change.

According to the CEDEFOP Report "Setting Europe on course for a human digital transition" (2022), a survey that performed over 46.000 European workers, digitalization is at the core of the human debates on the future work, in positive as well as negative terms. The CEDEFOP report's data indicates that the transition of digital skills is not yet a reality. The goal of the digital revolution, according to researchers and policymakers, is "to reshape work in a human-centric way, where people seamlessly collaborate with technology, rather than being replaced by it."

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Findings:

The results of the survey with a sample of SME managers, indicate that limited financial resources may be a barrier to the digitization of management processes since these procedures sometimes call for a sizable upfront investment in hardware and software in addition to expenditures associated with hiring new staff and providing training. These expenses may be unaffordable for SMEs with little funding, particularly if they are already having difficulty keeping up with operations or are dealing with other financial difficulties.

The absence of training and competencies for digital preparedness (cumulatively, about 50%) is another crucial factor. This point is related to the one before it (inadequate financial resources for digital skill training and upgrades of managers and staff). This argument and the "scares human resources" revelation can be used to show how SMEs operating on both the human resources and economic sides need to develop their digital assets.

SMEs can learn about digital tools and technologies from a variety of free online resources, many of which are tailored especially for small enterprises. Digital tools and technologies are also reasonably priced and easily accessible. Therefore, in addition to training programs, it would be helpful for SMEs to have access to publicly available online light guidebooks on digital technology, particularly on:

- **Open-source platforms**
- **Social media platforms**
- **Collaboration tools**
- **Other Cloud-based software solutions**
- **Mobile apps**

These tools can help SMEs improve their productivity, efficiency, and competitiveness.

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Existing approaches:

The governments of every country that took part in the State of Play report recognised the necessity of digitalisation and created strategies for digital transformation that were partially financed by EU recovery funds. These recovery plans centre on Big Data, Cybersecurity, and the Internet of Things (BIC), but they also include tax breaks, infrastructure development, skill development, human capital investment, and R&D. On the one hand, a few SMEs have already used BIC technologies after seeing the value it adds to productivity, profitability, and optimization.

However, even though some SMEs are using social media and internet marketing, they are still far behind in every area of digitalization. Using advocates, support centres, and networks as agents is an extra helpful strategy. Using networks, centres of support, and promoters as agents to promote and assist digital transformation is another helpful strategy. To assist SMEs, associations, cooperative groups, innovation hubs, and centres have emerged in several nations. Programmes that combine professional sectors with educational institutions, like universities, have been developed in some situations, like Norway and Italy, with the goal of linking the educational and private sectors to build skills and lay the groundwork for digital transformation.

Best practices:

The best practices that can be used by SMEs to fulfil the EU target include investing in human capital through digitalisation education and providing financial capital to support digital development, in addition to modernizing public administration and technology infrastructure. Widespread support is necessary to guarantee the effective and seamless integration of contemporary technologies.

Furthermore, hubs, groups, and innovation centres are helpful tools for supporting small and medium-sized enterprises (SMEs) in their digital transformation efforts and facilitating cooperation. Finally, bringing together the public and academic sectors with the private sector through cooperation or training programs would ensure the effective shaping of a new generation of highly qualified digital professionals who will drive Europe's digital transformation and maintain the continent's competitiveness.

A variety of tactics, approaches, and procedures that have been shown to improve the calibre of vocational education and training are included in the best practices for VET (Vocational Education and Training). According to findings from studies carried out during the DigitUp project's lifespan:

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Continuous professional development is crucial, and we invest in the professional development of VET practitioners by offering ongoing training, workshops, and opportunities for collaboration and sharing of best practices. This ensures that educators stay abreast of industry trends, emerging technologies, and pedagogical advancements. There is a need for dedicated training of VET educators about upskilling of SME managers for digital transformation. Thereby, a dedicated and innovative training course was delivered via an interactive elearning platform designed, addressed to VET providers/trainers/educators and SME managers.

The Training Course aims to bring knowledge, train, and empower SME managers, supervisors, self-entrepreneurs, and relevant stakeholders to foster their digital skills and become familiar with cutting-edge technologies under the framework of Industry 4.0 and BIC technologies advantages.

The WP involves the development of a Training Curriculum which will adopt a blended methodology:

- **Face to face training**
- **Work-Base Learning initiatives**
- **Online Resources**

The DigitUp elearning platform, hosts the training course in all partner languages and includes 8 modules:

- **Module 1: Digital Literacy Fundamentals**
- **Module 2: Industry 4.0 and Its Benefits**
- **Module 3: Big Data Essentials**
- **Module 4: BIC Technologies (Internet of Things, and Cloud)**
- **Module 5: Cybersecurity for Small Businesses**
- **Module 6: Business Model and Digital Marketing**
- **Module 7: Business Continuity Plan Module**
- **Module 8: Practical Digital Tools and Platforms**

Each module was designed to be straightforward with factsheets providing an overview of the module, the content of the module in slides, and key aspects addressed through a Mindsmith AI interactive presentation.

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Supporting transnational cooperation and mutual learning: on forward-looking issues amongst important stakeholders (industry, associations, academia, and international organizations), and enabling them to create novel solutions and encourage the transfer of those solutions in new contexts. This includes developing relevant stakeholders' capacity and creating curriculum that is current and relevant, offering opportunities for work-based learning, and making sure that training programs are in line with industry needs.

Participate in official EU programmes: VET institutions can promote international collaboration, open funding opportunities, and stimulate innovation in education and training by participating in EU programs and facilities such as Erasmus+, Horizon Europe, Digital Europe, and the Recovery and Resilience Facility. These programs enable VET practitioners, students, and institutions to stay on the cutting edge of advancements in education, research, digitalization, and recovery efforts by facilitating the exchange of knowledge, best practices, and experiences.

• Digital Skills and Jobs Platform: It offers a vast array of excellent tools, opportunities, and information about digital skills and careers at all skill levels, from entry-level to expert. New users may easily obtain current insights, while seasoned professionals can gain from content that is specifically tailored to their area of expertise.

Work-based learning: Include work-based learning opportunities in VET programs, such as internships, apprenticeships, and on-the-job training. By giving students real-world, hands-on experience in professional settings, this helps them build industry exposure and job-specific abilities. It is important to examine how to use contemporary integrated apps and digital technology to address problems in the real world.

With the use of **online learning platforms, augmented reality, virtual reality, and artificial intelligence,** VET can offer immersive and dynamic learning opportunities that mirror the changing digital landscape.

Encourage agile frameworks and programmes: Identify and meet the various requirements of students by implementing individualized teaching strategies. It is necessary to routinely assess the programs, curricula, and prerequisites of vocational education and training to determine the competencies, knowledge, and abilities that businesses and industries demand. Provide students with individualized learning goals, flexible course delivery, and customized feedback and assistance to guarantee their success. Promote cutting-edge training techniques as well as technical and digital competencies.

- Including **living labs**, where students may learn how to strengthen their critical thinking, creativity, problem-solving, and holistic approach to difficulties across disciplines.

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- **Showcasing success stories:** VET institutions can inspire people, foster entrepreneurial skills, and give students the information and resources they need to transform their ideas into profitable ventures by disseminating and examining success stories from companies and other organizations that have received European funding and support for their innovation projects.
    - EU success stories from EU-funded research & innovation
    - ESA Business Applications Portfolio
    - Enterprise Europe Network

Participate in official EU social media platforms for instruction and training. Vocational education and training-related webinars, workshops, conferences, and training programs are frequently advertised on EU social media networks. VET practitioners can learn new skills and information, build their professional networks, and obtain information about professional development opportunities by subscribing to these channels. These chances may support their ongoing professional development and advancement as teachers.

Assessment and feedback: Use efficient evaluation techniques in line with the competences and learning objectives of Vocational and Applied Technology programs. Utilize a range of assessment techniques, including projects, portfolios, simulations, and hands-on demonstrations, to give students insightful feedback and encourage ongoing development.

A free online application called SELFIE for work-based learning (WBL) helps businesses and Vocational Education and Training (VET) institutions maximize the use of digital technology in their operations. SELFIE WBL helps businesses and educational institutions adapt to the digital era. This helps the digital transformation, which is one of the European Commission's top policy priorities. To support VET schools, SELFIE must be modified to meet the unique requirements of WBL.

Collaboration and partnerships: Encourage cooperation and joint ventures between educators, industry stakeholders, VET institutions, and other pertinent groups. Exchange best practices, knowledge, and resources to raise the standard of vocational education and training.

- **Participate in EU networks for educators both inside and outside of VET institutions.**
- **Take part in industry marketing and dissemination activities inside the EU.**

Recognition of prior learning: Provide systems for acknowledging and crediting learners' prior education and employment experience. Make it possible for people who already possess the necessary knowledge and abilities to progress in their professions and obtain official certifications.

- **Test center:** If an exam or assessment is being administered, VET institutions may also act as test centers. This enables them to assist with the evaluation needs of their students or outside candidates and provide further services.

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Learner support services: Provide all-inclusive learner support services, such as academic support, career guidance, and counselling. Make sure students have access to the tools and assistance they require for success in their vocational education and training, including the DigitUp Vet Practitioner Handbook.

Use of technology: Integrate technology into teaching and learning processes to enhance engagement, interactivity, and efficiency. Utilize digital tools, learning management systems, online resources, and virtual simulations to deliver content, facilitate collaboration, and provide access to up-to-date information and resources.

- **Serious games:** can be highly effective tools in educational and training settings. foster active learning by requiring players to make decisions, solve problems, and engage in critical thinking. Learners are actively involved in the learning process, exploring scenarios, experimenting with different approaches, and reflecting on the outcomes. This hands-on experience promotes deeper understanding and the development of critical skills. **The DigitUp project developed a Serious Game for SME's managers and self-entrepreneurs.** This serious game is hosted on the e-learning platform. This serious game will perform like an online game-based learning course for digital skill acquisition in which participants will learn and apply strategies, techniques, and tools to develop and improve these skills. The Serious Game was developed according to the prior produced deliverables, and it will be the tool for the training of the main target group of the project - SME's managers and self-entrepreneurs. It includes branch scenarios on corporate or business management, finances, digital transformations, innovations, human resources, negotiations or trading shares on the stock market.

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3. Assessment of direct experiences from piloting activities with various stakeholders during the DigitUp project lifecycle

Within the scope of the DigitUp project, there were several pilot testing sessions in each partner country, as part of the following activities:

- Piloting Activities on training course and evaluation and,
- Final pilot testing activity on the DIGITUP Serious Game

Methodology: The piloting activities involved employing prompts to facilitate natural conversations among participants. This method allowed for the exploration of thoughts, feelings, views, perceptions, and opinions within the group of participants. Structured questionnaires were distributed for the evaluation of the activities by the participants. For the pilot test of WP3 & WP4, each partner was required to involve in each partner country a minimum number of 40 learners (VET educators, VET providers, SMEs managers, self-entrepreneurs) - 280 in total.

Data analysis: The partners analysed the feedback received from the questionnaires and produced national reports, drawing on the KPIs for satisfaction from the serious game functionality (qualitative), quality and reach of the piloting activities (quantitative) and satisfaction from the improvements, the well-defined translations, the visualization and graphics of the platform (quantitative). The outcomes from the analysis suggested that the satisfaction level on all categories was at least 90%.

Final report: The final cross- country reports (one for each pilot activity) drew upon the main points derived from the data collected from the questionnaires conducted by the six DigitUp partners. Questions and answers were organized into categories or main points. The conclusions were derived from the most frequently mentioned answers in the questionnaire and the main points identified in each partner's analysis of the questionnaires.

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Findings: The online platform system and the course material received an overwhelming number of positive comments during the pilot test. Participants were quite satisfied, albeit there were a few small problems that were found and fixed right away.

Important takeaways from the comments:

A few participants had trouble finding the course at first after registering on the website. A direct course link was supplied to fix this and avoid more annoyance. There were found to be a few minor problems with the translations or the lack of them. The lead partner's promptness allowed for the prompt correction of these.

Findings from the structured surveys:

The main conclusions are outlined below:

- Throughout the piloting activities, participants felt involved and thought the course material was very applicable to their positions and responsibilities.
- The guidance offered to navigate the course material was straightforward to understand and comprehend.
- The course's interactive components significantly improved the participants' comprehension of digital transformation ideas.
- The training content was judged appropriate to the participants' day-to-day work, especially about encouraging workplace creativity and digital transformation.
- Overall, participants expressed great satisfaction with the course material and piloting exercises.
- The training techniques employed, including interactive sessions and presentations, were thought to be successful in communicating the concepts of digital transformation.
- The training material's relevance to real-world situations and its obvious application to the participants' jobs were greatly appreciated.
- The font and colour style of the training material also received good marks for satisfaction.
- Though no major difficulties were highlighted, participants were asked to propose areas for enhancement or improvement.

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4. Policy recommendations: Structured and Actionable Framework for VET Educators and Providers to Enhance Digital Skills Among SMEs and Self-Enterprises

This policy brief aims to provide a structured and actionable framework for VET educators and providers to enhance digital skills among SMEs and self-enterprises, contributing to their sustainable growth and success in the digital age. A systematic and practical framework is necessary for VET (Vocational Education and Training) instructors and providers to effectively improve digital skills among self-enterprises and Small and Medium-sized Enterprises (SMEs). With this methodology, creating, executing, and assessing digital upskilling programs customized to the requirements of SMEs and self-enterprises may be done methodically.

To put these suggestions into practice, policymakers, business stakeholders, and VET institutions should work closely together. By giving SMEs and self-enterprises priority when it comes to digital upskilling, we can create an economy that is more resilient, creative, and competitive.

4.1 Needs Assessment and Research

Objective: Determine the unique digital skills that self-enterprises and SMEs require to create training programs that are specifically tailored to them.

How to: It is suggested that market research, employing data collection methods like surveys and interviews, as well as examining business opportunities and challenges is encouraged.

Perform Market Research:

To comprehend the landscape of digital skills, examine market demands, industry trends, and upcoming technologies.

Determine the essential digital skills required by different industries (e.g., digital marketing for hospitality, e-commerce for retail).

SME and Self-Enterprise Survey:

Employ focus groups, interviews, and surveys to get firsthand information from business owners about their training requirements and gaps in digital skills.

To reach a larger audience, collaborate with chambers of commerce, industry associations, and local business associations.

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Examine Business Opportunities and Challenges:

Determine the typical obstacles SMEs experience when implementing digital technology, such as a lack of awareness, limited financial resources, or a lack of technical expertise.

Examine ways that digital expertise might improve corporate success, like increasing online presence or streamlining procedures.

4.2 Curriculum Development and Alignment

Objective: Provide a curriculum that gives SMEs the necessary digital skills and is in line with industry demands.

How to: Drawing on a competence-driven approach, develop training that is based on real life scenarios and in accordance with certification and industry standards.

Design Modular Training Programmes:

It is important to develop a modular curriculum that addresses important domains of digital skills, including cloud computing, cybersecurity, e-commerce, digital literacy, and online marketing.

Give SMEs the freedom to select modules in accordance with their unique requirements and corporate objectives.

Include real world, Interactive Learning:

Emphasize on providing participants with practical, hands-on training that enables them to use digital skills in real-world circumstances. Make use of projects, case studies, and simulations that illustrate the difficulties SMEs encounter.

Incorporate interactive elements to improve student involvement, such as role-playing, workshops, and group activities.

Comply with Certifications and Industry Standards:

Provide courses that are in line with accepted industry norms and provide certifications from reliable companies (such as Google, Microsoft, and AWS).

Make sure that the training materials are current with the ever-evolving digital tools and technologies.

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4.3 Capacity Building for VET educators

Objective: Give VET instructors the abilities and information they need to conduct successful digital skills training.

How to: Seek to offer continuing education and professional development, create synergies with industry actors and VET, as well as promote peer learning networks.

Offer Opportunities for Professional Development:

Provide instructors with frequent training and workshops on digital pedagogy, developing technology, and online teaching strategies.

To increase their reputation and level of experience, instructors should be encouraged to obtain certifications in digital skill areas.

Encourage Industry Involvement:

Set up internships, industry immersion programs, or partnerships with IT firms to provide instructors with direct exposure to digital tools and procedures.

Encourage collaborations with professionals in the field to offer mentorship, guest lectures, and possibilities for co-teaching.

Encourage Knowledge sharing and Peer Learning:

Provide a forum where educators can exchange ideas, resources, and experiences in teaching digital skills training.

Create communities of practice where educators may work together, share knowledge, and remain up to date with developments in the field.

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4.4 Delivery Methods and Learning Platforms

Objective: Make use of efficient platforms and delivery techniques to connect with a variety of SMEs and independent businesses.

How to: Offer flexible, blended learning and accessible learning opportunities. Focus on adaptable content that is inclusive and addresses the needs of the learners.

Use Blended Learning Techniques:

Combine in-person and virtual instruction to meet the needs of learners with varying schedules and learning preferences. For theoretical information, use online modules; for practical activities, use in-person workshops.

Use digital technologies to track progress, promote communication, and provide content, such as learning management systems (LMS).

Employ Adaptable and Expandable Training Frameworks:

Create training curricula that can be adjusted to accommodate varying participant numbers and learning styles.

Provide microlearning modules, workshops, and quick courses that work with SME owners' and independent contractors' hectic schedules.

Ensure Accessibility and Inclusivity:

Ensure that training is available to everyone, including non-native speakers, rural enterprises, and individuals with impairments. Make use of accessible design elements, subtitles, and multilingual content.

To accommodate varying degrees of access to technology and internet connectivity, offer both online and offline learning choices.

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4.5 Awareness and engagement initiatives

Objective: Encourage SMEs and self-enterprises to participate in training programs and raise awareness of the prospects for digital upskilling.

How to: Showcase the benefits of digital upskilling through dedicated campaigns and outreach to stakeholders

Start Campaigns of targeted awareness:

Promote digital skills training programs through social media, local media, digital marketing platforms, and community events.

Emphasise case studies, endorsements, and success stories of companies that have profited from digital upskilling.

Collaborate with Business and Community Groups:

To reach a larger audience, work with chambers of commerce, local councils, and business associations.

Involve community organizations to guarantee that minority and marginalized business owners participate inclusively.

Provide Rewards and Recognition:

To promote participation, provide incentives like discounts, free training modules, or scholarships for certification.

Acknowledge accomplishments with rewards, digital badges, and certificates for finishing training courses.

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4.6 Monitoring and evaluation (M & E)

Objective: Monitor the success of digital skill development programs and make ongoing program improvements based on participant input and results.

How to: Assess the level of satisfaction and success of implemented programmes and improve where necessary.

Put pre- and post-training assessments into practice

Measure starting digital skill levels via baseline tests and evaluate learning outcomes with post-training assessments.

Utilise surveys, practical tasks, and quizzes to collect information on the effectiveness of training and the learning of skills.

Gather Input from Participants and Relevant Parties:

Collect feedback from participants, instructors, and industry partners through focus groups, interviews, and feedback questionnaires.

Based on feedback, determine your strengths, areas for development, and future training requirements.

Monitor Metrics for Business Performance:

To gauge the effect of digital upskilling, keep an eye on important business performance metrics including sales growth, online engagement, and operational efficiency.

To evaluate the long-term advantages of training for SMEs and self-enterprises, conduct follow-up research.

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5. Conclusion

The SME Digitalization Plan 2021-2025 proposes five lines of action to increase the number of companies benefiting from these tools. These include digital change management support, fostering disruptive innovation and digital entrepreneurship, support for sectoral digitalization, coordination and efficiency, and implementation of 5G.

With this well-organized and useful framework proposed in the DigitUp policy brief, VET teachers and providers have a comprehensive approach to enhancing digital skills among SMEs and self-enterprises.

By focusing on requirements assessment, curriculum development, capacity building, effective delivery strategies, engagement methods, monitoring and evaluation, and continuous improvement, VET educators can help businesses thrive in the digital economy. SMEs and solopreneurs will see sustainable growth, improved business performance, and a rise in digital literacy by implementing this strategy.

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