



InTraRed

Innovation Transfer
Ready SMEs

Policy Paper **Innovation Management in the Age of Disruption**



Table of Contents

| | |
|--|----|
| LIST OF TABLES | 2 |
| LIST OF FIGURES | 2 |
| ABBREVIATIONS..... | 3 |
| 1. INTRODUCTION | 4 |
| 1.1 Scope | 4 |
| 1.2 Goals | 4 |
| 1.3 Structure | 4 |
| 2. PROJECT FRAMEWORK..... | 5 |
| 2.1 Project Overview | 5 |
| 2.2 Project Objectives..... | 5 |
| 2.3 Project Partners | 5 |
| University of the Peloponnese | 5 |
| Meath Partnership..... | 6 |
| Chamber of Commerce and Industry of Slovenia (CCIS) | 6 |
| Innovation Training Center (ITC) | 6 |
| MCAST | 6 |
| INNOVADE LI..... | 6 |
| 2.4 Project Results | 7 |
| In-Service Training Programme | 7 |
| 3. APPROACH AND METHODOLOGY..... | 8 |
| 3.1 Desk research | 8 |
| 3.2 Questionnaire..... | 8 |
| 4. ANALYSIS..... | 8 |
| 4.1 Descriptive statistics..... | 8 |
| 4.2 Qualitative results..... | 10 |
| 5. CONCLUSIONS & COURSE OF ACTION..... | 18 |
| 5.1 Role of VET professionals | 18 |
| 5.2 Importance of innovation management within the SMEs | 18 |
| 5.3 Policy changes for partnership between SMEs and VET professionals..... | 18 |
| 6. ANNEX..... | 20 |
| 6.1 INTRARED questionnaire for POLICY PAPER..... | 20 |

LIST OF TABLES

| | |
|---|----|
| Table 1: Distribution of Participants' identity between partner countries | 10 |
|---|----|

LIST OF FIGURES

| | |
|---|----|
| Figure 1: Allocation of participants based on the country of residence | 9 |
| Figure 2: Distribution of participants based on their identity | 9 |
| Figure 3: Percentage of SMEs representatives that are familiar with the EU innovation legislation | 10 |



ABBREVIATIONS

| | |
|----------|---|
| CCIS | Chamber of Commerce and Industry of Slovenia |
| CEO | Chief Executive Officer |
| EU | European Union |
| ICT | Information and Communication Technologies |
| INTRARED | Innovation Transfer Ready |
| ITC | Innovation Training Center |
| MCAST | Malta College of Arts, Science and Technology |
| R&D | Research and Development |
| SMEs | Small and medium-sized enterprises |
| UoP | University of the Peloponnese |
| VET | Vocational Education and Training |



1. INTRODUCTION

1.1 Scope

This policy paper presents the results of the empirical work that has been carried out in the context of the European Project “Innovation Transfer Ready SMEs – INTRARED”, in order to highlight the importance of supporting innovation management and strengthening the links between VET and SMEs in achieving lasting benefits for society and economy.

It provides the background of the project and the main rationale behind it. It, also, summarises the methodological approach that was adopted to achieve the objectives, the empirical evidence that was gathered and the analysis that has been conducted throughout the different tasks implemented by the project team so far. In terms of geographical scope, it includes an analysis of the empirical evidence that has been collected from the partners and other key stakeholders from the following European Countries: Cyprus, Greece, Ireland, Malta, Slovenia and Spain.

1.2 Goals

In the context of the project, a blended innovation management curriculum for SMEs, has been developed in order to provide useful and constructive information about incorporating innovation in the daily operations of the SMEs. The curriculum has been evaluated by the partners of the project, as well as selected SMEs and Vocational Education and Training (VET) professionals.

The aim of this policy paper is to analyze the main outputs of the evaluation, with the purpose of presenting the results of the curriculum and its correlation with the needs of the SMEs and VET professionals. Furthermore, it aims to highlight:

- 1) the role of VET professionals in supporting innovation management within SMEs and the policy changes need to take place in order to make this partnership more effective in an ever evolving marketplace.
- 2) how can the proliferation of innovation management within the SME sector can help their operation.

1.3 Structure

The policy paper is consisted of the following chapters:

- **Project Framework:** In this chapter the main characteristics of the project are analysed, including the goals, the partners, the work that has been carried out as well as the key outputs.
- **Approach and Methodology:** In this chapter the methodology followed for the optimization of the innovation management curriculum is presented
- **Analysis:** This chapter provides information about the main outputs of the methodology that has been carried out, regarding the innovation management curriculum and its relation with the SME representatives and VET trainers’ needs.
- **Conclusions & Course of Action:** In this chapter, the key conclusions derived from the analysis are presented and a course of action for the implementation of the policy is proposed.
- **ANNEXES** including supporting material and evidence as referenced throughout the document.

2. PROJECT FRAMEWORK

2.1 Project Overview

The InTraRed project aims to foster the innovation management within SMEs through the building of new learning partnerships between the world of work and the world of VET provision. After years of economic and political crisis, resilient economic growth has returned to Europe, unemployment is falling and Europe is ready to set the foundations for its future. Small and medium-sized enterprises (SMEs) and entrepreneurs are crucial for identifying new avenues to more sustainable and inclusive growth because of their twin roles in creating and diffusing innovation and providing employment.

VET providers are the key educational bridge between education and SMEs, and the InTraRed project will focus on building robust and sustainable learning partnerships between both sectors in pursuit of excellence in innovation management. VET providers are best placed to develop and implement the bespoke resources necessary to support this rapidly developing area.

2.2 Project Objectives

The InTraRed project will look at building the innovation management of SMEs through active engagement with VET professionals. VET providers are the key educational bridge between SMEs and education. There is often a fragmentation in the innovation management process within companies and the onus is on VET providers as key education stakeholders to address it. In response to this fragmentation the InTraRed project will develop and provide:

- a blended innovation management curriculum for SMEs that recognises the time and human resources available within SMEs
- an in-service training programme for VET professionals to support them in delivering the new curriculum resources and coaching SMEs through the innovation management process.
- an observatory of best practice to understand the meaning of innovation and disruption, and learn about what kind of people lead innovation in today's business world across each partner country
- a dynamic online platform that facilitates mobile, on-demand learning and a thought provoking policy paper on the theme of innovation in the age of disruption informed by the project's implementation activities.

2.3 Project Partners

University of the Peloponnese

The University of the Peloponnese was established in 2000. It has its headquarters in Tripoli and is developed at the level of integrated schools in six cities of the region of the Peloponnese (Tripolis, Sparta, Corinth, Kalamata, Nafplio and Patras). It offers studies in all cycles of learning: undergraduate, postgraduate and Doctoral as well as Life Long Learning and VET activities.

UoP is dynamically involved (either as a leader or as a partner) in a considerable number of national and international R&D projects (150 competitive research projects in progress: 68 internationally and 79 nationally funded projects, as Horizon 2020, Erasmus+, Programs of National Strategic Reference Framework and many others). The University has developed close links and cooperation with a large number of national and international entities such as Ministries, Regions, Municipalities, Chambers, Institutes, Research Centers, private charities etc., international organizations (e.g. EU, OECD, UNESCO, World Bank) as well as other state organizations (e.g. Ministries of Education) or academic and research institutions (e.g. University of Cambridge, The Institute of Education, King's College, University of Oslo, University of Cyprus, University of Pompeu Fabra in Barcelona, Berlin Free University etc.) through agreements aimed at encouraging the transfer and exchange of knowledge, the creation of long-term partnerships and opportunities and the promotion of research, innovation and entrepreneurship.



Meath Partnership

Meath Partnership is a not-for-profit organisation responsible for the design and implementation of local, rural and community development programmes in County Meath, Ireland. We specialise in building the capacity of local communities through the design and implementation of a range of projects and programmes tackling persistent incidence of exclusion and disadvantage. We are also responsible for the implementation of the LEADER Rural Development Programme in our territory, and focus on improving the economic, social and cultural quality of life through the creation of sustainable rural communities in County Meath through the provision of capital investment, training opportunities and mentoring support for the development and expansion of micro-enterprises, social enterprise and local businesses. We hold charitable status and currently employ 27 full-time staff.

Chamber of Commerce and Industry of Slovenia (CCIS)

The Chamber of Commerce and Industry of Slovenia (CCIS) provides essential services for enterprises operating in Slovenia, and it is the ideal local partner for foreign investors. The CCIS was founded more than 160 years ago and now has 7,000 member companies of all sizes and from all regions. It is a non-profit, non-governmental, independent business organization representing the interest of its members and is Slovenia's most influential business association. CCIS unites under its roof 24 branch associations representing all sectors of Slovenian Economy. CCIS operates a network of 13 regional chambers.

Innovation Training Center (ITC)

Innovation Training Center (ITC) is a training and consultancy organization based in Palma de Mallorca (ES) who offers a wide range of services regarding innovative materials and services (R+D+I approach) to promote innovation in learning, entrepreneurship and support to start ups with a focus in tourism and service sector.

It is based in PARC BIT (ParcBit, Parc Balear d'innovació tecnològica, www.parcbit.es) a specific park to promote innovation in ICT for companies and SMEs mainly focusing on those of the Tourism sector. Its consolidation and experience has allowed them to create a specific R & D department for the development and implementation of Innovation projects. Its interdisciplinary team of experts has participated and managed a wide range of R & D projects and has built an intensive networking experience with various private and public organisations: governmental institutions, technology centres and public research organizations at local, regional, national, European and international level.

ITC counts on a team of middle-aged and also senior workers very motivated and full of innovative and creative ideas that may not only provide good deliverables but also provide their input towards the sustainability and the further exploitation of the project results.

MCAST

Established in 2001, the Malta College of Arts, Science and Technology is Malta's leading vocational education and training institution. It is committed to provide universally accessible vocational and professional education and training with an international dimension, responsive to the needs of the individual and the economy.

Every year, MCAST provides training opportunities to over 6,000 full-time students. The college spans over six Institutes:

- Institute of Applied Sciences
- Institute for the Creative Arts
- Institute of Engineering and Transport
- Institute of Business Management and Commerce
- Institute of Community Services
- Institute of Information and Communication Technology

INNOVADE LI



INNOVADE LI LTD is an SME based in Cyprus, with a team of professionals with several years of experience in entrepreneurship, innovation, startup development, entrepreneurship eco system development and culture infusion, adult and vocational training, financial management, forensic consulting, strategic visioning, business evaluation, business development, performance improvement, use of technology to affect positive change, and academic development and training. INNOVADE works with organizations to help them streamline technological advancements and develop and use productivity, communication and marketing tools into their processes to ensure that they improve performance, and increase their profitability. Its core objective is to continually adapt to new ideas, technologies, and operational methodologies as they relate to the needs of its clients and the current operational and business ecosystem with particular focus on the social progress of the youth. INNOVADE is interested in the healthy development of new businesses and it is involved in various local and regional initiatives that promote (social) entrepreneurship, innovation, and creativity especially among young people.

2.4 Project Results

In-Service Training Programme

The **InTraRed In-service Training Programme** aims to support adult educators and trainers working directly with **SME's owners CEOs and in-company executives**, to develop their skills and competences to harness the potential of Innovation management in SME's environments. VET has a key role to play as an intermediary in building sustainable relationships and mutually beneficial partnerships between education and the business community. Bringing the worlds of vocational education & training and business closer together is one of the key aims of the InTraRed project.

Hosted on the project's online platform (<https://elearning.intrared.eu/>), there has been created an Innovation Management Curriculum and E-learning Portal & Library of Innovation Inspired Case Studies in business that promote the understanding, the awareness and willingness to gain innovation in the business sector, specifically addressed to SME's owners CEOs and in-company executives. Through the In-Service training adult educators and trainers will be encouraged to use and integrate Modules and inspired Case Studies in their current teaching practice to develop key skills and competences on innovation Management transfer

The Innovation Management Curriculum includes the following Modules:

- Module 1 - Innovation as a primer
- Module 2 - Drivers of innovation
- Module 3 - Innovation Ecosystem
- Module 4 - Organizing for innovation
- Module 5 - Innovation management
- Modules 6 - Leading Innovation
- Modules 7 - Implementing Innovation I
- Modules 8 - Implementing Innovation II

All modules are accompanied by the following masterclasses:

- Module 1 - Disruptive Innovation and how to handle it
- Module 2 - The 4th Industrial Revolution and How it Impacts your Business
- Module 3 - Navigating within an Innovation Ecosystem
- Module 4 - Organising for Innovation
- Module 5 - Innovation Management
- Module 6 - Leading for Innovation
- Module 7 - Innovation in Practice I
- Module 8 - Innovation in Practice II

3. APPROACH AND METHODOLOGY

In order to construct the policy paper, a multilevel methodological approach has been followed, taking into account the necessity to diversify data collection means, to leverage results from one task to develop subsequent tasks, and to involve the key stakeholders identified. To ensure the thoroughness of research and guarantee high-quality results, the project team has employed a mixture of data collection techniques that complement each other. The data collection techniques include desk research as well as the distribution of a questionnaire that are described in detail in the following paragraphs.

3.1 Desk research

The data collection phase was initiated with extensive desk research to identify and define factors of innovation transfer and management in SMEs. In order to gather all the relevant information systematically conventional search engines were used, such as Google and Google Scholar. Furthermore, in order to guarantee an accurate and complete view of the main factors of innovation in SMEs, the project team used academic reports and publications, relevant to the field.

Based on the desk research, the project team developed the profile of the required respondents of the questionnaire. More specifically, three categories of respondents were defined: a) Members of Partners involved in the project, b) VET trainers and c) SMEs representatives.

3.2 Questionnaire

The project team developed a policy questionnaire that included the main factors and obstacles of innovation transfer in SMEs. The questionnaire was then distributed to the respondents chosen from the desk research phase, with the use of the Google form tool.

During data collection, responses were monitored regularly to ensure a balanced geographical spread. Eventually, 37 stakeholders from all the countries participating in the project, including members of the partners, SMEs representatives and VET professionals took part in the survey.

The questionnaire entailed four main sections, the first one concerning general information about the participants and the rest concerning questions modified for each one of the three categories of the respondents. The questionnaire is presented in the Annex.

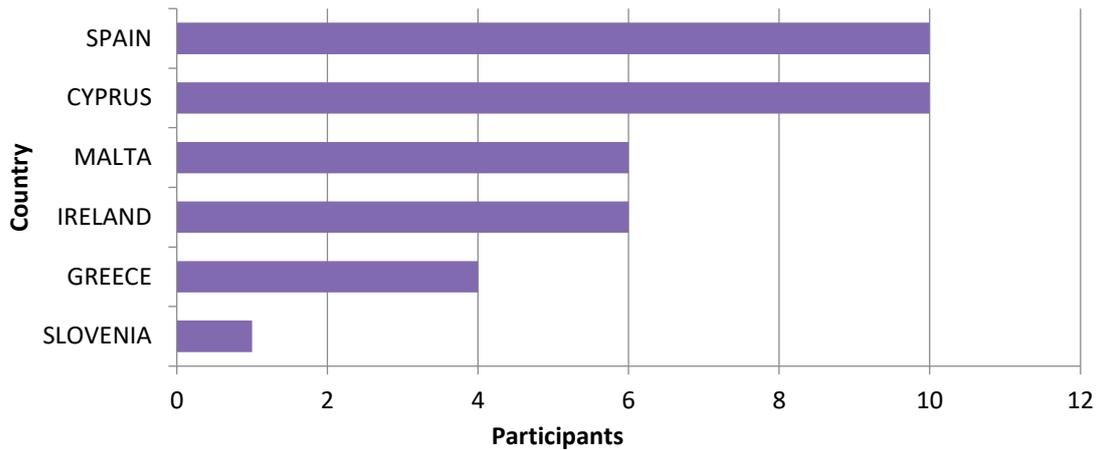
4. ANALYSIS

In this chapter, the key outputs and results from the desk research and questionnaire are presented. The main focus of the analysis is the identification of drivers and barriers of innovation management, as described by members of the partners, SMEs representatives and VET professionals in Europe. The analysis includes quantitative as well as qualitative results that provide crucial information for the development of a course of action based on the experiences and lessons learned in the InTraRed project.

4.1 Descriptive statistics

To begin with, a main aspect of the analysis was to ensure a balanced geographical spread of the participants. The project team monitored the process thoroughly and achieved the participation of members from all the partners. The allocation of the participants based on the country of residence is shown in the following figure.





****Slovenia gathered all the inputs from the stakeholders and filled in only one questionnaire: 3 participants from VET and 3 from SMEs.**

Figure 1: Allocation of participants based on the country of residence

As seen on the above diagram, all of the partner countries participated in the questionnaire. More specifically, the countries with the largest number of participants are Spain and Cyprus, with ten (10) participants each. Malta and Ireland follows with six (6) participants, whereas Greece has four (4). Slovenia conducted a focus group with 3 representatives of VET and 3 representatives of SMEs, gathered all the inputs from these stakeholders and filled in only one questionnaire.

Moreover, another important parameter that should be examined is the characteristics of each participant. The analysis focuses in the distribution of the participants among the three main categories of the respondents: members of the partners, SMEs representatives and VET professionals. The results are shown in the following diagram.

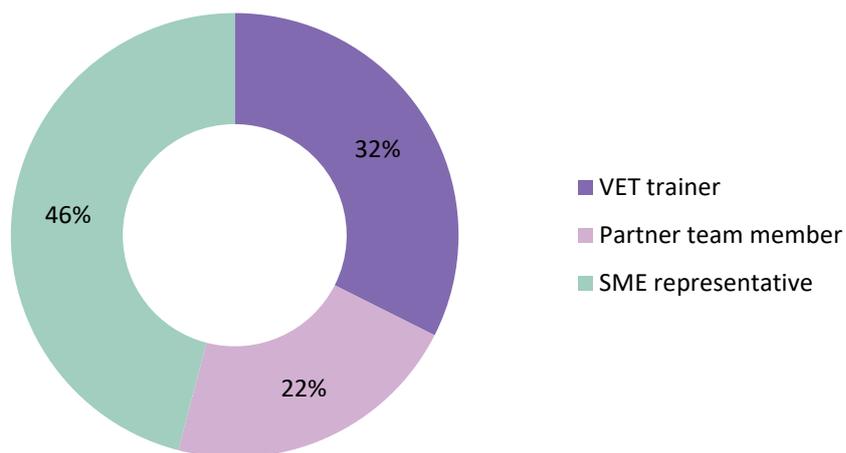


Figure 2: Distribution of participants based on their identity

Most of the participants were SMEs representatives (46%), which is a very important percentage because it can lead to an accurate depiction of the SMEs needs in the field of innovation management. Furthermore, another positive aspect is that the percentage of VET trainers is also high (32%) and therefore important

insight about the efficiency of the curriculum can be provided. Apart from the above, it is essential to examine the division of each category of respondents among the participating countries.

Table 1: Distribution of Participants' identity among partner countries

| COUNTRY | PARTNER TEAM MEMBER | SME REPRESENTATIVE | VET TRAINER | TOTAL |
|--------------|---------------------|--------------------|-------------|-----------|
| CYPRUS | 0 | 10 | 0 | 10 |
| GREECE | 2 | 0 | 2 | 4 |
| IRELAND | 2 | 2 | 2 | 6 |
| MALTA | 1 | 2 | 3 | 6 |
| SLOVENIA** | 1 | 0 | 0 | 1 |
| SPAIN | 2 | 3 | 5 | 10 |
| TOTAL | 8 | 17 | 12 | 37 |

** Slovenia conducted a focus group with 3 representatives of VET and 3 representatives of SMEs, gathered all the inputs from these stakeholders and filled in only one questionnaire.

Based on the above table, most SME representatives derive from Cyprus, whereas Spain has the largest number of VET trainers. Therefore, the impact of these countries in the development of the policy paper will be higher.

Another aspect that is crucial for the correct implementation of the practices proposed in the innovation management curriculum is whether SMEs are familiar with the latest innovation legislation in Europe. The answers of SMEs representatives are shown in the following diagram.

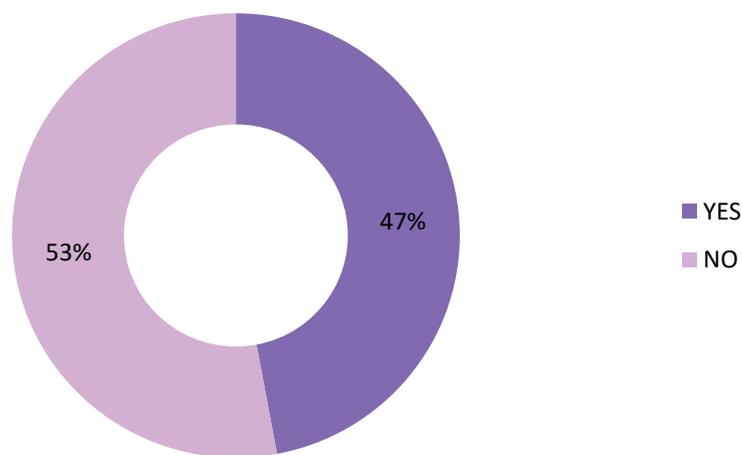


Figure 3: Percentage of SMEs representatives that are familiar with the EU innovation legislation

More than 50% of the SMEs are not familiar with the EU legislation concerning innovation, and therefore are not aware of the opportunities, as well as the barriers that exist in the innovation transfer process. Consequently, these SMEs will have a higher difficulty in implementing the practices proposed in the innovation management curriculum of this project. Nevertheless, there is a percentage of SMES (47%) that is familiar with the legislation, thus being more ready to transfer innovative ideas into their operation.

4.2 Qualitative results

The main pillar of the questionnaire that was distributed to the partners concerns key questions which aim at better understanding the difficulties faced throughout the project, the benefits of the proposed curriculum, as well as important parameters in the daily operation of SMEs. In the analysis that follows, for each question, the scope and main goals are presented in order to understand the logic of the question and the desirable output. Furthermore, the key results as derived from the participants are described, followed by proposed policy implications based on the experiences and lessons learned. In the following paragraphs, the analysis on each question is presented.

What were the methodological challenges during the development of the curriculum?

Scope of question

The main goal of this question is to analyze potential difficulties that the members of partner countries faced during the development of the curriculum, in order to define the factors that can pose a challenge in the development of the action proposed for the innovation management in SMEs.

Key Results

One of the main challenges that the partners faced during the development of the curriculum was the process of condensing the very broad topic of innovation management into 8 modules, with comprehensible content that could cover the majority of SMEs needs. Furthermore, with partners from six (6) different countries involved in the development of the curriculum, another challenge was to ensure that all the content development was holistic in nature, complementary and relevant to all countries, as the status of SMEs is different in each country. However, most partners acknowledged that the content of the curriculum met the required criteria, despite the challenges.

“The main challenge was the diversity that the SMEs presented among the partner countries, as well as the development of a condense and rich content that could be used by the majority of them”

Policy implication

Successful innovation transfer is not achieved through the simple movement of innovation to a new environment; it requires the development of a methodology that will help the innovation transfer process to advance and overcome potential barriers. This methodology is efficiently presented through the innovation management curriculum, draws upon the knowledge and skills from a variety of innovation disciplines that are relevant to all countries participating in the project.

Which were the areas of conflict or differentiation during the group discussions?

Scope of question

The main goal of this question is to identify the problems that the participants faced during the group discussions, as well as potential barriers in the usage of the proposed curriculum and the e-learning platform.



Key Results

Most of the participants noted that there were no major conflicts or differentiations. However, it was pointed out that one challenge was the difficulty of encouraging the involvement of participants in the different activities and group discussions. More specifically, it was emphasized by the participants that the most challenging part was to deliver online trainings and obtain learners' focus, due to technical restrictions (unstable connections, closed cameras, microphone dysfunctions), as well as distractions from each participant's environment. Furthermore, it was pointed out that in some cases it was difficult for the SMEs to link their business model and plans to the module proposed, due to their involvement into a very specific sector.

"A significant obstacle during the group discussions was the low level of participation, as well as technical restrictions"

Policy implication

One important aspect in the development of the curriculum process was the group discussions that took place. Group discussions were essential in order to integrate the views and proposals from all the participants and develop a holistic and well-structured curriculum that addressed the majority of the participants' needs. Therefore, it is crucial to increase the participation of key stakeholders, which can be achieved with the incorporation of more interactive practices.

Describe potential cost and benefits to be derived from the proposed curriculum

Scope of question

The scope of this question is to identify potential cost that could prevent participants from using the curriculum, in order to find ways to decrease them. On the other hand, it is important to analyze the main aspects that could benefit the participants in order to focus on them.

Key Results

The proposed curriculum covers a set of highly relevant topics in terms of innovation, which have been of great interest to both VET trainers and representatives of SMEs. The main potential benefit of the curriculum for most of the participants was the fact of concentrating a complete curriculum in a single training material that it is ready to be used by representatives of SMEs and those in charge of directing the training. Furthermore, it was pointed out that the content is practical and easy to understand, the skills and abilities obtained are highly relevant and the platform is intuitive and easy to use. Moreover, for many participants the whole procedure gave them the opportunity to network with the European ecosystem and exchange knowledge and good practices in order to overcome their difficulties.

Regarding potential cost derived from the curriculum, most of the participants did not list any factor that could generate costs. Nevertheless, it was emphasized that time invested in order to get familiarized to the proposed curriculum and content could potentially lead to some costs for the SMEs and VET trainers. Furthermore, it was noted that costs could also derive from the innovation transfer processes that the SMEs is willing to incorporate after they go through the content

“The main benefits are the development and exploitation of an easy-to-use curriculum and platform, as well as networking and knowledge exchange opportunities. On the other hand, time invested familiarizing with the content could generate costs”

Policy implication

The proposed innovation management curriculum will provide important insight and knowledge to the participating SMEs regarding key aspects of innovation and also, give them the opportunity to exchange good practices and develop a broader network for collaboration, in order to implement the innovation transfer methodology. Therefore, by implementing the proposed innovation management methodology the participants can gain significant benefits such as improved productivity, reduced costs, increased competitiveness, brand recognition, new partnerships and relationships. On the other hand, potential cost should be considered and presented further in the proposed curriculum, so that SMEs and VET trainers are fully prepared to overcome difficulties during the application of innovative solutions to their processes.

Can you identify any areas or issues that were not efficiently addressed in the Curriculum? Why do you feel this way?

Scope of question

The scope of this question is to identify areas in the curriculum that need further consideration or improvement in the way they are presented.

Key Results

Most of the participants didn't identify any areas or issues that were not efficiently addressed in the Curriculum. However, there were some suggestions about analyzing further the drivers of innovation, such as regulations and funding opportunities. Moreover, some of the participants proposed the enhancement of the curriculum with thematic pillars concerning disruptive technologies (e.g. metaverse, XR technologies or blockchain) as well as sustainability in innovation. Finally, the curriculum could include practical situations for VET trainers on how to engage learners.

“Further analysis on the drivers of innovation is suggested, along with enhancement of the curriculum with thematic pillars concerning disruptive technologies and sustainability in innovation”

Policy implication

Numerous processes, informal and formal, can help discern topics and issues participants need to learn about. Members of the project team can draw on their conversations with SMEs and VET trainers in the field and their own observations during the implementation of the curriculum. In a more formal way, questionnaires can be used at the end of training sessions for SMEs and VET trainers to identify issues that the curriculum could address. Where resources are available, interviews with a sample of VET trainers might also be conducted, allowing for a more in-depth look at learner needs and issues. The information gathered in this way is more contextual and can be used to illuminate questionnaire responses¹.

¹ Ejaz H. (2016), Curriculum Design and Its Implications

Were there certain activities that posed challenges for the learners?

Scope of question

The scope of this question is to identify potential challenges for the learners in order to understand their needs and adapt the curriculum accordingly.

Key Results

The activities were clear and pose no significant challenges for the learners or the trainers. One aspect that could be considered as a challenge was the adaptation and implementation of the proposed curriculum into the SMEs operation and the change of management within the organization. Furthermore, the shift towards long term goals posed a difficulty to some learners. Finally, the participants needed some time to get familiar with the e-learning platform and its characteristics

“The adaptation of the proposed practices, as well as the shift towards long term goals posed a challenge for the learners”

Policy implication

During the implementation of the curriculum it is natural that some activities pose a higher difficulty to the participants than others. Also, participants from different sectors or countries could encounter challenges in different kind of activities, based on their characteristics. Therefore, the adaptation of each activity to the participants’ needs is required for the successful completion of the curriculum.

What should be the EU's priorities regarding innovation implementation in the SMEs?

Scope of question

The scope of this question is to identify the current situation in the EU regarding innovation and define the necessary actions in order to support and motivate SMEs to incorporate innovative solutions to their operations.

Key Results

The majority of participants highlighted the importance of providing financial aid to the SMEs in order to test new innovative technologies and support additional activities intended to enhance productivity and efficiency, as well as improving access to markets. Moreover, another essential factor that should be a priority for the EU is the development of incentives to a) bridge the gap between innovation and education, b) link the academic and research community with businesses.

Furthermore, EU should focus on implementing a policy that provides opportunities for synergies between SMEs that are ready to transfer innovations to their processes as well as encourage the upskilling and reskilling of the staff according to their needs and limitations. In addition, reducing bureaucratic procedures and improving infrastructures in the ICT sector were also suggested by the participants as important

parameters in the EU policy. Finally, EU should emphasize on ensuring that SMEs and the innovation implementation strategies adhere to the United Nations Sustainable Development Goals as well as other sustainability criteria.

All of the above should be based on a place-sensitive policy that takes into consideration the variety of European regional contexts.

“EU should emphasize on providing financial aid to the SMEs, along with opportunities for synergies. Another crucial priority is the linkage between the academic and research community with the SMEs”

Policy implication

Innovation remains of fundamental importance for the European economic and social system. Specifically, Europe’s economic prospects depend on innovation in general, and especially digital and new frontier technologies, including artificial intelligence, Internet of Things, blockchain, high-power computing, and the integration of biology and engineering. These technologies have the potential to deliver the breakthrough in productivity that Europe needs and therefore it is essential to support their development.² First of all, Europe provides incentives to further strengthen collaborative and open innovation between SMEs as well as connect and organize universities, industries, and governments to achieve the common goal. Furthermore, in regard to talent, one of the main EU priorities is to create better pathways for high-skill professionals, in order to attract international talent, as well as encourage the return of Europeans who work abroad. Finally, Europe has developed noteworthy programs and funding tools in order to support innovation that can be used by SMEs and other stakeholders to fund their innovative idea.

What do you consider to be the most important needs of SMEs with regards to innovation? Does the curriculum address it? Please elaborate.

Scope of question

The scope of this question is to recognize the needs of SMEs regarding innovation transfer in the interest of evaluating and improving the proposed curriculum of the project and the process of implementing it.

Key Results

Regarding the most important needs of SMEs, the participants stressed the fact that financial resources and financial aid are crucial in order to support their innovative ideas, sustain their businesses and infuse modern technologies that will help them scale. Furthermore, access to national/European/Global networks in their field, for exchange of good practices and ideas is also a need that many SMEs representatives pointed out. Moreover, another significant need of the SMEs is the connection with mentors and trainers with expertise in the field of innovation and technology, who could guide them in incorporating innovative solutions and more eco-friendly operation systems.

The curriculum addresses the majority of SMEs’ needs and provides important insight and knowledge to the learners about these needs. However, an important factor that is not fully addressed in the curriculum and is crucial for the survival of SMEs is the current situation of the COVID-19 pandemic and how innovation can aid at overcoming this problem.

² McKinsey Global Institute (2019), Innovation in Europe: Changing the game to regain a competitive edge

“The curriculum addresses the majority of SMEs’ needs, which include financial aid, access to networks, training and expertise in innovation transfer. The role of innovation in support of SMEs’ recovery from the COVID-19 pandemic should be analyzed further.”

Policy implication

During the development of a curriculum, the specific objectives that need to be addressed should be considered. In the case of innovation management, the key aspects that the curriculum should address are the SMEs’ needs for the incorporation of innovative ideas to their daily operation. The main parameters that can be considered as crucial needs for the SMEs include financial aid, access to networks and expertise in innovation. Therefore, the curriculum should provide insight to the SMEs regarding these topics and prepare them in order to be more innovation ready.

What were the motivations behind innovation? What was the motivation behind becoming an SME employee/owner?

Scope of question

The scope of this question is to identify the drivers of innovation and the criteria that could motivate the development of SMEs.

Key Results

Most of the SMEs representatives underlined that the prevailing motivation behind the creation of an SME were the financial benefits, in addition to the use of the skills and background they had acquired over the years. Regarding the motivation behind implementing innovative solutions, most of the SMEs representatives acknowledged the contribution to the production of new products or ideas, or improvement of products tailored to the needs of the customers as a main driver. Moreover, some SMEs presented the need to fill an existing gap on the market in order to create further opportunities in their rural community and gain financial benefits as well as positive publicity, as important drivers of innovation.

“The main motivation behind innovation transfer and becoming an SME employee/owner are the financial benefits from the activities. Furthermore, the contribution to the development of the community and the satisfaction of customers’ needs are also important drivers of innovation”

Policy implication

Financial benefits have always been a driver for the development of many business activities. Regarding innovation, the benefits derived from the transfer of innovative solutions can be economic, as well as environmental and social and therefore they can motivate SMEs to actively participate in this field. By promoting this positive impact of innovation transfer and management, a higher participation of SMEs can be achieved.

Please provide examples of successful practices in facilitating the role of innovation in SMEs

Scope of question

The scope of this question is to recognize the practices and examples that SMEs and VET trainers consider as successful in order to understand their expectations from the implementation of the innovation management curriculum.

Key Results

The efficient use of emerging technologies such as artificial intelligence and other types of automation, XR, blockchain and digital platforms are listed as successful practices among the participants. Moreover, the incorporation of innovations in the digital marketing area to reach new target audience or expand the existing one was also mentioned as a significant example of successful innovation. Lastly, some participants highlighted the efficiency and economic development that many startup companies in the technology sector displayed during the pandemic, by answering emerging needs of the citizens.

“The incorporation of emerging technologies such as AI and blockchain and the innovative digital marketing solutions were rendered as successful practices”

Policy implication

Successful practices and good examples can play an important role to the innovation transfer process as they can be exploited by SMEs and VET trainers to overcome difficulties during their transformation towards a more innovative operation. Therefore, it is essential to increase the exchange of knowledge between participants, through co-organized events and incorporation of good practices and examples from innovation ready SMEs.

What are the potential issues/problems with the way best practices are used in different contexts (countries, type of business, field of business applications, etc.)?

Scope of question

The scope of this question is the depiction of the potential issues derived from the implementation of the proposed innovation management curriculum in different countries and types of businesses, in order to define the parameters that can ensure the correct application of the methodology to the partner countries.

Key Results

Every country, business and field of application has different needs and therefore requires different approaches. While good practices can be applied, it is essential to ensure that the approaches are adapted in each specific case and scenario in order to address successfully the specific needs. The main differences between countries and sectors that should be taken into consideration are related to different legislations and business environments, as well as cultural differences. Furthermore, technical issues are arising between the partner countries and different fields of application, as some countries and sectors are more innovation and technology ready, whereas others are more reluctant to change. Therefore, in order to efficiently incorporate the best practices to different countries and sectors, it is crucial to adapt the curriculum taking into account the aforementioned specific conditions.

“Different legislations and business environments, as well as cultural differences and technical issues can pose a challenge in the implementation of best practices. Therefore, it is essential to ensure that the approaches are adapted in each specific case and scenario”

Policy implication

One of the major difficulties of the curriculum process is the transition of the general best practices to the particular needs of every different country, type of business and field of business applications. Innovation does not stand alone, but encompasses political, social, economic, and cultural values that can serve as barriers that impede the diffusion or transfer of innovation. In order to overcome these barriers, it is first of all important to understand the specific needs for each country and field of application regarding the aforementioned and afterwards adapt the practices and methodology based on these needs.

5. CONCLUSIONS & COURSE OF ACTION

This policy paper presents the results of the implementation of the curriculum to selected SMEs and VET trainers in order to highlight the importance of supporting innovation management and strengthening the links between VET and SMEs. More specifically, it aims to highlight a) the role of VET professionals in supporting innovation management within SMEs, b) the importance of innovation management within the SMEs in the improvement of their operation and c) the policy changes need to take place in order to make the partnership between SMEs and VET professionals more effective.

5.1 Role of VET professionals

Base on the results from the questionnaire, a significant need of the SMEs is the **connection with mentors and trainers with expertise in the field of innovation and technology**, who could guide them in incorporating innovative solutions and more eco-friendly operation systems. Successful innovation transfer is not achieved through the simple movement of innovation to a new environment but it requires the **development of a methodology that will help the innovation transfer process to advance** and overcome potential barriers. This methodology, which is also presented in the curriculum can, be adapted to the SME's needs with the assistance of the VET trainers.

5.2 Importance of innovation management within the SMEs

Innovation remains of fundamental importance for the European economic and social system. Specifically, Europe's economic prospects depend on innovation in general, and especially digital and new frontier technologies. These technologies have the potential to deliver the breakthrough in productivity that Europe needs and therefore it is essential to support their development.

The proposed innovation management curriculum provide important insight and knowledge to the participating SMEs regarding key aspects of innovation and also, give them the opportunity to exchange good practices and develop a broader network in order to implement the innovation transfer methodology. Therefore, by incorporating the innovation management practices the participants **can gain significant benefits such as improved productivity, reduced costs, increased competitiveness, brand recognition, new partnerships and relationships.**

5.3 Policy changes for partnership between SMEs and VET professionals

One of the major difficulties of the curriculum process is the transition of the general best practices to the particular needs of every different country, type of business and field of business applications. Innovation



does not stand alone, but **encompasses political, social, economic, and cultural values that can serve as barriers that impede the diffusion or transfer of innovation:**

- Social barriers. It is important to recognize that transfer occurs within a social system. The social system defines the boundary or limits within which the innovation will be transferred and diffused.
- Political barriers. The influence of political barriers on innovation transfer is evident through the existed bureaucracy and the level of participation in the processes by each country's government.
- Economic barriers. The role of economic barriers in innovation transfer is apparent, as economic resources are essential for the development and sustainability of a new innovative solution
- Personal barriers. An individual's particular concerns about a given technology seem to be an influencing factor in the degree of acceptance. Individuals have different concerns about innovations and proceed through various stages before they fully accept the change.
- Cultural barriers. Cultural barriers also play a key role in technology transfer. In many cases, the culture in which a technology is designed is different from that where it is ultimately used. Thus, it is important for designers to communicate with and understand the receiving culture.

In order to overcome these barriers, it is first of all important to understand the specific needs for each country and field of application regarding the aforementioned and afterwards **adapt the practices and methodology based on these needs**. In the context of this process, it is essential to develop incentives that increase the **cooperation between SMEs and VET trainers and the exchange of knowledge** about good practices and examples, for the reason that this collaboration can lead to the development of more innovation ready SMEs.

6. ANNEX

6.1 INTRARED questionnaire for POLICY PAPER

Dear Participant, Thank you for your participation in this series of trainings on innovation as part of the Intrared Project. We hope you enjoyed the trainings and took away some key learnings for your personal or professional practice. As an organisation and as facilitators, we continuously try to learn and improve our trainings. Therefore, we would appreciate you taking the time to fill in the questionnaire below and provide us with some constructive feedback for future trainings. Thank you and hopefully we'll see you again,

The Intrared-Project Team

<https://www.facebook.com/IntraredProject>

Section A. Information

Email Address

Please indicate your country:

- IRELAND
- SLOVENIA
- SPAIN
- CYPRUS
- MALTA
- GREECE
- OTHER

2. Please indicate your status:

- VET trainer
- SME representative
- Partner team member

Section B. Partner Member

What were the methodological challenges during the development of the curriculum?

Which were the areas of conflict or differentiation during the group discussions?

Describe potential cost and benefits to be derived from the proposed curriculum.

Section C. SME representative

Can you identify any areas or issues that were not efficiently addressed in the Curriculum? Why do you feel this way?



Were there certain activities that posed challenges for the learners?

What should be the EU's priorities regarding innovation implementation in the SMEs?

What do you consider to be the most important needs of SMEs with regards to innovation? Does the curriculum address it? Please elaborate.

Are you familiar with the latest innovation legislation in Europe?

- YES
 NO

What were the motivations behind innovation? What was the motivation behind becoming an SME employee/owner?

Which were the areas of conflict or differentiation during the group discussions?

Please provide examples of successful practices in facilitating the role of innovation in SMEs

What are the potential issues/problems with the way best practices are used in different contexts (countries, type of business, field of business applications, etc.)?

Describe potential cost and benefits to be derived from the proposed curriculum.

Any other comments

Section D. VET trainer

Can you identify any areas or issues that were not efficiently addressed in the Curriculum? Why do you feel this way?



What skills do you feel are needed for VET professionals in this area?

Were there certain activities that posed challenges for the learners?

What should be the EU's priorities regarding innovation implementation in the SMEs?

What do you consider to be the most important needs of SMEs with regards to innovation? Does the curriculum address it? Please elaborate.

Which were the areas of conflict or differentiation during the group discussions?

What are the potential issues/problems with the way best practices are used in different contexts (countries, type of business, field of business applications, etc.)?

Describe potential cost and benefits to be derived from the proposed curriculum.

Any other comments

