



INTERNATIONAL EARLY WARNING SYSTEM

LEARNING FRAMEWORK

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01

ABOUT THE FRAMEWORK



01

ABOUT THE FRAMEWORK

Context

Small businesses play a significant role in driving European economic growth. However, both young and established business are exposed to a constant risk of crisis. Risk can include external shocks, structural weaknesses in national economies and a complex range of internal issues. SMEs often have special characteristics preventing from detecting and reacting to a business crisis e.g., owner-centred, patriarchally organised and underfunding. Usually, a crisis in an SME is a long-term process with multi-causal connections with changing environmental conditions and multiple internal complexities. However, a crisis can be overcome by taking appropriate countermeasures in a timely manner.

SECURE SME Early Crisis Toolkit¹ is an Erasmus+ project to enable SMEs facing an acute business crisis to precisely determine the crisis status, identify causes and initiate appropriate countermeasures. At the same time, (future) entrepreneurs are trained to implement early crisis detection mechanisms to prevent future company crises. The project achieves a sustainable impact by directly securing jobs on the one hand and by professionalizing VET organizations, management consultants, entrepreneurship, and SME support infrastructures and by providing first of its kind resources to be implemented into their curricula and services.



¹ Home - SECure (smecrisistoolkit.eu)

Early Warning System Framework for SMEs

The SECURE Framework is the foundation for this ERASMUS+ project. The Framework will include three interconnected facets:

01

A summary of current research on crises in SMEs, early warning indicators for SMEs, and implementing early warning systems in SMEs

02

A Competence Framework, which will categorise and describe the necessary competences, knowledge, and skills that our target groups need to recognise and analyse crises at an early stage and implement suitable countermeasures. The competence framework will provide the backdrop to the development of curricula, trainer the trainer guides and learning resources in our SECURE Curriculum and VET-Package.

03

An Indicator Framework which catalogues and describes qualitative indicators for the analysis of the 6 crisis stages. Relevant questions for the determination of the indicators will be developed and will serve as a basis for the development of the self-assessment tool and the specific solution strategies in our SECURE Interactive Crisis Analysis and Solution Toolkit.

Profile of learning participants

The SECURE Framework is an open resource for educators, including VET organisations, trainers, management consultants and business mentors who work with SME managers and support structures for SMEs such as chambers of commerce and incubators.

The SECURE Learning Framework is designed to be flexible and responsive to the learning needs of a diverse group of owner managers and SMEs managers, with the central aim being to provide

personalization of learning paths. SME owners/managers and future entrepreneurs will gain an in-depth understanding of the importance of early detection mechanisms and indicators and are enabled to take appropriate countermeasures. It recognises that individual characteristics and needs will vary depending on socio-economic background, educational attainment; reason for setting up the business; business size; business performance; and plans for expansion.



How we developed the Framework

We propose that a key issue is not necessarily the arrival of a crisis, but the inability of SME owner/managers to access a system for early detection. The later that a crisis is recognised, the less that there is scope for (re)action. The Framework was developed using bottom-up, learner- centric design principles. We focused on the skills, competences and tools needed by SMEs

and entrepreneurs to identify and deal with an emerging crisis and used same to determine the specific learning outcomes and educational content. We present our findings from a pan-European study and a series of national focus groups, which provided a robust sounding board to produce a customised learning framework that supports in-depth analysis of crises in a small business setting.

The following table presents the **key themes** that emerged from the **focus groups**.

THEMES	GERMANY	GREECE	IRELAND	SPAIN
A crisis takes many forms	Yes		Yes	
Always under pressure		Yes	Yes	
The Political system	Yes	Yes		Yes
Family Life brings turbulence		Yes		
Key Informants		Yes		Yes
People do not use the Metrics available to them	Yes	Yes	Yes	
Entrepreneurial Mindset		Yes	Yes	Yes
Industry wide outlook	Yes			Yes
Looking to the future			Yes	Yes
Information is Power	Yes	Yes	Yes	Yes

Table 1. Key themes arising from the focus group

02

SECURE CURRICULUM + VET TRAINING PACKAGE



SECURE CURRICULUM + VET TRAINING PACKAGE

These themes, along with the academic literature reviewed, informed our discussions and the design of our Learning Framework, to be delivered in the SECure CURRICULUM AND VET TRAINING PACKAGE (IO2) across six engaging training modules:-

MODULE 1

THE FUNDAMENTALS

What is a business crisis and what are early detection mechanisms?
Knowing when -overview of the 3 phases on SME/business crisis - main stages, the pre-crisis, the management and response stage itself and the post-crisis

MODULE 2

A CRISIS THAT COMES FROM EXTERNAL UNAVOIDABLE FACTORS

You did not see this coming, it's not usually something you're prepared for, but once it happens, you wish you were, e.g.

- Natural crisis – increasingly common due to climate change e.g. extreme weather incidents, bio hazards e.g. COVID-19
- Weakening economy and calamities
- Market environment e.g. supply chains
- Technology related issues such as power outage or cybernetic attacks

Problem based learning approaches to understand and apply mechanisms to respond

MODULE 3

A CRISIS THAT COMES FROM INTERNAL FACTORS

- Management skills and culture, openness to innovation
- Product sales crisis, when your product or company experiences a sudden drop in demand (e.g. tourism during COVID 19) leading to loss
- Customer base, dependency and relationships.
- Understanding the role and function of data systems and tools of internal and external analysis within the business
- Earnings (bottom line or a company's profits) and liquidity crisis
- Operational crisis
- Technology deficits – lack of skills and resources
- Organisational/personnel crisis (human error and malpractice or intentional human-caused events)

Problem based learning approaches to understand and apply mechanisms to respond

SECURE CURRICULUM + VET TRAINING PACKAGE

MODULE 4

LEADERSHIP CULTURE, STAKEHOLDER MANAGEMENT AND COMMUNICATIONS

LEADERSHIP CULTURE

- the skills (e.g. technical, wellbeing and resilience) to manage through a crisis.
- Critical thinking
- Understanding Adaptive Leadership.
- Teamwork

STAKEHOLDER MANAGEMENT

Which stakeholders are important in my company? What are the first warning indicators of a stakeholder crisis? How do I determine the extent of the stakeholder crisis? How can I as an SME overcome a stakeholder crisis?

VITAL ROLE OF COMMUNICATIONS

If you can't communicate, you can't recover. Hence the learner will be immersed in

- Duty of care communications
- Controlling the narrative

MODULE 5

UNDERSTANDING FINANCIAL AND LIQUIDITY RATIOS AND INSOLVENCY AS A RESTRUCTURING APPROACH.

- What Are Financial and Liquidity Ratios?
- Understanding Liquidity Ratios
- Types of Liquidity Ratios
- Managing Liquidity
- Solvency Ratios vs. Liquidity Ratios
- Examples Using Liquidity Ratios

INSOLVENCY

- A starting point for restructuring?
- What does insolvency mean? How do you distinguish between insolvency and payment stagnation?
- How do I determine whether I have to file for insolvency? (country-specific)
- What are the consequences of insolvency?

MODULE 6

INFORMATION MANAGEMENT AND MONITORING

A problem-based learning video-based module focused on the implementation of a Holistic Early Warning System. The theme of the video will be, as an SME with limited resources, how can you implement early warning systems that enable you to detect crises at an early stage before they take on dimensions that threaten the company's existence.

It will focus on IO2 and IO3 and interactivity between both resources.

03

THE SECURE LEARNING FRAMEWORK LEARNING OUTCOMES + COMPETENCES



03

THE SECURE LEARNING FRAMEWORK LEARNING OUTCOMES + COMPETENCES

The overall aim of the SECure Learning Framework is to provide participants with the knowledge, skills and competencies required to identify and cope with an emerging business crisis.

Learning Outcomes

Having successfully completed the programme participants will be able to:

- 01** Develop specific skills on data, critical thinking and adaptive leadership which contribute to financial literacy, teamwork, and communication.
- 02** Evaluate the tools of internal and external analysis within a SME, as the basis to identify and respond to warnings of business failure and find suitable crisis intervention measures
- 03** Reflect on the need for leadership and stakeholder management within a SME.
- 04** Propose appropriate approaches to managing financial and metric dynamics.
- 05** Acquire advanced communication skills in the area of duty of care communications and controlling the narrative
- 06** Evaluate the role of information management and monitoring within an SME.
- 07** Strengthen their overall entrepreneurial mindset and their ability to adapt to a fast-changing world

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01

EntreComp

The development of the entrepreneurial capacity of European citizens and organisations has been one of the key policy objectives for the EU and the Member States for many years. It is one of the eight Key Competences for Lifelong Learning. EntreComp: The Entrepreneurship Competence Framework describes entrepreneurship as a lifelong competence, identifies the elements that make someone entrepreneurial, and establishes a standard reference for initiatives dealing with entrepreneurial learning.

THE ENTRECOMP FRAMEWORK IS MADE UP OF 3 COMPETENCE AREAS:

01

IDEAS AND OPPORTUNITIES



02

RESOURCES



03

INTO ACTION



Each area includes five competences, which together are the building blocks of entrepreneurship as a competence. From a SECure perspective, we enable participants with the knowledge to anticipate and take corrective action to deal with an impending crisis, the framework will also provide valuable skills to the learners. Interestingly, a spectrum of entrepreneurship skills will be use at each stage of a business crisis. These skills are embedded in the EntreComp framework, and we can anticipate learning outcomes will include

01

IDEAS AND OPPORTUNITIES



COMPETENCES	HINTS	DESCRIPTORS
1.1 Spotting opportunities	Use your creativity and abilities to identify opportunities for creating value in a challenging circumstance.	<ul style="list-style-type: none"> Identify and seize opportunities to create value within the market environment Identify external needs and challenges that need to be met in a new or different way Establish new connections with stakeholders (investors, employees, customers, suppliers, communities, governments, or trade associations) to create opportunities to mitigate crisis and create value
1.2 Creativity	Develop creative and purposeful approaches	<ul style="list-style-type: none"> Explore and experiment with innovative approaches Develop new ideas and opportunities to create value, including better solutions to existing and new challenges Combine knowledge and resources to achieve valuable effects
1.3. Vision	Work towards your vision of the future	<ul style="list-style-type: none"> Imagine the future beyond the crisis Develop a vision to turn ideas into action Visualise future scenarios to help guide crisis mitigation effort and action
1.4 Valuing ideas	Make the most of ideas and opportunities	<ul style="list-style-type: none"> Judge what value is in economic, social, technological and future trends environment. Recognise the potential an idea has for creating value and identify suitable ways of maximising its potential and impact
1.5 Ethical and sustainable thinking	Assess the consequences and impact of ideas, opportunities and actions	<ul style="list-style-type: none"> Assess the consequences of opportunities that bring value and the effect of entrepreneurial activity on the target community, the market, society and the environment Reflect on how sustainable long-term economic goals are and the course of action chosen Act responsibly

Table 2. Adapted by SECURE from the EntreComp conceptual model



COMPETENCES	HINTS	DESCRIPTORS
2.1 Self-awareness and self-efficacy	Believe in your-self and keep developing	<ul style="list-style-type: none"> • Reflect on your personal situation, what are your needs in the short, medium and long term • Identify and assess your individual and group (internal stakeholders e.g. employees) strengths and weaknesses • Believe in your ability to influence the course of events, despite uncertainty, setbacks and failures
2.2 Motivation and perseverance	Stay focused and don't give up	<ul style="list-style-type: none"> • Be determined to turn solution ideas into action and satisfy your need to achieve • Be prepared to be focused and keep trying to achieve progress • Be resilient under pressure, adversity, and failure
2.3 Mobilising resources	Gather and manage the resources you need	<ul style="list-style-type: none"> • Get and manage the resources needed to tackle the crisis • Make the most of limited resources – lean approaches • Get and manage the competences needed at any stage including technical, legal, tax and digital competences
2.4 Financial and economic literacy	Develop financial and economic know-how	<ul style="list-style-type: none"> • Deep review of Finances and Control in terms of earnings, liquidity, information management and monitoring • Plan, put in place and evaluate financial decisions over time and at each stage of a crisis
2.5. Mobilising others	Inspire, enthuse and get others onboard	<ul style="list-style-type: none"> • Inspire and enthuse relevant stakeholders • Get the support needed to achieve valuable outcomes • Demonstrate effective communication, persuasion, negotiation, and leadership

Table 2. Adapted by SECURE from the *EntreComp conceptual model*

03

INTO ACTION



COMPETENCES	HINTS	DESCRIPTORS
3.1 Taking the initiative	Go for it	<ul style="list-style-type: none"> • Initiate processes that tackle the crisis • Take up challenges • Act and work independently to achieve goals • Show resilience and stick to intentions and carry out planned tasks
3.2 Planning and management	Prioritise, organise and follow-up	<ul style="list-style-type: none"> • Set long, medium and short-term crisis management goals • Define priorities and action plans • Adapt to unforeseen changes
3.3 Coping with uncertainty, ambiguity and risk	Make decisions dealing with uncertainty, ambiguity and risk	<ul style="list-style-type: none"> • Make decisions when the result of that decision is uncertain, when the information available is partial or ambiguous, or when there is a risk of unintended outcomes • Within the value-creating process, include structured ways of testing ideas and prototypes from the early stages to reduce risks of failing • Handle fast-moving situations promptly and flexibly
3.4 Working with others	Team up, collaborate and network	<ul style="list-style-type: none"> • Work and cooperate with others to mitigate and tackle crisis • Network • Solve conflicts and face up to competition positively when necessary
3.5. Learning through experience	Learn by doing	<ul style="list-style-type: none"> • Use any initiative for value creation as a learning opportunity • Learn with others, including peers and mentors • Reflect and learn from both success and failure

Table 2. Adapted by SECURE from the *EntreComp conceptual model*

DigiComp is the Digital Competence Framework for Citizens. DigComp 2.0 identifies the key components of digital competence in 5 areas, each of which the SECure project contributes to:

THE RELEVANT COMPONENTS OF DIGITAL COMPETENCE	HOW SECURE RESPONDS
<p>1 INFORMATION AND DATA LITERACY:</p> <ul style="list-style-type: none"> • To articulate information needs, to locate and retrieve digital data, information and content. • To judge the relevance of the source and its content. • To store, manage, and organise digital data, information and content. 	<p>The subsequent three SECure deliverables (IO2, IO3 and IO4) all focus on the importance of information and data literacy as a means to overcome a business crisis. Competences will be acquired through specific learning in</p> <ul style="list-style-type: none"> • Module 3- Understanding the role and function of data systems and tools of internal and external analysis within the business • Module 5 Understanding financial and liquidity ratios and insolvency as a restructuring approach and a fully dedicated module in • Module 6 Information Management and Monitoring
<p>2 COMMUNICATION AND COLLABORATION:</p> <ul style="list-style-type: none"> • To interact, communicate and collaborate through digital technologies while being aware of cultural and generational diversity • To manage one’s digital identity and reputation. 	<p>Module 4 has a dedicated section in the Vital role of Communications. This content is designed to increase competences in communication and collaboration (including digital) and managing one’s digital reputation.</p>
<p>3 DIGITAL CONTENT CREATION:</p> <ul style="list-style-type: none"> • To create and edit digital content. • To improve and integrate information and content into an existing body of knowledge 	<p>Competences in improving and integrating information and content into an existing body of knowledge is a common thread through all IOs.</p>
<p>4 SAFETY:</p> <ul style="list-style-type: none"> • To protect devices, content, personal data and privacy in digital environments. • To protect physical and psychological health, and to be aware of digital technologies for social well-being and social inclusion. • To be aware of the environmental impact of digital technologies and their use. 	<p>60 per cent of small businesses that are hit by cybercrime go out of business within six months. MODULE 2 A Crisis that comes from External Unavoidable Factors will increase learners’ skill levels in terms of technology related issues such as power outage or cybernetic attacks while MODULE 3 A Crisis That Comes From Internal Factors will equip the learner to understand and overcome technology deficits – lack of skills and resources.</p>

² DigiComp | EU Science Hub (europa.eu)



THE RELEVANT COMPONENTS OF DIGITAL COMPETENCE	HOW SECURE RESPONDS
<p>5 PROBLEM SOLVING:</p> <ul style="list-style-type: none"> • To identify needs and problems, and to resolve conceptual problems and problem situations in digital environments. • To use digital tools to innovate processes and products. • To keep up-to-date with the digital evolution 	<p>Our SECure Interactive Crisis Analysis and Solution Toolkit (IO3) is entirely based on problem-based learning in a digital environment. The overarching theme of the that problem-based learning will be the SECURE adopted training approach. It is a teaching method in which students learn through the complex and open-ended problems. These problems are real world problems and are used to encourage students' learning through principles and concept.</p> <p>MODULE 6 Information Management and Monitoring brings the learner on a problem-based learning video module focused on the implementation of a holistic early warning system.</p> <p>It is a teaching method in which students learn through the complex and open-ended problems. These problems are real world problems and are used to encourage students' learning through principles and concept. Problem-based learning is both a teaching method and approach to the curriculum.</p> <p>Further, MODULE 4 Leadership Culture, Stakeholder Management and Communications will upskill the learner in Critical Thinking.</p>

04

THE SECURE INTERACTIVE CRISIS ANALYSIS + SOLUTION TOOLKIT



04

THE SECURE INTERACTIVE CRISIS ANALYSIS + SOLUTION TOOLKIT

In addition to a fully comprehensive and detailed training course, an interactive assessment tool (IO3) is needed to allow management to detect crisis factors in their company at an early stage and to intervene if necessary. The assessment tool must be user friendly and provide accurate results and warnings quickly. Additionally, it must provide the impetus for early and targeted action by the various users. The framework will be based on Porter's value chain model (1985). Since every company creates value in some way, the value chain model is an efficient approach to structure an assessment.

After answering the questionnaire, the entrepreneur should receive individual, informative feedback. It should include indications of possible risk factors indicating the early stages of a crisis in the company and links to the training course so that entrepreneurs can intervene directly and refresh their knowledge if necessary. Based on our research, we believe that this tool creates awareness and helps to close knowledge gaps. Thus, in case of doubt, it can ensure the survival of small and medium-sized enterprises, which are more than essential for our economic system.

The indicator framework will provide questions that test quantitative indicators as well as qualitative indicators, including:

- **HUMAN RESOURCE MANAGEMENT** - Will examine the management practices and management of people in the company including planning and control
- **TECHNOLOGY** - Products/services, new product development and technology in the company
- **PROCUREMENT** - Purchasing practices, supplier dependency and production planning
- **LOGISTICS** – supply chain, logistics management and technology
- **OPERATIONS AND PROJECT MANAGEMENT** planning & technology and quality management
- **MARKETING AND SALES** - Market analytics and research, customer dependency, sales trends, customer communication and relationships
- **Market Environment** - Nature of the market in terms of competitiveness, competition, pricing, and profitability trends
- **Finances and Control** - Financial results, product/service profitability, liquidity/cash flow, loans/debt and financial indicators/ratios
- **Personal Wellbeing** -Work life balance, access to coaching/mentoring

Note – the final sequence of assessment topics will be concluded to dovetail with the Module content of the SECure CURRICULUM AND VET TRAINING PACKAGE (IO2).

05

KNOWLEDGE PLATFORM + OPEN EDUCATION RESOURCES





05

KNOWLEDGE PLATFORM + OPEN EDUCATION RESOURCES

To facilitate collaboration, promote communication and encourage cross-project fertilisation of ideas to accelerate learning, EUEI will lead on implementing and promoting the uptake of an open online collaborative learning and knowledge exchange platform (IO4) which will be integrated into the project website.

The tool will promote ongoing knowledge exchange – online and mobile – within project participants and across the regions too. The platform will support learning from IO1, IO2 and IO3, helping to

build closer relationships and share information, all stakeholders will use the tool to promote ‘communities of learning and practice’. In addition to fertilising peer-to-peer interaction and exchange, the tool also facilitates opportunities for peer-to-peer learning through useful features such as chat-based workspace.

The tool will also provide a repository facility and record all communication which can be accessed by others who will benefit from the activities of past participants.

Making the Most of the Framework

The SECURE Framework is innovative because it is the first practice-oriented study on (qualitative) early warning indicators in SMEs and at the same time provides the basis for the development of innovative learning resources and interactive, individual solutions to overcome corporate crises. We generate impact already during the creation of the study by involving central target groups directly in the creation process. We confront these target groups with innovative questions and thought-

provoking impulses even before the first output has been completed, thus creating a changed perception of the topic.

Our resource innovates in the generation of new information regarding early-stage indicators and also by packaging the content in an actionable resource that can be used directly by our target groups. It lays strong foundations for the rest of the project.



01 CURRICULUM, TRAINING PACKAGE AND LEARNING MODEL

Providing VET trainers, management consultants, teachers, start-up consultants etc. with access to an innovative content on early detection of business crises and crisis management which they can easily integrate into their (teaching) offers, Providing SME owners/managers and future entrepreneurs with learning materials and courses via intermediaries to generate a direct impact on overcoming existing business in a sustainable way

02 EARLY WARNING SYSTEM FRAMEWORK

03 KNOWLEDGE PLATFORM AND OPEN EDUCATION RESOURCES

Virtual learning and knowledge exchange platform. In addition to providing all SECURE tools and learning resources, the platform will allow for international collaboration and peer to peer learning.

04 INTERACTIVE CRISIS ANALYSIS AND SOLUTION TOOLKIT

app-based, innovative resource for determining the concrete crisis stage and the extent of an existing corporate crisis



Quality and Impact

To ensure SECure learning outputs are of the highest quality possible and deliver impact, we will involve representatives of our target groups in the testing and feedback process.

This will be realised as

- IO1 will be reviewed by 10 crisis experts (insolvency administrators, academics etc.),
- 10 business trainers and 10 VET and enterprise stakeholders
- IO2 will be tested by 10 crisis experts, 10 lecturers and 30 young entrepreneurs
- IO3 will be tested by 10 crisis experts, 10 business trainers, 30 SME owner / managers
- IO4 will be tested by 100+ users

We will know we are making an impact if we achieve the following IO indicators for each deliverable:-

- % users find easy to use, useful/very useful and relevant/very relevant (90%)
- % users consider make a significant contribution to improving knowledge and attitudes regarding company crisis (90%)

Finally, our Theory of Change Impact Model review the impact of SECure in terms of Outcomes, Results, Regional Impact and International Impact and support of EU goals, as illustrated overleaf.

Impact Model

Partners VET Sector SMEs / Future Entrepreneurs Civic Society

