Erasmus+

FoDIGreT

Result No 3

Fostering Digital and Green Transformation in SMEs

2021-1-PL01-KA220-HED-000027531

Methodology for the practical validation of the green digital technologies in SMEs

Co-funded by the European Union

The authors of this Project Result:

1. Uniwersytet Ekonomiczny w Poznaniu, Poland
2. Universita Degli Studi di Macerata, Italy
3. Universitat Rovira I Virgili, Spain
4. Kauno Technologijos Universitetas, Lithuania
5. EFMD AISBL, Belgium
6. Conform-Consulenza Formazione e Management Societa Consortile a Responsabilita Limitata, Italy
7. Fundacja "Partnerzy dla Samorządu", Poland

Table of Contents

I. FoDiGreT project company check-up guide

1 Introduction

The company check-up is a methodology for analysing the state of digital and sustainable transformation of SMEs, which is developed and put into practice in the FoDiGreT project as an active study tool.

As the project refers to the green aspects of the digital transformation, following the provision of lessons and study materials, students go to companies to assess the current state of the digitization and implementation of sustainable practices in SMEs in all pathways of study and the countries involved in the project. In fact, this tool also has the objective of providing the companies involved with a state of the art on their commitment in these two directions of extreme strategic importance and solidifying the link between companies and universities.

In particular, after having been introduced to the topics of digital and sustainable transformation in their courses, after having tested the OER and the study materials, the students will have acquired the knowledge that they can put into practice when they come into contact with companies. They will also implement their skills by verifying the appropriateness of the assessment tool (Check-up) and the propensity and readiness of the SMEs regarding the challenges of digitization and sustainability.

2 Division of work for training tool development and implementation

The development of the training tool was a collaborative effort, requiring the active participation of all partner organizations. The Universita Degli Studi di Macerata took the lead in this activity, overseeing the overall process. The development and implementation phases included the following key steps:

- Partners collaborated to design a comprehensive questionnaire. The content of this questionnaire was informed by the structure of Result No.1 and the materials available in Result No.2. The questions were meticulously crafted to address the green aspects of digital transformation in SMEs, focusing on the utilization of digital technologies and tools, their environmental impact, and their effect on company performance, particularly in terms of Key Performance Indicators (KPIs).
- The responsibility for establishing the quality standards of the training tool was assigned to EFMD. EFMD ensured that the standards met the project's requirements and aligned with best practices in educational tool development.
- The partner universities were tasked with the practical application and testing of the tool. Each university collaborated with SMEs in their respective countries to conduct these tests. This phase was crucial in assessing the tool's effectiveness and gathering first-hand feedback from potential end-users. 39 students from four universities were engaged in this activity.

- Upon completion of the testing phase and necessary adjustments based on the feedback, the tool was finalized and made available as a text file. The tool was designed for easy use and adaptability in different countries, with availability in English and options for translation into other languages as required.

The collaborative approach and division of responsibilities among partners ensured a thorough development process, from the initial design of the questionnaire to the final launch of the training tool. The emphasis on quality standards, practical testing, and adaptability for international use underscored the project's commitment to creating a valuable and effective resource for understanding and implementing green digital transformation in SMEs.

3 Check-up methodology

The process breaks down as follows:

- Students are divided into groups of 4-8, each associated by the academic tutor to a selected SME (min 2 each country)
- Students conduct a preliminary desk analysis on the company context (sector and market) and on the interlocutor
- Students conduct the interview at the company / online to the company interlocutor (CEO, manager, etc.) according to the Tool (if possible, they visit the company too)
- Sending the questionnaire link with the KPIs on sustainability and digitization to the company interlocutor
- The students draw up a research report, supported by the academic tutor, formulating some suggestions and implications
- The report is shared with the company and presented to the class in a special session, to collect peer reviews and reflect on similarities and differences across groups/cases.

Criteria for SMEs selection:

- SMEs in any sector
- Interlocutor: CEO, owner, manager.

Criteria for students selection:

- bachelor degree students in economics, business, marketing courses
- master degree students in economics, business, marketing courses.

Structure of the report (word file format provided, filled in in local language or English), to be delivered to the academic tutor - by end of May 2023

1. Cover Page (students' data)

2. Context and introduction (SME description with secondary data – web site, social media etc.)
4. Methodology (5-10 lines explaining the primary data analysis)
5. Findings (interview + survey - primary data analysis)
6. Recommendations
7. Reference list
8. Annex (interview tool with notes)

II. FoDiGreT project company check-up tool

1 Introduction

The information provided is collected in connection with the implemented in the EU Programme ERASMUS+ KA2 for the project FoDiGreT – Fostering Digital and Green Transformation in SMEs, led by Poznan University of Economics with name of your institution as the Consortium Partner.

These results of this Check-up assessment (interview + survey) will be included in the final report prepared by the group of students, which will be one of the project results, with a coded company name. For any further assistance on GDPR compliance, confidentiality, data collection and analysis, please refer to maciej.pietrzykowski@ue.poznan.pl.

After the interview session, the interviewee will be sent a link via e-mail to provide more detailed information on digitalization and sustainability, to be completed in a week.

For the students: before and after the interviews, ask if the interviewee has any questions or issues. You can ask the interviewee to record the audio/video to keep track of details you might want to revise for the report. While conducting the interview, record the answer with a tick / text notes in the right column of the pages, to help you and your team finalize the report, to be delivered to your academic tutor.

2 Section 1 – Interview / F2F session

Please tick the appropriate box:	
a. The final report may be accessible to the public	
b. The final report may be accessible to the public, but with a coded company name	
c. The final report may only be used for the purpose of completing the course for the FoDiGreT project and presenting the project results of the Managing Agency	
d. Other: please specify	

General information	
1. Country	
a. Italy	
b. Lithuania	
c. Poland	
d. Spain	
2. Sector	
a. Accommodation and Food Service Activities	
b. Administrative and Support Service Activities	
c. Construction	
d. Electricity, Gas, Steam and Air Conditioning Supply	
e. Information and Communication	
f. Manufacturing	
g. Mining and Quarrying	
h. Professional, Scientific and Technical Activities	
i. Real Estate Activities	
j. Transportation and Storage	
k. Water Supply; Sewerage, Waste Management and Remediation Activities	
l. Wholesale and Retail Trade	
3. Number of employees	
4. Company role	
5. Company email	
Performance and costs	
a. TOTAL REVENUE (last year)	
b. The general performance in the last 3 years has	
i. Improved substantially	
ii. Improved	
iii. Been stable	
iv. Decreased	
v. Decreased substantially	
c. The general return on our investments in the last 3 years has	
i. Improved substantially	
ii. Improved	
iii. Been stable	
iv. Decreased	

v. Decreased substantially	
d. The costs in the last 3 years have generally	
i. Improved substantially	
ii. Improved	
iii. Been stable	
iv. Decreased	
v. Decreased substantially	
6. In your business strategy, do you take into consideration EU regulations and European funding sources? (yes/no)	
DIGITALIZATION	
Open questions	
Could you provide your definition of digitalization?	
Is your company planning on investing in additional digitalization in the next five years? (yes or no and to what extent in terms of effort and resources to invest)	
Close questions	
1. Which of these technologies have you adopted in your company?	
a. Mobile, intenet, app	
b. Blockchain	
c. Internet of Things	
d. Digital twin technologies	
e. Big Data	
f. Cloud computing	
g. Edge computing	
h. AI, machine learning, deep learning	
i. Virtual/Augmented Reality	
j. Adaptive Manufacturing	
k. 3D Printing	
l. Robotic Process Automation – RPA	
m. CRM/ERP	
n. Other, please specify	

2. In which area /unit?	
a. Strategy	
b. Finance	
c. Accounting	
d. Purchasing	
e. Marketing	
f. Sales	
g. Operations / production	
h. R&D	
i. IT	
3. What kind of benefits do you expect out of digitalization? (multiple selection)	
a. Better quality	
b. Increased efficiency	
c. Reduction of errors in business operations	
d. Higher customer satisfaction	
e. Higher quality of processes	
f. Higher competitiveness	
g. Other, please specify	
4. What factors have driven the implementation of digitalization?	
a. Owner / management support	
b. Personnel support	
c. Training providers	
d. Demand from Suppliers	
e. Demand from Customers and Users	
f. Reaction or response to Competitors	
g. Business partners	
h. Law and regulation (international, national, local)	
i. Demand from Authorities and institutions	
j. Dedicated funding/incentives	
k. Others, please specify	
5. What increased the difficulty to digitalization implementation?	
a. Low commitment from owner / management	
b. Low commitment from personnel	
c. Cost advantage is too low	
d. Process rigidity to conversion	
e. Cost of programs/tools	
f. Competitive pressure	

g. Other, please specify	
6. Express you level of agreement: you think your company's personnel need to learn additional digital skills	
a. Strongly disagree	
b. Disagree	
c. Indifferent	
d. Agree	
e. Strongly agree	
7. Express you level of agreement: It is not easy to find people with the needed digital skills on the labor market	
a. Strongly disagree	
b. Disagree	
c. Indifferent	
d. Agree	
e. Strongly agree	
8. What digital training efforts is your organisation adopting for its employees?	
a. provides internal trainings	
b. provides external trainings	
c. pays for part of the employee training	
d. none	
e. other, please specify	
1. If some training is provided, in which aspects?	
a. Cybersecurity	
b. Cloud computing	
c. Recovery	
d. Automation	
e. AI and Machine learning	
f. Robotics	
g. Data mining	
h. Other, please specify	

SUSTAINABILITY	
Open questions	
Could you provide a definition of sustainability? (try to understand if only environmental or also social and economic)	
Is your company planning on investing in additional sustainability (renewable energies, waste management, recycling, reuse, less emissions, green logistics etc) in the next five years? (try to understand if yes or no and to what extent in terms of effort and resources to invest)	
What is your strategy towards green finance?	
Close questions	
1. My company has a green certification	
a. None	
b. Emas	
c. Ecolabel	
d. Other, please specify	
2. When did you obtain the certification?	
3.	
4. Have you already implemented initiatives for:	
a. Sustainability / energy improvement of the facilities	
b. Production process redesign	
c. Energy saving	
d. Renewable energy sources	
e. Emissions reduction	
f. Water and resource waste management	
g. Reuse and creation of materials	
h. Reuse and creation of new products	
i. Others, please specify	

5. In which area /unit?	
a. Strategy	
b. Finance	
c. Accounting	
d. Purchasing	
e. Marketing	
f. Sales	
g. Operations / production	
h. R&D	
i. IT	
6. What kind of benefits do you expect from sustainability?	
a. Having a green appeal	
b. Energy saving	
c. Recycling and saving materials	
d. Cost reduction	
e. Increase life cycle durations, reuse	
f. Others, please specify	
7. What factors encouraged implementing sustainability?	
a. Owner / management support	
b. Personnel support	
c. Training providers	
d. Demand from Suppliers	
e. Demand from Customers and Users	
f. Reaction or response to Competitors	
g. Business partners	
h. Law and regulation (international, national, local)	
i. Demand from Authorities and institutions	
j. Dedicated fundings/incentives	
k. Others, please specify	
8. What increased the difficulty to sustainability implementation?	
a. Low commitment from owner / management	
b. Low commitment from personnel	
c. Cost advantage is too low	
d. Lack of financial resources	
e. Process rigidity to conversion	
f. Access to resources / materials	
g. Cost of resources / materials	

h. Low interest from customers	
i. Competitive pressure	
j. Other, please specify	
9. Express you level of agreement: you think your company's personnel need to learn additional green skills in sustainability Likert 1-5	
10. Express you level of agreement: It is not easy to find people with the needed green skills on the labour market Likert 1-5	
11. What initiatives is your company implementing to train employees towards sustainability?	
a. provides internal trainings	
b. provides external trainings	
c. pays for part of the employee training	
d. none	
e. other, please specify	
12. If some training is provided, in which aspects?	
a. Circular Economy	
b. Recycling	
c. Resource management	
d. Alternative energy sources	
e. Security	
f. Supply chain sustainability	
g. Other, please specify	

3 DSM MATRIX

The digitalization-sustainability matrix is allowing the company to put into relation the efforts made in implementing digitalization and sustainability, tracing a roadmap for further application (Source: own elaboration from Gupta, S., Motlagh, M., & Rhyner, J. (2020). The digitalization sustainability matrix: A participatory research tool for investigating digitainability. Sustainability, 12(21), 9283.)

Digitalization tools	Data Driven			Analytics Driven			Design Driven		Robotic Process Automation – RPA			
	Mobile, intenet, app	Blockchain	Internet of Things, Digital twin technologies	Big Data	Cloud computing, Edge computing	AI, machine learning, deep learning	Virtual/ Augmented Reality	Adaptive Manufacturing, 3D Printing	Automation Anywhere	Blueprism	UiPath	Microsoft Power Automate
Implementing this tech? (yes = tick)												
Which sustainability aspect has this helped? (yes = tick)												
Structure												
Production process												
Energy saving												
Energy sources												
Emissions reduction												

Water and resource waste management												
Reuse and creation of materials												
Reuse and creation of new products												

4 Section 2 – SURVEY

The interview is finished, additional data will be collected via survey in a couple of days. Students and academic tutor will send the link via email:
https://forms.gle/pjYDntbAcHopVL6k8

1. Country
   a. Italy
   b. Lithuania
   c. Poland
   d. Spain
2. Sector
   a. Accommodation and Food Service Activities
   b. Administrative and Support Service Activities
   c. Construction
   d. Electricity, Gas, Steam and Air Conditioning Supply
   e. Information and Communication
   f. Manufacturing
   g. Mining and Quarrying
   h. Professional, Scientific and Technical Activities
   i. Real Estate Activities
   j. Transportation and Storage
   k. Water Supply; Sewerage, Waste Management and Remediation Activities
   l. Wholesale and Retail Trade
3. Company performance / revenue (last year, in €)
4. Number of employees
5. Your company role and contact: _____

4.1 Digitalization KPI

1. ROI on digital investment?
2. [%] of annual revenue allocated towards Digitalization and Automation projects within the company
3. [%] of physical products for which digital or databased services are proposed
4. [%] of defined marketing/sales employee's digitalization competencies that are management in digital software systems
5. [%] of employees in administrational areas that receive at least one annual training to increase their digital competencies

6. [%] of customer orders that are automatically transferred from order acceptance until production planning in IT-systems
7. [%] of production machines that automatically exchange data with higher-level IT systems (es: MES or ERP)
8. [%] of the material containers and carriers at workstations for which their filling level is automatically monitored in real time in higher-level IT systems
9. [%] of incoming material deliveries for which their location and the time of arrival is monitored in real-time
10. [%] of software systems for which replacement software is provided to ensure task execution in the case of software-failure

4.2 Sustainability KPI

1) Total cost of raw materials
   a) % Raw materials for reuse
2) Total cost of energy
   a) electricity cost
   b) gas cost
   c) other, specify
3) Water cost
   a) water reuse
   b) % water for reuse
   c) water purification
   d) % purified water
4) Total cost of transport
   a) type and cost of:
   b) type and cost of:
   c) type and cost of:
   d) type and cost of:
5) Total cost of social initiatives
   a) type and cost of:
   b) type and cost of:
   c) type and cost of:
6) Investment in innovations towards sustainability
   a) type and cost of:
   b) type and cost of:
   c) type and cost of:
7) Investments in sustainable initiatives
   a) type and cost of:

b) type and cost of:
c) type and cost of:

8) Investments in renewable energy (es: solar panels installation : €)
   a) type and cost of:
   b) type and cost of:
   c) type and cost of:
9) Investments in recycling/reuse
   a) type and cost of:
   b) type and cost of:
   c) type and cost of:

III. FoDiGreT project company check-up Final Report

1 FoDiGreT Check-up tool final report and indications

1.1 Introduction

The company check-up is a methodology for analysing the state of digital and sustainable transformation of SMEs; in particular, the objectives of this phase are:

- To assess the current state of the digitization and implementation of sustainable practices in SMEs in all pathways of study and the countries involved in the project.
- To test the capability of students (after having been introduced to the topics of digital and sustainable transformation in their courses, after having tested the OER and the study materials) to put into practice the tools and skills acquired in the contact with companies.
- To provide the companies involved with a state of the art on their commitment in sustainability and digitalization and solidify the link between companies and universities.

1.2 Methodology

Based on the indications provided in the Check-up tools, SMEs were selected in national contexts following the selection criteria. The students involved are business, entrepreneurship and marketing students form master and bachelor courses, they were instructed to:

- conduct a preliminary desk analysis on the company context (sector and market) and on the interviewee;
- conduct an interview at the company / online via video-conference system to the company interviewee (CEO, manager, etc.) according to the Tool;
- drew up a research report, supported by the academic tutor, formulating some suggestions and implications.

The report was shared with the company and presented to the class in a special session, to collect peer reviews and reflect on similarities and differences across groups/cases.

1.3 The design of the Tool

The check-up tool was composed following the results of the previous FoDiGreT project and in particular the research results and training material created to fill existing gaps in terms of training, assessment and implementation of green and digital transformation in SMEs.
The objective of this tool was that it followed the learning by doing approach and that it was consistent with the following objectives: cover issues related to how digital technologies and tools are used; how the use of digital technologies and tools affects the environment; questions about KPIs in terms of the company's performance.
Therefore, the partners of the FoDiGreT project all collaborated in the drafting of this Guide, structured in two main moments, the survey and the interview, the contents of which followed the structure of the research gaps, which gave shape to the cognitive framework divided into modules, which consequently oriented the performance areas regarding which to formulate questions and KPIs, as shown in the table below.

MODULE	UNIT	Questions and KPIs
Institutional framework of SMEs transformation URV	1.1. Circular and digital economy: from the current economic model to sustainable development	
	1.2. Transforming production and operation management	
	1.3. Alternative financial models for green evolution of SMEs	
Digitalization: new techs and the impact on SMEs PUEB	2.1. Possibilities to employ digital workforce by SMEs	
	2.2. Practice to use robotics in SMEs operations	
	2.3. Implementation of information and data security in SMEs operations	
Circular economy KTU	3.1. Circular resource management	
	3.2. More rational use of energy by SMEs	
	3.3. Logistic transformation	
Green marketing UNIMC	4.1. Green marketing as a differentiation strategy	
	4.2. Practice of SMEs to add value for the consumer through green marketing	
	4.3. Measuring the impact of green marketing	

Source: own Elaborations

This approach made it possible to produce a tool in line with the most relevant gaps, maximizing the expertise of the partnership and the participatory construction of the tool.

1.4 Companies involved

The companies involved are 9: Italy 2, Spain 3, Lithuania 2, Poland 2
The sectors and the size in terms of workers employed are shown in the following table:

Company	Country	Number of Employees	Industry	Number of students involved	Type of contact
Giano	Italy	30	Footwear factory	10	Visit
Giano Woolrich Div.	Italy	30	Footwear factory	10	Visit
Amiblu	Spain	185		6	Online Interview
Jabil	Spain	400	Manufacturing and Electronics Solutions Services	6	Online Interview
Saica	Spain		Packaging	6	Visit
UAB Led	Lithuania	45	Educational tools	2	Online Interview
Lit2	Lithuania	24	Create projects and produce LED lighting solutions	2	Online Interview
AniDis Group	Poland	32	Distribution of professional pet products	11	Online Interview
Versele-Laga	Poland	239	Food and Beverage Manufacturing	6	Online Interview

Source: own Elaborations

1.5 Results

The Tool identified can be used both as:

- A grid for qualitative research that allows to identify, in general terms, the main dimensions and characteristics of the path towards digitalization and sustainability undertaken by companies in a sector or in a Country;
- A measuring tool, a dashboard, for the specific company.

These results from the Check-up tool testing are further discussed below according to these main categories.

Grid of analysis

Using the tool as a grid of analysis of the state of the art in terms of digitalization and sustainability of the companies involved, it is possible to identify the following evidence.

A. Digitalisation

1. Definition

The concept of digitalization is declined in terms of optimization in information management, that allows: a more effective support to decisions; an improvement in the management of relationships and processes, an integration of the different business functions. In any case, the concept of digitalization is linked to simplification of processes, so a direct relationship between re-engineering processes and increasing digitalization is defined.

2. Technologies, intervention areas and implemented activities

The level of digitalization and the ways in which it is introduced in the company are linked to the idea of digitalization carried out by the entrepreneur/management. In line with the vision indicated, in fact, the technologies used are linked to:

- automation of administrative processes;
- customer relationship and management of incoming and outgoing logistics;
- automation of the production process (robotization) and support to the product creation/ideation process, also thanks to augmented reality. These aspects are present at a more advanced level of development.

Given the nature of the activities implemented, the areas of intervention concern all managerial functions, although the impact varies depending on the level of digitalization.

3. Future investments

The investments planning follows a logic of short/medium term, tied to:

- the vision
- the costs
- the financing means and sources.

In other words, on the basis of a clear initial view of the objectives to be achieved, investments proceed in successive steps, and the interval between each phase is linked to the capacity to spend and finance.

4. Benefits and difficulties

The benefits and difficulties are also defined and perceived according to the vision of digitalization, and consequently linked to: efficiency, effectiveness and speed of information

supporting decision making, improvement of the partnership/sharing relationship, improved overall quality and processes, increased efficiency, reduction of errors in business operations, increased customer satisfaction and competitiveness. At the next level of development there is the improvement in design.

5. Push and pull factors

The incentive for digitisation is linked to external and internal dimensions, often in copresence. The main internal factor is the vision and support of ownership/management which, linked to the training provided to staff, often creates a conducive environment to digitalisation.

The external factors are connected to dimensions not controllable or little controllable from the enterprise: pressure of the competition; greater efficiency and effectiveness demanded by customers, suppliers or partners; funds and financial incentives.

The co-presence of external and internal factors seems to be a necessary function for the start of digitalization; in fact, the main factor of delay is linked to the resistance of management. Other equally important, and often related, factors are: lack of skills and concern about data security.

6. Staff Training

The lack of digital skills is common to every country; this aspect determines a need for training to which companies try to respond with internal activities or, more often, using external support. Training is almost always centred on topics that are considered to be priority, or on immediate needs. It is however commonly perceived that, in any case, training allows to create a conducive climate to the introduction of digital tools.

B. Sustainability

1. Definition

Sustainability involves producing value that considers the environmental impact and, more generally, maintaining and enhancing the wealth of resources for future generations.

More specifically, sustainability is associated with the dimensions of:

- reduction of waste and energy efficiency,
- use of alternative energy sources,
- use of materials with low environmental impact and reduced emissions,
- recycling and circular economy,
- durability of the product by improving its quality,
- optimization process and efficiency production,
- with less frequency, social responsibility, declined in terms of workers' well-being and return of value to society.

2. Technologies, intervention areas and implemented activities

Again, the implemented activities and intervention areas are linked to the ownership/management vision on sustainability. The main implemented activities are related to the environmental dimension of sustainability and concern aspects of: efficiency; reduction of waste; use of alternative energy; circularity of resources; reduction of emissions; re-engineering process in terms of optimisation; less frequently, employee welfare improvement activities and community social initiatives. The areas of intervention concern all business functions, with a gradual involvement from operational to strategic dimensions, in function of the vision on sustainability.

3. Future investments

The planned short-term investments mainly concern energy efficiency and the switch to alternative energy sources. In the medium term, the emphasis is given to the activity of tracking and control of productive process and logistic; in the long term, investments are linked to the restructuring of processes in terms of greater sustainability.

4. Benefits and difficulties

The benefits are linked to three main areas: cost, process/product, market.

Cost dimensions include increasing efficiency, saving energy, reducing waste.

The second area, process/product, concern: reduction of errors, increase of product life cycle, quality improvement. Finally, market aspects are linked to the enhancement of customer satisfaction and competitive capacity.

The market benefits are identified as last because it is almost general opinion that sustainability is currently a value sought only by a low percentage of consumers.

In general, the idea that sustainability is the best way not only from an ethical but also from an economic point of view seems to become more and more concrete.

The difficulties are connected to aspects less controllable from enterprise: supplying, logistic, finding of investment and staff resources.

5. Push and pull factors

Again, these can be divided in internal and external factors. The internal factors are mainly related to the vision of entrepreneurship/management; external factors concern the legislative provisions; the present or possible compulsory certification; the push of competitors, customers and partners.

6. Training of personnel

Once more, there is an education gap on staff currently available on the labour market; training needs in this area, compared to the one's linked to digitalization, are:

- less evident, in the sense that they are less intense than previous;
- less specific, in the sense that they are identified in vague terms;
- more operational and efficiency-related.

These evidences do not mean that training needs in object are less urgent, but only they are still at a latent level because the market pressure is less strong and knowledge spread in the field is less and less thorough than digitalization (which is a more mature topic).

Measuring tool

Using the tool as measuring tool for the specific enterprise in terms of digitalization and sustainability, results obtained show how the two tools can be effectively used in business assessment.

The Tool is composed of two levels of evaluation:

- a part of self-assessment;
- a part that identifies measurable indicators that can be used as concrete evidence of a certain path towards sustainability and digitalisation.

KPIs enable the identification of objective and measurable elements that can serve as an indicator of the level of digitalisation and sustainability of the enterprise; they provide an objective dimension of verification or refutation of the self-evaluation process done in the previous part.

The Matrix makes it possible to relate the aspects of digitalization and sustainability and understand how the two dimensions allow to set a possible virtuous circle of mutual development, that is, how one dimension can help to develop and integrate the other.

1.6 Feedback from students, educators and trainers

The students found the training experience challenging and at times complex due to the presence of many steps and areas of action but they had the opportunity to directly put into practice the many aspects of digitalisation and sustainability.

From the educators and trainers who guided the students in this experience we learn that:

- the check-up encourages practical learning through direct engagement with real-world businesses, enhancing students' ability to apply theoretical knowledge;
- it promotes critical thinking and analysis, as students must analyze data and formulate recommendations;
- the guide is clear, concise and informative for understanding the main goals and structure of the check-upguide itself;
- the process of performing an interview and survey was smooth
- the informants did not have any difficulties in completing the survey, nor students have any challenges during the interview.

- for some, the methodology's complexity could be overwhelming for some students, necessitating a deep understanding of business practices, hence more educator/trainer guidance;
- the method prerequisite is business access, which can be critical for some courses/contexts.

In sum, the concepts under consideration are relevant for SMEs, and that the check-up guide developed during the project is relevant and practical. In order to conduct high-quality interviews, the students got to know and deepen their knowledge about the concepts of digitization and sustainability. It was a great opportunity for them to strengthen their competence in conducting research.

1.7 Conclusion

In general terms, the piloting of the tool showed:

a. The existence of a training gap, more precisely specified for digitalization and more latent but equally present for sustainability; this implies the need to create professional figures consistent with the training needs identified and, at the same time, training tools that can be used by companies in their internal activities.
b. The strong relationship between digitalization and sustainability: the re-engineering and optimization of processes, the improvement of tracking and control mechanisms, the possibility of less use of physical media, the improvement of communication and relationship possibilities, the greater integration of functions and companies - benefits obtainable from digitalization - work in the interests of sustainability. At the same time, the rethinking and simplification of production processes, the drive for energy efficiency, etc. can be an opportunity for the use or development of digital tools in the company.
c. The relationship between entrepreneurship/management vision and implemented activities.

In terms of measurement, the verification of the check-up tool outlined by the project allows us to conclude that they are effective in assessing the company's approach in terms of digitalization and sustainability because:

- They allow to identify the vision of the company on the two aspects;
- They allow to specify the gaps of intervention at strategic and operational level thanks to the link between vision and intervention measures;
- They allow to set up a self-assessment process for the awareness of the path taken in terms of strengths and weaknesses, push and pull factors, delay on the activities' implementation, consistency of the objectives as benefits obtained;
- They provide objective verification dimensions in terms of easily identifiable and measurable indicators thanks to KPIs;
- They provide integrated evaluation thanks to the Matrix;
- They allow to highlight the gaps and to identify possible remedial actions.

In summary, the evaluation tool is an effective means of measuring the aspects of digitalization and sustainability of the company and its virtuous integration; at the same time, it is highlighted as a useful guide for the identification of solutions and interventions to correct the highlighted gaps.