



Report

Lean Methodological Framework

Project Result 1 Task 2



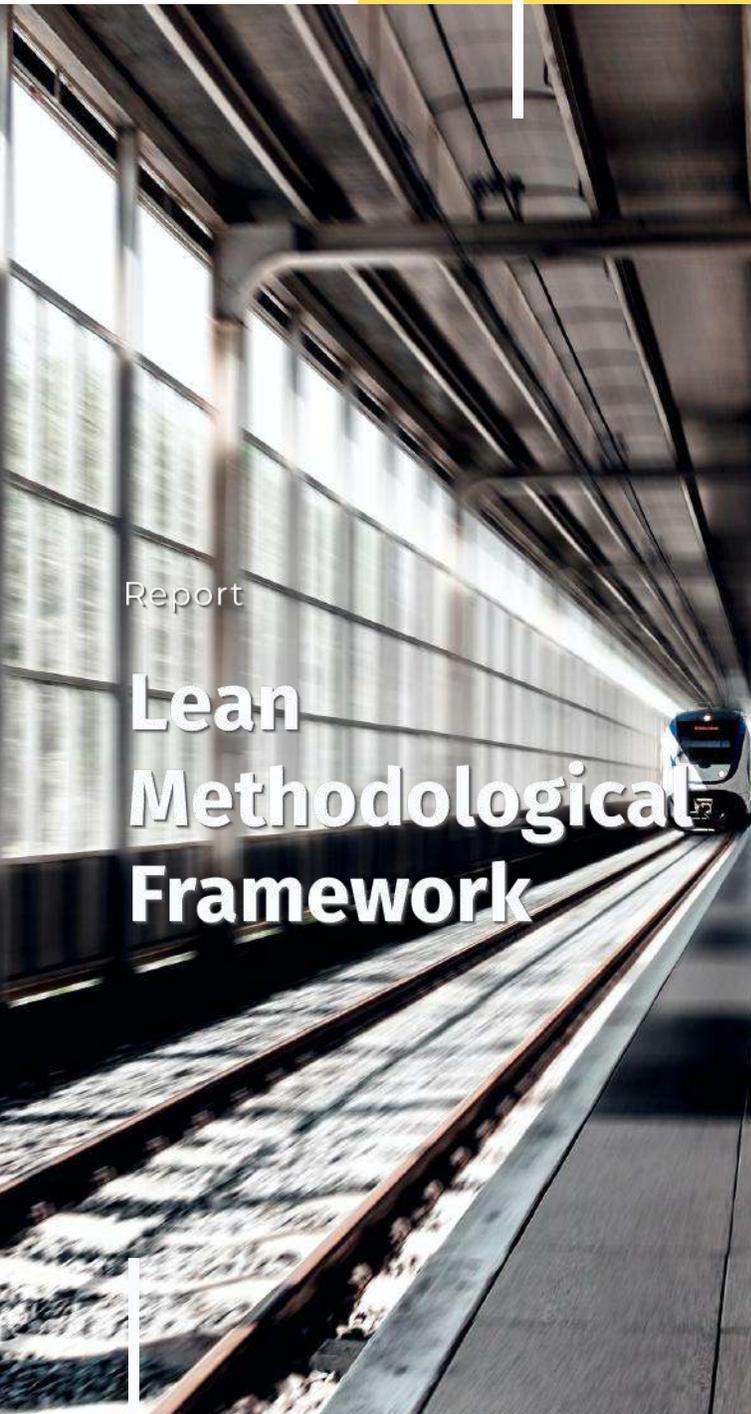
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» Project Information

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Report

Lean Methodological Framework

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Executive Summary

The general objective of the DGI Tourism project is to develop a holistic training model for Vocational Education and Trainings (VETs) that would encourage responsible travel and ensure sustainable growth for the sector in the post-COVID 19 future. More specifically, the main goal of the Project Result (PR1) is to develop interactive, participatory, and lean teaching approaches that boost sustainable thinking in tourism education.

The work within the PR1 Methodological framework is divided into two activities as follows:

- Task 1: Selection of Methodologies (led by Travel2Fit)
- Task 2: Lean Methodological Framework (led by Atlantis Engineering SA)

In the first task, all consortium partners were asked to record the methodologies they use in their organizations, but also to make an extensive analysis in the methodologies used in general in the European Union. Then the partners, in PR1/T2, conducted research on the methods and tools used in each partner's country. Following, a Strengths, Weaknesses, Opportunities, Threats (SWOT) analysis was executed on the existing and established methodologies, related to the content of the project. The selection of methodologies was based on comprehensiveness, which is a rational basis for the development of the target tool specified in the DGI Tourism project.



The economic, employment, social, and environmental implications of tourism make it a significant industry in the European Union (EU). Statistics on tourism¹ are used to assess the EU's regional and sustainable development programs in addition to its tourism policy. In 2018, businesses in the European non-financial business economy that belonged to the tourism industry exceeded 10%. An estimated 12.3 million people were employed by these 2.3 million enterprises. 9.5% of the non-financial business economy's workforce and 22.4% of the workforce in the services sector were employed by businesses in the tourism-related industries.

As is widely known, the tourism sector has been hit hard by the Covid-19 pandemic. In the EU, the number of nights spent in tourist accommodations declined by 51% in 2020 compared to 2019. With 28% more nights spent in hotels in 2021 compared to 2020, the EU's accommodation market began to recover in 2021, returning to levels that were over two thirds higher than those prior to the 2019 pandemic. 51 million fewer European Union citizens traveled abroad in 2020 (for personal purposes). While 243 million Europeans travelled for at least one overnight stay during the year before the pandemic, this number dropped by 21% to 193 million in the year 2020.¹

DGI Tourism Project Objectives



Establish a novel training methodological framework for the VET sector



Develop adaptable and transferable training material by tourism experts



Propose a path for tourism professionals to adapt to post-covid market needs



Perform trials and assess results, offer feedback to VET centres

For more information:

[DGI Tourism Project Website](#)



At the same time, among these findings, the degradation of the environment by tourism activities was also highlighted. Consequently, it is at risk of climate change with its effects ranging from soil erosion, increased pollution, dumping of pollutants into the sea, loss of natural habitats, increased pressure on endangered species, etc. Climate action requires

Considering the aforementioned, the DGI Tourism Project initiative seeks to lead the changes in the tourism industry. Its goal is to innovatively accommodate post-Covid travel industry demands that mandate a seamless shift towards more sustainable methods, providing a futureproof for the tourism sector. It also aims to adapt the VET offering to the difficulties of the digital age and climate change. The proposed methodology has been created based on well-known models for quality excellence and customized for the delivery of digital, green, innovative methodology for VETs.

Comparative analysis on the methods and tools

The findings of the analyses performed as part of the output of PR1/T1 are the characteristics of the most widely used learning methodologies, which are mostly used in business and industrial sectors. In order to determine the best methodology based on the results of the SWOT analysis, it is imperative to look at the tools utilized in the partners' countries in this section of the research.

Methodologies of Assessment: Greece

European Quality Assurance Reference Framework for VET (EQAVET)

According to the report on developments in VET policy in 2015-2019² presented by [CEDEFOP](#), a national quality assurance framework aligned to the EQAVET was officially presented in July 2011 and it was partially implemented over a pilot phase covering post-secondary IVET. More specifically, IVET providers were asked to:

- Draw up action plans at the beginning of the year
- Prepare an annual evaluation report
- Perform self-assessment
- Put in place accreditation and monitoring of continuing VET providers

The main goal for the 2016–2020 period was to complete the deployment of the quality assurance system. To achieve this, methods for quality control were created that were connected to the implementation of the Hellenic Qualifications Framework and to assuring the standard of the certification procedure based on learning outcomes. It led to the creation of a manual that was tested in the tourist industry by creating evaluation criteria based on learning objectives.

Moreover, according to the CEDEFOP calculations based on EQAVET Secretariat surveys for 2013 and 2018 data, Greece was above the EU average in IVET and CVET IN 2018, while “all EQAVET indicators are used, including those on the destination of VET learners upon completion of their training, the use of acquired skills at the workplace, and mechanisms to identify training needs at the workplace”.

Finally, the guidelines for VET providers suggested by [EOPPEP](#), which is the National Reference Point for Quality Assurance in VET and represents Greece in the European network for EQAVET, identify key activities that need to be taken into account “in order to improve quality assurance processes in line with the EQAVET Framework”.³

European Foundation for Quality Management (EFQM)

An internationally recognized management framework that helps organizations manage change and boost performance is the EFQM Model.⁴ Since its introduction, the EFQM Model has given businesses all around the world a guide for creating a culture of innovation and development. Some of the objectives of the EFQM model are the following: It assists in defining your goal, cultivating strong leaders, overcoming special

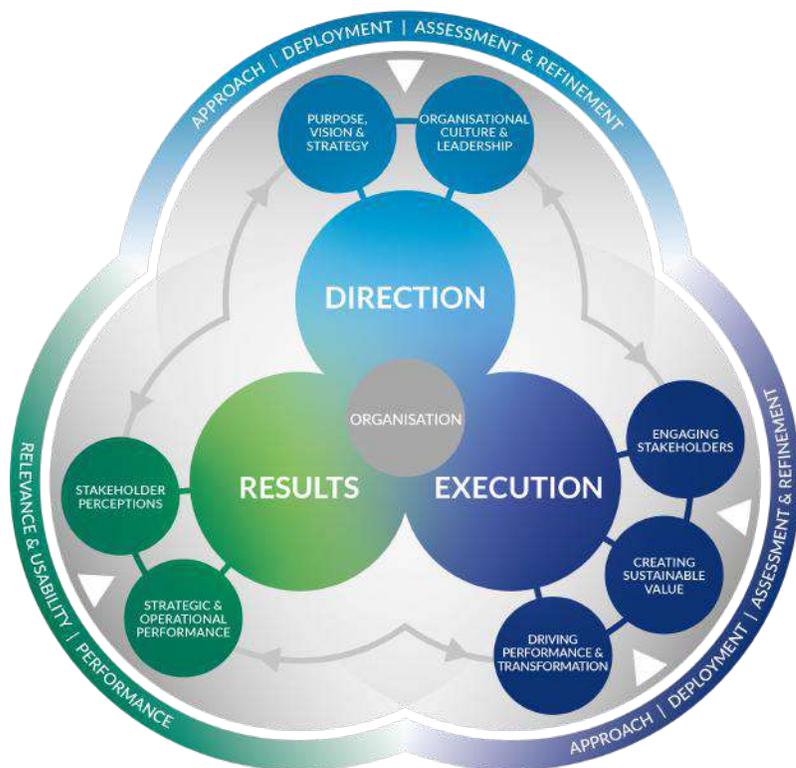


Image source: [European Foundation for Quality Management](#)

organizational problems, creating your culture, changing your organization, predicting the futures, supporting agile practices. Over the last several years, an increasing number of businesses, institutions, and organizations from the public and private sectors have used the EFQM approach. We have discovered examples and studies of its use in businesses providing social services, hotels, elementary and secondary schools, pharmacies, and other environments, with varying degrees of excellence.⁵

Total Quality Management (TQM)

TQM is linked to continuous improvement regarding an organisation's performance. However, the increased competitiveness among institutions necessitated the use of TQM principles in higher education as well. The Quality Assurance Unit (MODIP) is in charge of implementing TQM concepts and conducting its evaluation at Greek institutions. It is used in order to improve the educational work and the quality services through internal and external evaluation procedures. Moreover, according to a research study in private sector Higher Education Institutions in Greece, "the TQM elements mostly adopted by the Greek HEIs concern the following: student focus, leadership and top management commitment, strategic quality planning, process management and teaching staff and employee involvement. On the other hand, the most significant results achieved by the sample HEIs concern quality performance improvement, teaching staff and employee satisfaction, operational performance improvement and the positive impact on society."

The application of TQM is also applied in the Greek Public Sector as, based on Law 3230/2004, quality tools as the following are used: Management by Objectives, Indicators Measuring Efficiency and Effectiveness, the Common Assessment Framework and the Quality Certification through ISO.

What is more, based on the paper on Quality Assurance Mapping in Greek Service Companies Greek⁶ companies offering services, despite their small size, seem to follow progressively the trends of international and competitive markets, implementing various QMSs. At the same time, it shows that the majority of companies ask for external quality consultants to help them with the proper design and implementation of the selected standards. On the other hand, this review reveals that only few publications presented exhaustively the methodology that was followed by service companies in order to design and apply a QMS."

Methodologies of Assessment: Italy

For what concerns the **2009 European Parliament and of the Council Recommendation on EQAVET**, the European Quality Assurance in Vocational Education and Training, the Italian VET environment was positively influenced on several levels.

Italy has been one of the first member to indicate a **National Reference Point**, the ISFOL (Istituto per lo Sviluppo della Formazione Professionale dei Lavoratori, i.e. Institute for the Development of the VET for Workers), which existed since 1973, and always worked as a hub to create synergies in the field, including in its board representatives from national and local institutions, but also the providers of VET education. Since 2016, ISFOL has changed its legal name in INAPP (National Institute for the Analysis of the Public Policies).

About the **implementation of the EQF**, Italy has been one of the enthusiastic promoters of this initiative since its development in 2008. **From 2012, with the deployment of the First Italian Report on the implementation of the EQF Strategy**, Italy moved to a further step, which also included the crossing with other policies to promote the employability and the job-matching.

After the 2017 Recommendation on EQF, which integrates and substitutes the 2008 one, in 2018 Italy has decided to make a step forward, detailing a **National Framework for the Qualifications (QNQ)**. This tool, on one side provides an exact matching between the national and European schemes and on the other, it is one of the most detailed and punctual documents produced by a national government at European level.

The **Regional Framework for Professional Standards (QRSP)**, developed by a governmental decision in 2015, provides a sort of final catalogue of all the professionals which have been identified by the regional authorities in accordance with the request and needs of the local economic clusters. These documents represent a precious start to understand and compare the standards between regions and to understand the direction of the job market.

Lombardia region is particularly advanced in this direction, producing one of the most detailed and complex reports which can be considered a national standard at the levels of detail and completeness. This positive output is due to a deep collaboration between private stakeholders and public bodies.

Another very precious tool which is implemented both at National and regional level is the **Atlas of Jobs and Qualifications**, which provides coherent assessment of the situation in terms of knowledge, skills and competences, with the explicit intention of being a tool useful both for policy makers, companies and VET actors. The realization of the Atlas has been the start of an important process of deepening and homogenization related to the professional profiles objective that is offering operators accredited to Vet, important incentives and ideas for example on the creation of new grids of collection and evaluation of training activities on the job and school-work alternation more effective and usable for all the actors involved.

Unfortunately, several problems remain, in particular due to the **fragmentation of the scenario at regional level**: VET training in Italy depends mostly on the Regions, which can deploy different strategies and available budget, reaching quite unbalanced results. This also partially derives from a historical difference between economic clusters among the Italian territories, presenting both virtuous situation in which companies and VET providers work jointly and conditions of scarce coordination and lack of common references.

About **non-formal education recognition**, after years of delay, Italy has recently made some relevant progress. Nowadays the non-formal education is part of the training plans of several levels of schools and universities, including professional ones and VET providers. Trainers and teachers, in their preparation and academic path, are made aware of the relevance of this approach in relation to the classical formal and on-the-job education. At the same time, it is not always easy to integrate non-formal education in learning plans which includes companies and artisans, since its goal does not appear to be always clear.

For what concerns **evaluation of the education results in VET programs**, Italy has always included company tutors in the evaluation process, as we have already mentioned before about the Atlas, since this was seen as a valorisation of the on-the-job results of the trainee, but also a way to make companies and artisans more aware of their role in the learning process, participating to the shaping of the training offer and adapting them to the learning needs of each trainee. The comparison and cooperation between company tutor and school tutor also allows vocation training institutions to modulate and evolve their training and their reference profiles as much as possible in line with the needs of the market.

Total Quality Management has not been particularly stressed in Italian legislation. It appears as one of the several terms of reference and tool of evaluation proposed by the public administration and the education system. This does not mean that there is not a quality management strategy, but this is evaluated sometimes with other similar standard approaches, others with specific internal parameters. Of course, this peculiarity risks making comparisons and side-to-side evaluation more complex.^{7 8 9 10}





Methodologies of Assessment: Austria

National Qualification Framework (NQF)

“The National Qualification Framework (NQF)¹¹ is an instrument for mapping qualifications from the Austrian education system. The aims are to provide a transparency tool to facilitate the orientation within the Austrian education system and to support the comparability and comprehensibility of Austrian qualifications in Europe.

In Europe there are different, historically evolved, education systems but also a vast variety of qualifications. As mobility from people in Europe increases, during training periods or within the working life, there is a desire for greater clarity and better comparability.

The European Commission has recommended the EU-Member States to develop National Qualification Frameworks. Each Member State implements its own qualification framework and allocates national qualifications based on the respective learning outcomes regardless of the education areas (from the vocational education, the tertiary education to the Education and Training) to a specific level.

The European Qualification Framework (EQF) is a translation tool which is necessary to reference all national qualifications and to make them comparable.”

NQF-Act

“Efforts to develop the NQF in Austria were pushed ahead based on the 2008 EQF recommendation of the European Parliament and Council. The adoption of the federal law on the National Qualifications Framework (NQF-Act) was an important step towards full implementation of the National Qualifications Framework. The act was adopted by the National Council on 24 February and then by the Federal Council on 10 March. It went into effect on 15 March 2016.

Development of the NQF-Act was within the responsibility of the former Federal Ministry of Education and Women’s Affairs in consultation with the Federal Ministry of Science, Research and Economy (now the joint Federal Ministry of Education, Science and Research), involving as well, all national stakeholder and interest groups.

The act regulates the mapping of Austrian qualifications based on learning outcomes to one of the eight qualification levels of the National Qualifications Framework and the publication of the results of the mapping process for information purposes in the NQF-Register.

The objective of the NQF-Act is to use the National Qualifications Framework as a tool for encouraging the transparency and comparability of qualifications in Austria and Europe and to promote lifelong learning, which comprises formal, non-formal, and informal learning. The NQF-Act does not decidedly define the mapping of non-formal or informal learning since further process specifications are needed for these.”



Methodologies of Assessment: The Netherlands

VET in the Netherlands is comprehensive and has considerably good labour market outcomes within the European Union. The VET system in the Netherlands is grounded in adaptability and flexibility to continuously meet the changing labour market demands and societal needs. Thus, quality assessments are continuously strengthened to ensure the efficiency of the Dutch VET system.

The Netherlands' Ministry of Education, Culture and Science lays down the general framework and conditions of the country's VET system, while municipalities oversee the implementation at the regional level. The Ministry of Education, Culture and Science and the MBO Council (Dutch Council for Vocational Training and Adult Education) have been involved in the development of the EQAVET Framework since 2004. When the EQAVET Framework was implemented EU-wide, a VET system for quality assurance was already in place. The Dutch national quality assurance system follows a framework that uses all EQAVET indicators. In 2018, the Netherlands was above the EU average in using these indicators.¹² The National Coordination Point EQAVET (NCP EQAVET) guarantees the quality education provided by VET providers according to the EQAVET framework.

The provision of the VET programs is decentralized and organized by the VET providers, because of the strong regional orientation of VET. The VET providers determine themselves which programs they offer as well as the design and implementation of the quality assurance systems, within the legal requirements and in mutual competition. Providers and teams of teachers work according to the Plan-Do-Check-Act/Review Cycle (PDCA-Cycle). The external supervision of VET providers is handled by the Inspectorate of Education.

At the national level, the Dutch system uses two monitors for quality assessments. These are the JOB monitor and the BPV monitor. The JOB Monitor is coordinated by Youth Organization Vocational Education (Jongeren Organisatie Beroepsonderwijs, JOB), a national organisation that represents the interests of VET students and is financed by the Ministry. This organisation conducts a student satisfaction survey that measures how satisfied VET students are with VET education. This is done twice a year. On the other hand, the BPV monitor looks into VET providers and the labour market to continuously measure the quality of apprenticeships per educational course, school and sector. Students and the trainer-on-the-job need to fill in surveys after the apprenticeship.

With this setup, the Dutch VET system strongly relies on self-regulation by VET providers. Thus, the national framework also puts a heavy focus on building a strong quality culture, a “soft” concept that looks into the attitudes and behaviours of individuals within VET organisations.⁶ Quality culture is one of the criteria that the Inspectorate of Education looks into.

Methodologies Relevant to the DGI Tourism Project

The goal, as already pointed out above, is the development of a Lean methodological framework for the needs of the reinforcement of VET professionals. In the present analysis, the widely used tools and concepts that are mostly applied in European countries have been selected.

The criteria for choosing the appropriate methodologies are as follows:

- relevance of the scope of the project
- consortium brainstorming
- focus on green, digital, and innovative elements

Considering above, the consortium concluded that the methodologies to be used are as follows:



The description and analysis of these methodologies was stated in PR1/T1. However, it is worthwhile highlighting more details of the aforementioned methodologies in the field of education in the context of the current research.



Digital Competence Framework

In the framework of DigiCompOrg¹³, digital learning technologies represent a critical enabler for educational organizations, supporting their efforts to realize their unique purpose and vision for excellent education. A process of planning for change on three fundamental dimensions—pedagogical, technical, and organizational—is implied by the deep, as opposed to superficial, integration of digital technology into education.

DigiCompOrg offers a thorough and general conceptual framework that captures all elements of the methodical integration of digital learning in educational organizations across all educational sectors. It may be modified to fit the various environments in which educational institutions, intermediaries, or project developers work (e.g., sector-specific elements, sub-elements or descriptors may be added).

There are seven common elements (seen as parts of the same whole) and fifteen sub-elements within education sectors that reflect a different aspect of the complex process of integrating and effectively using digital learning technologies while they are being interconnected.

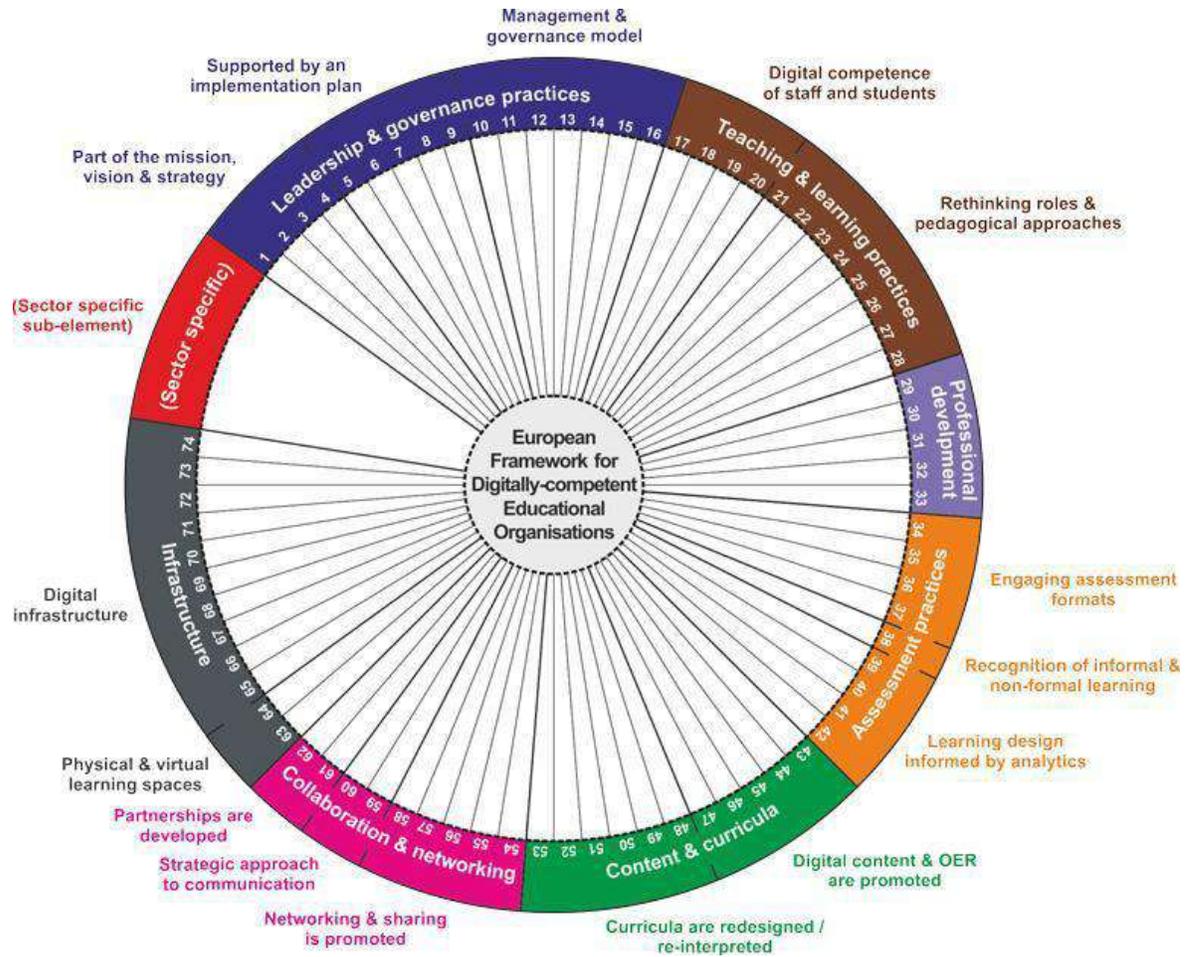


Image source: [DigCompOrg Framework](#)

The common dimensions of the of the DigiCompOrg framework are:

<p>01 Leadership and Governance Practices</p> <p>The leadership role in integrating digital technology effectively across the organization in light of its teaching/learning purpose and activities</p>	<p>04 Assessment techniques</p> <p>Fostering an integrated approach to assessment by providing timely and valuable information on students' experiences and accomplishments to all stakeholders</p>
<p>02 Teaching and Learning practices</p> <p>There is a need for organisations to update their teaching procedures in order to adapt to the digital era of learning</p>	<p>05 Collaboration and Networking</p> <p>Having a system that allows staff and students to interact with internal and external stakeholders, share experiences, and learn successfully both inside and outside the structure</p>
<p>03 Professional Development</p> <p>Supporting continuing professional development to create and incorporate new digitally based teaching and learning methods</p>	<p>06 Infrastructure</p> <p>To support and foster creative practices and expand the bounds of learning environments in a way that includes some or all of the many dimensions of openness and flexibility</p>

The competencies¹⁴ for each dimension are elaborated in the next pages.

01

Leadership & Governance Practices



Integration of Digital-age, Learning is part of the overall mission, vision and strategy

- The potential of digital learning technologies is clearly flagged
- The benefits of digital learning technologies are communicated
- The strategic plan encompasses digital-age learning
- Open education is an aspect of public engagement



Strategy for digital-age learning is supported by an implementation plan

- Planning builds on enablers while addressing barriers
- Internal stakeholders have a degree of autonomy
- Opportunities, incentives and rewards for staff are identified
- Digital-age learning is aligned with broader priorities
- There are twin goals of modernising existing educational provision & offering new opportunities



A Management and Governance Model is in place

- There is a shared understanding of & commitment to the implementation plan
- Management responsibility is clearly assigned
- Resources are aligned with budgets and staffing
- The outcomes, quality & impact of the implementation plan are reviewed
- Specific initiatives or pilots are evaluated
- Implementation status is benchmarked
- Oversight of policy and direction is evident

02

Teaching and Learning Practices



Digital Competence is promoted, benchmarked and assessed

- Staff and students are Digitally-Competent
- Safety, risks & responsible behaviour in online environments are foregrounded
- The Digital Competence (DC) of staff and students is benchmarked
- DC is included in staff appraisal



A rethinking of roles and pedagogical approaches takes place

- Staff are partners in change
- New roles are envisaged for staff
- New roles are envisaged for students
- Pedagogical approaches are expanded
- Personalised learning is developed
- Creativity is promoted
- Collaboration and group work is expected
- Social and emotional skills are developed

03

Professional Development



- A commitment to Continuous Professional Development (CPD) is evident
- CPD is provided for staff at all levels
- CPD is aligned with individual and organisational needs
- A wide range of CPD approaches is evident
- Accredited/certified CPD opportunities are promoted

04

Assessment practices



Assessment Formats are engaging and motivating

- The scope of formative assessment is extended
- Summative assessment is diversified
- Self- and peer-assessment are promoted
- Rich, personalised and meaningful
- Prior, experiential and open learning are recognised & accredited



Informal & Non-Formal Learning are recognised

- Prior, experiential and open learning are recognised & accredited



Learning Design is Informed by Analytics

- Learning analytics is given strategic consideration
- A code of practice for learning analytics is in place
- Learning is supported through learning analytics
- Quality management and curriculum/programme design are supported through learning analytics

05

Content and Curricula



Digital Content and OER are widely promoted and used

- Staff and students are the creators of contents
- Content repositories are widely and effectively used
- Intellectual property and copyright are respected
- Digital tools and contents are licensed as required
- Open Educational Resources are promoted and used



Curricula are redesigned or re-interpreted to reflect the pedagogical possibilities afforded by digital technologies

- Subject-based learning is reimagined to create more integrated approaches
- The time and place of learning is rescheduled
- Online provision is a reality
- Learning in authentic contexts is promoted
- Digital learning provision is evident across curriculum areas
- Students' digital competence is developed across the curriculum

06

Collaboration and Networking



Networking, sharing & collaboration is promoted

- Networked collaboration for staff to pool expertise and share contents is the norm
- Knowledge exchange efforts are recognised
- Students engage in effective networking
- Participation in knowledge-exchange activities and events is promoted
- Internal collaboration and knowledge exchange is expected



A strategic approach is taken to communication

- An explicit communication strategy is in place
- A dynamic online presence is evident



Partnerships are developed

- A commitment to knowledge exchange through partnerships is evident
- Staff and students are incentivised to be actively involved in partnerships

07

Infrastructure



Physical and Virtual Learning Spaces are designed for digital-age learning

- Physical learning spaces optimise the affordances of digital-age learning
- Virtual Learning Spaces are optimised



The digital infrastructure is planned and managed

- An Acceptable Usage Policy is in place
- Pedagogical and technical expertise direct investments in digital technologies
- A range of digital learning technologies supports anytime/anyplace learning
- Bring Your Own Device (BYOD) approaches are supported
- Risks relating to inequality and digital inclusion are addressed
- Technical and user support is evident
- Assistive technologies address special needs
- Measures to protect privacy, confidentiality and safety are well established
- Effective procurement planning is evident
- An operational plan

Total Quality Management

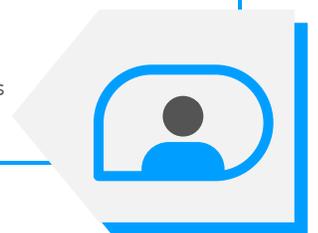
Despite the fact that TQM as a methodology was initially applied in the field of industry, later its application was established in the field of education with great success. It has been observed that at all stages of the educational process, the application of the methodology offers better results, especially regarding the required never ending improvement through the cooperative efforts of the members of the educational organizations. The TQM concept encourages employees, instructors, and students to perform to their full potential.

Principles of TQM¹⁵

1

Customer-Centric Approach

This principle focuses on the needs and feedback of the customers. If these needs are served, then the customers are satisfied. Being aware of customers expectations allows a more efficient and relevant appropriation of resources, personnel, and procedures.



Employee commitment

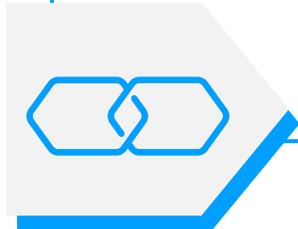
Productivity, procedures, or sales cannot be increased without the total commitment of all employees and understanding of the company's objectives and vision. To be dedicated to achieving objectives on time, they must be provided with the necessary training and resources.

2

3

Compliance with procedures

Process adherence is essential to quality management. In order to assure consistency and speed up production, processes make sure that the necessary actions are completed at the right time.



Unified system

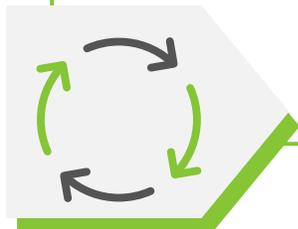
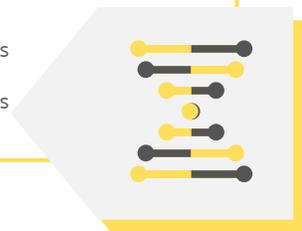
A company often contains many distinct departments, each with its own unique duties and aims. The horizontal processes that should be the emphasis of Total Quality Management should connect these departments and functions. But occasionally, these divisions and tasks work in separate compartments.

4

5

Strategic and systematic approach

According to the International Organization for Standardization (ISO), this principle is stated as: "Identifying, understanding and managing interrelated processes as a system contributes to the organization's effectiveness and efficiency in achieving its objectives."



Continuous improvement

Your company should always look for methods to enhance processes and modify your products and services in response to changing client requirements if you want to achieve maximum productivity and total customer satisfaction.

6

7

Fact-based decision-making

Better judgments are made based on the facts available thanks to analysis and data collection. Making informed selections helps you get a deeper knowledge of your market and clients.



Communication actions

Your organization's objectives, strategies, and procedures for achieving goals must be known by every member of the team. Failure is more likely if you don't have a clear communication strategy.

8

According to Dr William Edward Deming¹⁶, the definition of a method uncovers the reasons for which products or processes deviate from their original purpose. Its effectiveness has been proven in many types of enterprises as it gives the opportunity to develop change-related theories and investigate them in a "continuous feedback loop". This method is known as PDCA cycle, and it is very helpful for implementing Total Quality Management. The PDCA cycle allows you to address issues and put ideas into action in a logical, rigorous manner.

1. Plan

As a first stage, it is important for identifying and understanding the problem or opportunity. Maybe the quality of the final product isn't good enough, or a part of your marketing strategy needs to provide greater results.

Investigate all the facts offered. Create and evaluate concepts, as well as a strong implementation plan. Make sure you clearly define and make your success criteria as quantifiable as you can. Later on in the Check stage, you'll come back to them.

2. Do

It is recommended to test a prospective solution safely using a small-scale pilot project after you've found it. This will demonstrate if your suggested adjustments provide the intended results and, if not, will cause the least amount of interruption to the rest of your business. For instance, you may plan a trial inside a division, in a certain region, or with a specific group of people. Collect data while you execute the pilot project to demonstrate if the change has been successful or not. This will be useful in the following step.

4. Act

Here is where you put your answer into action. But keep in mind that PDCA/PDSA is a loop and not a sequential procedure. Your enhanced method or end result becomes the new standard, but you keep looking for methods to improve it more.

3. Check

Assess the success of your proposal by comparing the outcomes of your pilot project to the standards you established in Step 1. Return to Step 1 if it wasn't. Move on to Step 4 if it was. You could want to repeat the Do and Check steps after attempting more modifications. But if your initial strategy is unquestionably failing, you must go back to Step 1.

GreenComp

GreenComp is a reference framework for sustainability competences, offering to learners a common ground and to educators instructions, in order to form a unified definition of what sustainability as a competence requires.¹⁷ It meets the expanding demand for humans to enhance and develop the information, abilities, and attitudes necessary to live, work, and behave in a sustainable manner. It is intended to promote training and educational initiatives for lifelong learning. Sustainability competencies may aid students in developing their critical and systemic thinking skills as well as their sense of agency. They also serve as a knowledge foundation for anybody who is concerned about the present and future sustainability of the world.



Image source: [Greencomp Conceptual Reference Model](#)

GreenComp Competences

01

Embodying sustainability values



Valuing sustainability

Considering human values. Identify and demonstrate the way in which values differ among people, while analyzing how they align to sustainability principles.



Supporting fairness

Promoting equity and justice for all generations and pursue the flow of sustainability knowledge from previous generations



Fostering nature

Respecting the needs and rights of other species of nature as well as the needs and rights of nature itself in order to restore and create healthy and resilient ecosystems

02

Embracing complexity in sustainability



Systems thinking

Approaching a sustainability problem from all perspectives; to examine time, space, and context, explaining elements interaction within and between systems.



Critical thinking

To evaluate data and arguments, recognize assumptions, challenge the status quo, and consider how one's own, social, and cultural upbringing affects perceptions and thinking.



Problem framing

To define current or potential sustainability issues and to determine the best methods to predict, minimize, and adapt to them

GreenComp Competences

03

Envisioning sustainable futures



Futures literacy

To imagine several sustainable futures by creating different scenarios and figuring out how to get to the desired sustainable future.



Adaptability

To oversee transitions and challenges in difficult sustainability conditions and make future decisions while dealing with ambiguity, risk, and unpredictability



Exploratory thinking

To think relationally by examining and connecting circumstances, making decisions for the future while dealing with risk, ambiguity, and uncertainty

04

Acting for sustainability



Political agency

To understand how the political system works, recognize political accountability for unsustainable conduct, and demand effective sustainability policies.



Collective action

To take action for change in partnership with others



Personal initiative

To recognize one's own capacity for sustainability and to actively work to improve the prospects for the global community

SWOT Analysis

SWOT (Strengths, Weaknesses, Opportunities and Threats) analysis is a very popular tool for business researchers in major organizations. Many organizations do SWOT analyses for strategic planning, quality control, and the creation of governmental policies and laws. When establishing and marketing new strategies for various industrial situations in the framework of integrated project management, bearing in mind complicated business operations, the SWOT activities in the context of digital ecosystems require a great lot of attention. Information solutions can not offer options, fail to meet goals, and lack complementary approaches.¹⁸ It should be noted that SWOT analysis, although widespread and very effective, presents some advantages but also disadvantages.¹⁹

The main advantage is the diagrammatic approach that is used, thus it is understandable. SWOT analysis is applied to all levels of an organization, from a member, to a workteam, a business unit and the corporate team. Also, it is applied with the same success and efficiency in different circumstances, whether it is for simple issues or for more complex ones. Finally, the fact that it is visual makes it easily communicable to the interested parties.

However, some disadvantages of the method have also been indicated. Non-qualitative data such as anecdotes, hearsay and other factors are used as generalisations and the data used comes from personal beliefs, opinions, and theories. There is no separation of the data collection, its review and decision-making processes from the analysis elements. Moreover, it is simple to disregard basic concepts, which results in elements being allocated to the incorrect analytical regions, leading to an invalid approach.



Digital Competence Framework



Strengths

- Concise and global approach
- Tool for improve and enhancing digital skills
- Indicators to measure Human Capital
- Establishes learning objectives
- Can be used by educational institutions to direct a self-evaluation process on their advancement toward thorough integration and efficient deployment of digital learning tools.
- The framework does not replace other tools but adds complementary value to them
- Adaptability
- Provides self-evaluation
- Highlights educational challenges facilitating job search



Weaknesses

- Large-scale applied tool
- The vagueness of some formulations complex approach too general
- Some fundamentals and subelements need for further specificity
- It's not designed to cover the entire spectrum of management and administrative information systems.
- An extremely time-consuming process
- It seems that some points are overlapped



Opportunities

- May be used to organize and create training and educational programs.
- It is used educational organizations, intermediaries or project
- It can facilitate transparency and comparability between related initiatives throughout Europe
- It can play a role in addressing fragmentation and uneven development across the Member States
- Can be utilized by decision-makers as a tool for strategic planning to advance complete policies for the efficient adoption of digital learning technology by educational institutions at the regional, national, and European levels.
- Can serve as the foundation for the creation of a particular framework and evaluation instrument for a particular educational system.
- The results of various studies indicate that a common conceptual approach at European level, capable of supporting the development of digital capacity in educational organizations, is both desirable and attainable
- Facilitates transparency and comparability between related initiatives throughout Europe.



Threats

- Concise and global approach
- Tool for improve and enhancing digital skills
- Indicators to measure Human Capital
- Establishes learning objectives
- Can be used by educational institutions to direct a self-evaluation process on their advancement toward thorough integration and efficient deployment of digital learning tools.
- The framework does not replace other tools but adds complementary value to them

Total Quality Management



Strengths

- Human-centered approach (people are involved in the decision-making process)
- Improves departmental cooperation
- Boosts efficacy and efficiency, which ultimately results in cost savings
- Documenting and standardizing operating procedures
- Quality and customer orientation
- More responsive work groups



Weaknesses

- Decision making process takes longer because the teams must meet a consensus.
- A leadership is needed
- Proper planning required



Opportunities

- Direct management of staff productivity and work procedures
- An investment for the future
- Might be a crucial method of meeting the accountability demands typical of educational reform
- Positive reputation
- Heightened value for investors and stakeholders
- Restore trust of the public to the educational system



Threats

- Excessive focus on the procedure rather than the end result
- Resistance to adapt
- Inhibits innovation and creativity
- Long-term resource allocation
- Direct control of productivity by employees
- Requires that an organization's culture change

GreenComp



Strengths

- Human-centered approach (people are involved in the decision-making process)
- Improves departmental cooperation
- Boosts efficacy and efficiency, which ultimately results in cost savings
- Documenting and standardizing operating procedures
- Quality and customer orientation
- More responsive work groups



Weaknesses

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Opportunities

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Threats

- Excessive focus on the procedure rather than the end result
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Conclusion

The analysis indicates a strong need to develop a lean methodological framework for the lean and easily adaptable delivery of VET training.

The DGI Tourism methodological framework will be the embracement of the DigCompOrg, TQM methodology and GreenComp frameworks using these benefits, putting the focus on digital, green and sustainable tourism.

In this deliverable, three methodologies relevant to the scope of the DGI Tourism project, were thoroughly analyzed. The DigCompOrg as it focuses on digital dimension, the TQM methodology covering the lean and innovative aspects of the project, and the GreenComp framework ensuring the green dimension.

For the adaptive transformation of the above methodologies the DGI Tourism methodological framework will include elements from the aforementioned methodologies and will be taken into consideration as the most appropriate methodology to be used for the DGI Tourism project needs. Providing a blended methodology, that focuses on the strengths from the three suggested methodologies, it is expected when adopted by the VET sector of tourism to lead to its reshaping, allowing for more agility and adaptiveness. More specifically, with the proposed methodology, the ability of the professionals of the VET sector is expected to be improved and adapted properly to the new emerging conditions. The suggested methodological framework is planned to be reviewed in the PR2 and also will be used as a reference by partners in order to develop a market-oriented structure of topics in a modular curriculum. It is anticipated that VET centers' capacity to appropriately adjust to new circumstances requesting integrated teaching techniques (online, blended, etc.) would increase.

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