Output 2: Digital Strategy Benchmarking Tool

BENCHMARKING TOOL METHODOLOGY AND CONTENT GUIDELINES

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Version	Date	Author
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1. Overview of IO2

What

This output will create **a Digital Strategy Benchmarking Tool** based on the DigComp framework, to measure organisation-wide potential, barriers and recommend implementation strategy for digital integration.

This methodology can be regarded as a working document, which will inevitably evolve through co-creation of all partners as they contribute to IO2. As the development of IO2 continues, the final Benchmarking Tool will evolve to suit the final user, tailoring the output based on feedback, and up-to-date research. The final output for IO2 will reflect the needs of VET organisations, as well as the current issues facing the VET and digital sectors.

Purpose

To be used by teachers, leaders, and decision-makers in VET (Vocational Education and Training) Centres seeking to measure the effectiveness of their current digital strategies and level of digital integration.

Benchmarking Tool Breakdown
- Use the SELFIE Self-Assessment Tool (itself based on the DigComp Framework) as a basis for the functionalities of the tool
- Allow organisations to measure and compare their Digital Strategy Scores with other organisations on local, regional, national and European levels
- Be designed with VET centres as the focus, considering the specific challenges, aims and activities undergone in vocational institutions as opposed to mainstream education
- Provide a range of good practices, resources, and 'next steps' activities to encourage the organisations to improve their benchmarking scores
- Work in conjunction with IO3 Modular Framework for Digital Integration and IO4 'Learn Digitally' Guide to provide a holistic range of tools and resources for organisations looking to improve digital strategy

Outcomes
- Organisations will be able to compare their score against others on local, regional, national and European levels – providing a 'competitive' aspect to motivate improvement and measure progress
- Organisations will receive a Digital Strategy score, and the benchmarking tool will direct them to resources and 'next steps' to improve their score.
- Once an organisation is rated as having an 'excellent' Digital Strategy score, they will be able to download a certificate to show this and be encouraged to promote this rating across their services

'Being Digitally Competent – a task for the 21st Century Citizen'

The DigMyVET Digital Strategy Benchmarking Tool will take into account the DigComp framework for digital competence to support the development of VET organisations' digital strategy and integration. The categories identified by the SELFIE self-assessment tool will feed into the sustainable development of young peoples' digital competencies. The DigComp framework identifies the key components of digital competence in 5 areas which can be summarised as below:

1. **Information and data literacy:** 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.
2. **Communication and collaboration:** To interact, communicate and collaborate through digital technologies while being aware of cultural and generational diversity. To participate in society through public and private digital services and participatory citizenship. To manage one's digital identity and reputation.
3. **Digital content creation:** To create and edit digital content To improve and integrate information and content into an existing body of knowledge while understanding how copyright and licences are to be applied. To know how to give understandable instructions for a computer system.
4. **Safety:** 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.
5. **Problem solving:** 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.

Digital Strategy Benchmarking Tool

This output will develop a benchmarking tool for European VET centres, based around the functionality of the SELFIE self-assessment tool, which itself is based on the DigComp framework and is aimed at schools rather than VET centres. The SELFIE tool in it's current form, with some adaptation, is relevant to VET centres, but this output will allow VET centres to assess the following areas, to measure the organisation-wide potential, barriers and recommended implementation strategy for digital integration:

- Governance
- Infrastructure and Equipment
- Continuing Professional Development
- Teaching and Learning
- Assessment Practices
- Learner Digital Competence

VET centres will be able to compare their results with other centres locally, regionally and nationally, to compare which best practices and techniques are supporting other VET centres to achieve higher and more sustainable levels of digital integration. The tool will first ask if the person completing the benchmarking exercise is a learner, teacher/trainer, department head, centre director or local/regional policy maker, and will ask different answers accordingly. The results of the benchmarking tool will identify areas for improvement of teachers/trainers, department heads, centre directors or local/regional policy maker. After completing the benchmarking tool, the user will be directed to/suggested the Digital Strategy Framework (IO2). This interactive resource will be hosted on the project website.

In terms of how this innovative benchmarking tool will build on and differentiate itself from the SELFIE tool and ensure specific relevance for VET contexts, it will:

1. use the data gathered through the benchmarking tool to provide benchmarks to a local, national or European sample of completed self-reflections. In its current form, the SELFIE

results do not allow for comparison with other organisations, or provide any idea of how your own institution is scoring in comparison to others.

2. use the data from the benchmarking tool will also be available to higher-level organisations, such as umbrella organisations in the VET sector or national-level stakeholders (governments). In many countries, VET providers operate under larger VET councils or VET associations. These associations have an interest in improving the quality of education and training and providing information on how different VET providers (and their companies) score on using digital could help them a lot in further supporting the VET providers and companies within their networks who provide WBL opportunities. This will position the benchmarking tool as a policy instrument.

3. provide tailored suggestions for further reading (based on weaknesses identified within the benchmarking results), showcase good practices of digital strategies, and reference useful tools for different aspects (such as cooperation between VET providers and companies). This will provide the basis for the user to develop a digital strategy through the Digital Strategy Framework (IO3).

4. present the information put into the tool in a manageable, aesthetically pleasing way, and will allow users to export the data into the most common file formats to allow for the easy development of graphics, charts and presentations by the users. This will directly support points 2 and 3 above, as presenting clean, clear, understandable and attractive data will facilitate the engagement of those in positions of organisational decision making and policy making at local, regional, national and European level.

The tool will also show a ranking table and a contact for the VET centre listed within the tool, to allow VET centres to engage in peer exchange of best practices, tools and methodologies of digital integration. This will also open up the opportunity for pan-European CPD sessions where VET centres can exchange ideas and learn from each other. The design of the tool will ensure that privacy and digital security policies, including GDPR is complied with. The ranking will show VET centres across Europe on a scale from 1 to 100, where 100 (for example) is completely integrated with every aspect of digital integration, and where 1 (for example) is entirely unfamiliar with, even opposed to, digital tools and methods. The ranking list will show the VET centre, it's score in each of the 6 areas of the benchmarking tool, the best practices it employs, the areas it wishes to improve in, the areas which are strengths, whether the centre is open to collaborative CPD sessions and the contact person for the VET centre.

2. IO2 Main Deliverables

1. Methodology guidelines for the IO2, including the methodology for development of the benchmark guidelines. This will include the detail to be covered under each criterion such as evidence to assess compliance, elements of a good service/practice, next steps, and training opportunities.

2. A technical specification for the Benchmarking Tool that will cover backend requirements, editing functionality, how users will access and use the tool.

3. The benchmarking guidelines to be used in the interactive tool, including the evidence which can be used to judge compliance, elements of a good service, next steps and training opportunities.

4. Digital Strategy Benchmarking Tool shared on the DigMyVET webpage
5. Certificates for Digital Strategy
6. Digital Strategy Champion Badge/ Logo – can be used when organisations achieve high digital strategy score

3. Division of work, the tasks, and timeframe

IO2 realisation timeframe

The realisation of the IO2 will take 9 months, from April 2022 to April 2023.

Activities, division of work and timeframe

Innovation Frontiers will lead on the technical development of this output. However, to ensure that the output benefits from partners' different experiences, they will be supported by the project consortium throughout the development.

O2/A1: Preparation				
April 2022 – May 2022				
Innovation Frontiers	Aspire-igen Group Ltd.	Pixel	All Partners	Deadline
Produce a technical specification for the tool which will be presented to partners for feedback.	Develop the methodology to be used in the development of the guidelines.	Develop quality indicators to be used for this output (to include relevance, ease of use, design).	Provide feedback on technical specification and methodology	5th May 2022
O2/A2: Development of Benchmarking Guidelines				
May 2022 – June 2022				
Innovation Frontiers	Aspire-igen Group Ltd.	Pixel	All Partners	Deadline
	develop the benchmarking guidelines to be used alongside the tool's minimum requirements for VET centres in the interactive tool.		Offer support in the development of the guidelines by carrying out further research into the national context/specific practices where required.	24th June 2022
O2/A3: Build				
June 2022 – September 2022				
Innovation Frontiers	Aspire-igen Group Ltd.	Pixel	All Partners	Deadline
Lead the development and build of the tool using the methodology and guidelines produced in A1 and A2	Embed platform within DigMyVET website		Offer support in the development of the platform by carrying out further research into the national context/specific practices where required.	September 2022
O2/A3: Piloting				
September 2022 – November 2022				
Innovation Frontiers	Aspire-igen Group Ltd.	Pixel	All Partners	Deadline

Work in collaboration with AI to produce piloting questionnaire and national reporting template for piloting.	Work in collaboration with IF to produce piloting questionnaire and national reporting template for piloting.	Carry out additional piloting with 10 European stakeholders from non-partner countries.	Carry out national piloting in line with the resources produced by Aspire and IF (questionnaire for participants, national report template for partners). Use feedback for a national piloting report which will be submitted to IF.	November 2022

4. Benchmarking Criterion Details

Evidence

- The benchmarking function of the tool will provide participating organisations with a Digital Strategy score which will allow them to measure progress but against organisations on a local, regional, national and European scale, as well as against their own previous scores
- The scoring system will be based on the DigComp framework and take inspiration from the SELFIE self-assessment tool also
- Evidence provided by the organisations will be based on a numbered scale, focusing on quantitative responses and data
- Qualitative data will be allowed at certain points as a measuring tool for the organisations themselves – as opposed to being used directly in the scoring system.

Examples of Good Practice

- The Covid-19 Pandemic demonstrated that 'Best Practice' cases are difficult to ascertain within the current socio-economic climate of recovery after the worst periods of the pandemic. Many European countries are still enforcing covid-19 restrictions and a range of circumstances are affecting VET centres in the wake of the Coronavirus outbreak and ongoing restrictions. The judgement of these practices is subjective based on what is appropriate for those countries with those specific restrictions and circumstances.
- The good practices will be presented in a way that demonstrates peer-to-peer co-creation, as opposed to a definitive 'How-to' on digital strategy. Due to the developing nature of the post-pandemic environment within VET organisations, the co-creation aspect allows organisations to share good practices which have worked so far within their economic, social, and political environments, paying particular consideration to the context of the pandemic. The co-creation will develop an organic collection of best practices when more and more organisations use methods demonstrated by their peers, and these practices are tried and tested in different environments.

Next Steps

- Once the organisations have received their Digital Strategy score, they will be presented with a series of resources and tools they can use to improve digital strategy and integration within their VET centre.
- The scoring will create a scale of competence, which will then present the appropriate resources to allow them to improve their score
- For example, an organisation with a score of 80% will be recommended more advanced resources and tools to improve in line with their already more advanced level of digital strategy. Lower scored organisations will also be directed towards more appropriate resources based on their specific needs. All organisations will have access to all resources, but recommendations will be made for a smoother and more tailored experience.
- The benchmarking tool will pinpoint the areas of digital competence where the organisation has lower scores, and these areas will be highlighted in Next Steps as 'areas to work on'
- The work completed in IO1, IO3, and IO4 will also contribute to the next steps provided in the benchmarking tool.

5. Benchmarking Tool Content Guidelines

Introduction to the Benchmarking Tool

This output will allow VET centres to assess the following areas, to measure the organisation-wide potential, barriers and recommended implementation strategy for digital integration:

- Governance
- Infrastructure and Equipment
- Continuing Professional Development
- Teaching and Learning
- Assessment Practices
- Learner Digital Competence

The questions asked by the Benchmarking Tool will be split into the above six categories, which will allow users to easily navigate between the tool and other resources produced by the DigMyVET project, as well as external related documents. A number of these documents, including the DigComp framework itself, will be featured as 'Further Reading' options in the next steps of the tool.

Each section will have 5 compulsory questions which collect quantitative answers – a rating scale of 1-5, in order to calculate a digital strategy score with which the user will be 'graded' and provided next steps. Each category will also have one optional long-form question where users can provide qualitative answers and comments based on their organisation's circumstances. These qualitative answers will contribute towards the user's digital strategy report and case study collection on the platform. In all cases, the language of the questions will be made as accessible as possible to allow for easier translation and understanding.

Instructions to be given at the heading of each page for all quantitative questions:

"Please indicate how much you agree with the following statements, where 1 is 'completely disagree' and 5 is 'completely agree'".

Governance

- We have adequate data protection systems in place

- We have an adequate digital strategy in place

- The digital strategy we implement is developed with teaching staff and others who work with students

- We use digital technologies in our partnerships with other organisations

- Digital technology is integrated as a core part of our education strategy

Qualitative question: How are digital technologies and digital strategies implemented within the governance of your VET School/ Organisation?

Infrastructure and Equipment

- The digital infrastructure supports teaching and learning with digital technologies

- There are enough digital devices to use for teaching

- There is adequate access to the internet for teaching and learning

- We have adequate equipment and tools to teach practical subjects remotely

- Students have adequate home environments and internet access to learn remotely

Qualitative question: How does your organisation support the development of digitally focused infrastructure and the provision of equipment suitable for digital integration in education?

Continuing Professional Development

- We discuss the advantages and disadvantaged of teaching and learning with digital technologies

- Our teachers are aware of their own digital competences and training needs

- Teachers are given opportunities to improve their skills and knowledge on digital technologies

- Our teachers use the internet for professional development, e.g. by participating in online courses, webinars, or consulting digital training materials and video tutorials

- Our teachers continuously improve and update their digital pedagogical competence through experimentation and peer learning

Qualitative question:

Please give an example of a CPD activity on the pedagogical use of digital technologies your teachers found particularly effective.

Teaching and Learning

- Our teachers manage the integration of digital content, e.g. videos, interactive activities, into the teaching and learning process

- Our teachers use digital technologies, e.g. e-mail or chat, to respond to learners' questions or doubts, e.g. on homework assignments

- Our teachers create digital resources to support their teaching

- Our teachers use virtual learning environments with students

- Our teachers employ digital technologies strategically and purposefully to provide guidance and support

Qualitative question: Please give an example of the digital resources and strategies your organisation uses to support the teaching and learning of students.

Assessment Practices

- We review our progress in teaching and learning with digital technologies

- Our teachers engage students in using digital technologies to assess students' skills

- Our teachers use a variety of digital and non-digital assessment formats, aligned with content and technology standards, and are aware of their benefits and drawbacks.

- We use digital technologies (e.g. quizzes, voting systems, games) within the teaching process to provide timely feedback on learners' progress.

- We use digital technologies to enable learners and parents to remain updated on progress and make informed choices on future learning priorities, optional subjects or future studies.

Qualitative question: Please give examples of how your organisation uses digital assessment tools to monitor the learning process and obtain information on learners' progress.

Learner Digital Competence

- Students learn to search, find and use information online

- Students learn to communicate using digital technologies

- Students learn to create and edit digital content

- Students learn to protect devices, content, personal data and privacy in digital environments

- Students learn to identify needs and problems, and to resolve conceptual problems and problem situations in digital environments

Qualitative question: How do your teachers incorporate learning activities, assignments and assessments which require learners to identify and solve technical problems, or to transfer technological knowledge creatively to new situations?

Scoring System
Calculation of Scores
As each quantitative question will have options of 1-5, their answers to each question will be recorded numerically and their cumulative scores for each category, as well as the overall score, will indicate their level of digital integration.

The maximum score for each category will be 25, and the maximum overall score will be 150. For ease of understanding and comparison, these will be converted to percentages.

1 Example: Category Scoring

Infrastructure and Equipment	Rating: 1-5
The digital infrastructure supports teaching and learning with digital technologies	3
There are enough digital devices to use for teaching	2
There is adequate access to the internet for teaching and learning	1

We have adequate equipment and tools to teach practical subjects remotely	4
Students have adequate home environments and internet access to learn remotely	3
<u>Total for Infrastructure and Equipment (out of 25)</u>	13
<u>Total as a percentage</u>	52%

Digital Strategy Score and Report

After the completion of the benchmarking tool questions, the user will be provided with a report. The report will break down the overall score (% out of 150), including each category's score to demonstrate which areas the organisation may need to improve on specifically.

2 Example: Digital Strategy Score

<u>Category</u>	<u>Score</u>
Governance	13
Infrastructure and Equipment	15
Continuing Professional Development	7
Teaching and Learning	19
Assessment Practices	21
Learner Digital Competence	16
<u>Overall Digital Strategy Score</u>	91
<u>Total as a percentage</u>	60%

Qualitative Answers will also be featured on the report in the collated form. Each category breakdown will also include visual aids such as graphs and bar charts to demonstrate which areas require improvement specifically.

Once the Digital Strategy Score is calculated and presented, users are given a 'label' based on their score.

3 Scoring and Next Steps

Score Range	**Digital Strategy Label**	**Range of Next Steps Provided**
0% – 30%	Novice	Basic Resources
31% - 50%	Rookie	Basic Resource + Intermediate
51% - 70%	Star	Intermediate + Advanced + Star Certificate
71% - 90%	Expert	Advanced + Further Reading + Expert Certificate
91% - 100%	Champion	Further Reading + Champion Certificate + Champion Badge/Logo

*Please Note: labels and language used within the guidelines are a stylistic choice and are open to editing through feedback

Next Steps

Once users have been scored and received the report on their answers, the tool will signpost them to their next steps.

As in table 3 (above), the most appropriate resources will be highlighted based on the user's attainment. All resources will be available to all users – particularly as users may achieve high scores in one category and low in another, and still receive and average score which may not completely illustrate the reality of their progress in digital integration. As all six categories are defined and separate, so it is understandable that one organisation may score high in Governance, and low in Continuous Personal Development, for example. This should be highlighted within the report breakdown, and be acknowledged in the accessibility of resources.

The resources will be split in the above manner, and populated using resources produced directly from the DigMyVET project (IO1, IO3, and IO4), as well as additional resources found through research undertaken by the consortium.

Each category of resource will include at least 3 items (in the format of hyperlinks) with a short description of the resource. This will include 'tags' to differentiate and allow users to easily identify useful resources. These 'tags' will also include the categories of the questions, to allow easy access to the areas the users need to improve on. All European Commission DigComp resources and variations, such as DigCompEdu (the version of the documents focused on Educators), will be included in this. Further reading will also be accessible for all users.

Users achieving a score in the top three ranges will receive a certificate produced within the DigMyVET brand guidelines to demonstrate their attainment. These will be presented in a 'Bronze, Silver, Gold' system, emphasising the practical abilities of their attainment. The label 'Champions' is intended to be a useful description demonstrating the ability of these users to pass on their experience and understanding, and even become innovators in the field themselves. The accompanying 'badge' produced for 'champions' will also demonstrate this. The badge will be suitable for use on organisations' websites, letterheads, and other promotional material. This will be a sign of these organisations' involvement in the project as high achievers, and as a sign of their own expertise on the subject. The certificate template and badge design will be produced by the Dissemination Lead on the project, Aspire-igen.

Annex 1: Resource Research Template

Partner Research Brief

The IO2 Benchmarking Tool Guidelines and Methodology requires the undertaking of additional research to collect resources for the 'Next Steps' part of the benchmarking tool. Below is the description of resources as written in the methodology.

> *Each category of resource will include at least 3 items (in the format of hyperlinks) with a short description of the resource. This will include 'tags' to differentiate and allow users to easily identify useful resources. These 'tags' will also include the categories of the questions, to allow easy access to the areas the users need to improve on. All European Commission DigComp resources and variations, such as DigCompEdu (the version of the documents focused on Educators), will be included in this. Further reading will also be accessible for all users.*

As a result, all partners should contribute to the collection of resources to populate a resource repository for the tool.

- Below is a template for each partner to complete.
- Each partner should collect **3-5 unique resources per category** in a variety of competency levels. Partners should aim to collect **18-30 links in total**.
- Competency levels are detailed here, and include: Basic, Intermediate, Advanced, and Further.
- Descriptions should be no more than one sentence.

This work should be completed by **16th September 2022.** All completed research should be sent to ana.tokos@theopportunitycentre.com **and** be uploaded to the relevant file in the project Google Drive.

Research Template

Category	Resource Name	Link	Description	Competency Level
Template Note: Please add new rows per category as needed				
Governance				
Infrastructure and Equipment				
Continuing Professional Development				
Teaching and Learning				
Assessment Practices				
Learner Digital Competence				