accelerate futureHEI

supporting future focused higher education

D6.1 Monitoring and Evaluation Plan

29.04.2024

Funded by the European Union

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List of abbreviations

EC	European Commission
HEIs	Higher Education Institutions
HE	Horizon Europe
ITAP	Institutional Transformation Acceleration Projects
M&E	Monitoring and evaluation
R&D	Research and Development
R&I	Research and Innovation
SME	Small and Medium-sized Enterprises
SVS	Strategic Vision Statements
WP	Work Package

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Project Consortium

University Industry Innovation Network BV (UIIN) - Netherlands
TUM International GMBH (TUMInt) - Germany
Momentum Marketing Services Limited (MMS) - Ireland
Instituto Superior Tecnico (IST) - Portugal
Universite De La Reunion (UR) – La Reunion, France
Canarias Universidad Europea De Canarias SL (UEC) – Canary Islands, Spain
Universidade da Madeira (UMa) – Madeira, Portugal
Fachhochschule St. Polten GMBH (STPUAS) - Austria
UC Leuven (UCLL) - Belgium
Magyar Agrar- Es Elettudomanyi Egyetem (MATE) - Hungary
Universitatea Politehnica Timisoara (UPT) - Romania
Vidzemes Augstskola (ViA) - Latvia

In the project, the university partners are represented by or focus the project work on unique departments across their institutions. Specifically:

- UEC: School of Architecture
- UMA: *Higher School of Technology and Management.*
- STPUAS: team of Service Unit Research and Knowledge Transfer
- UCLL: Business Management and Research & Expertise
- MATE: Institute of Agricultural and Food Economics
- ViA: management team and Faculty of Society and Sciences
- IST: Department of Civil Engineering, Architecture & Environment
- UR: ESIROI engineering school
- UPT: Digital Transformation Institute - ID/IFR and e-Learning Centre

01

Project Overview, Aim & Approach

An overview of the project's overarching goals, objectives, methodology and consortium.

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Project Overview

The **Entrepreneurial & Innovative Universities Accelerator Program** (Accelerate_FutureHEI; thereafter referred as Accelerate Future HEI) project, under the coordination of University Industry Innovation Network (UIIN), launched in January 2023 and is funded by the European Commission's Horizon Europe program. Accelerate Future HEI brings together **twelve European partners** from **eleven countries** to develop and implement acceleration services.

Main Aim

Accelerate Future HEI aims to **develop and test acceleration services** to **equip universities with the skills and capacity** to **drive their institutional transformation towards becoming more entrepreneurial and innovative**. To do that Accelerate Future HEI will apply a robust, comprehensive methodology that builds on the status quo and develops a connected vision and set of activities that provide each institution with a tailored institutional transformation action projects (ITAP). Participating in this initiative provides Higher Education Institutions (HEIs) with a unique opportunity to identify key challenges they are facing and dedicate time and resources to develop solutions through a unique ITAP.

The **advantage of participating** is HEIs are not doing this alone, but instead receive personalised and peer-to-peer guidance through access to coaches, thematic working group workshops, training workshops and cohort knowledge exchange events. This allows HEIs to take a close internal look at what they want to achieve while receiving external support and guidance to enable them to implement these changes.

Key Objectives

TO IDENTIFY

the status quo of the HEI and its ecosystem regarding entrepreneurial and innovative activities.

TO DEVELOP

test and implement acceleration services that help institutions undertake a transformation roadmap and projects

TO BUILD

the capacity of the participating HEIs staff to implement the transformation roadmaps through **a skills development program.**

TO EVALUATE

the strategies from HEIs supervised by an 'Acceleration Board' of **independent experts**.

TO GENERATE

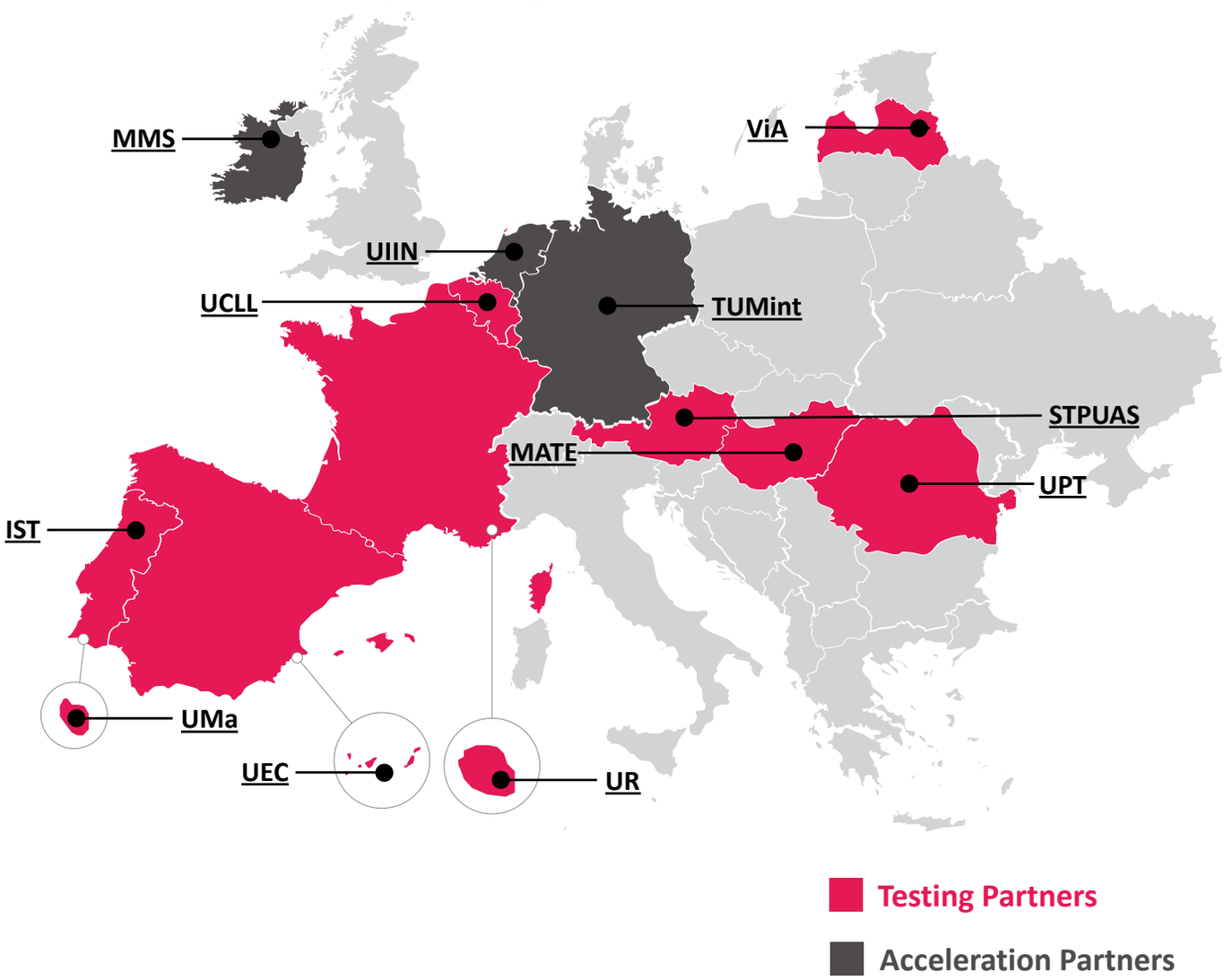
policy feedback to the European Commission as well as provide widespread dissemination of the pilot results to other target groups.

Project Consortium

Accelerate Future HEI brings together **twelve European partners** from **eleven countries** to develop and implement acceleration services.

Led by University Industry Innovation Network (UIIN), this ambitious project brings together twelve European partners from eleven countries to develop and implement acceleration services. The project consortium unites international experts on developing and supporting acceleration services, together with two established HEI consortia, one from the EIT HEI initiative (INCORE) and one from the European University Alliance (E^3UDRES^2) and EIT HEI Initiative (E.I.N.S). UIIN , together with TUM International and Momentum are referred to as *acceleration partners* to design and deliver the acceleration services and support the HEI *testing partners* as they implement their initiatives.

Our consortium represents institutions across Europe, including the Outermost Regions. The diversity of the partners will enable the development of overarching services that can be applied in different contexts and enable the HEIs to impact their regions.



Project Approach: Methodology

The project's methodology is based on a **gap analysis** which involves a **three-phase approach** to understand the context, strategy, goals and status quo of each HEI testing partner and to provide an evidence-base and solid starting point to identifying areas and opportunities for institutional transformation. The research, development and implementation phases are underpinned and supported by training, evaluation, dissemination and other activities across the project duration.

Current State Analysis
WP2| M1 – M12

Uncovering the goals for institutional transformation.
Where are HEIs now?
The aim of this phase is to (1) clarify the desired future state and goals for institutional transformation and (2) understand the current state of each HEI testing partner and provide an evidence base for entrepreneurial and innovative activities at the partner universities. Specifically, WP2 involves activities of pre-scanning, asset mapping, focus groups, and surveys.

Developing Roadmaps & ITAPs
WP3| M6-M18

What needs to change to achieve the goals and how will you do it?
Subsequently this phase builds on the current state data to define and design an implementation plan to achieve the desired future state and institutional transformation goals and objectives, with regards to entrepreneurial and innovative activities including the identification of opportunities and challenges to address in acceleration services and coaching activities. This will be done through the roadmap workshops as well as Institutional Transformation Acceleration Projects (ITAPs).

Acceleration services pilot-testing
WP4 | M12 – M48

What will you test and implement?
This phase will support the testing partners in implementing the acceleration services and undertake actions towards institutional change, through a mixture of individual HEI and group-based support. Specifically, HEIs will undergo individual ITAP coaching with experts aligned to their core transformation focus areas, to then work on the implementation of their ITAPs and development of their investment strategy.

Capacity Building & Knowledge Exchange Program
WP5 | M1 – M48

HEIs will be supported with knowledge exchange and learning opportunities across the full duration of the project. In addition to the personalised coaching sessions, and the feedback, peer-to-peer feedback and mentoring guidance, which will be provided throughout *Phase 1* and *Phase 2*, HEIs will have access to dedicated events and workshops, including thematic Cohort Knowledge Exchange Events and Accelerate Training Workshops.

Acceleration Impact – Monitoring & Evaluation
WP6 | M1 – M48

The progress of the ITAPs will be tracked through a dedicated monitoring and evaluation mechanism to evaluate the impact and policy implications.

Communication and Dissemination
WP7 | M1 – M48

A communication and dissemination plan will be developed to share the transformation stories and the project's key learnings to benefit the project's community.

Management, QA & Policy Feedback
WP1| M1 – M48

Adequate management and quality assurance processes and tools will be developed to deliver on the project's outcomes and inform policy.

Project Approach: Foundational conceptual model

The methodology within this project is based on a combination of research and practice. One of the key models underpinning the methodology is the **UIIN Entrepreneurial and Innovative University Framework© -** the framework has been developed over 10 years of research and validated in practice to define the key elements of an entrepreneurial and innovative university, and the challenges and success factors associated with HEI transformation to become more entrepreneurial, innovative and engaged.

UIIN Entrepreneurial and Innovative University Framework©

Activities

The extent to which HEIs are innovative and entrepreneurial in their activities across education, research, valorisation and governance. This can include facilitating cooperation with surrounding Research & Innovation (R&I) ecosystem actors across all areas of the HEIs, and supporting the transition to knowledge- and digitally-driven HEIs that include research and innovation outputs in teaching.

Mindset

An understanding of the entrepreneurial and innovative mindset across leadership, academics / researchers, professional / administrative staff, and students. This focuses on fostering entrepreneurial and innovative mindsets, not only across entrepreneurial activities but across all activities to develop and nurture a problem-solving approach.

Organisational Support

The organisational mechanisms required for developing both entrepreneurial activities and mindsets within the HEI. These include: strategy and institutional commitment (e.g. HEI research and innovation strategies); support services and activities (e.g. mechanisms to facilitate collaboration and sharing of knowledge, capacity, infrastructure and resources) and incentives and recognition.

External Ecosystem

The external partners and supporting mechanisms in place to ensure impact pathways and the role of the HEI within its regional ecosystem. It defines the degree to which the HEIs facilitate collaboration with surrounding R&I ecosystem actors and engages citizens in solving societal challenges.

Main Deliverables

Below you can see the overview of the project's deliverables, with the current deliverable highlighted.

Management, QA & Policy Feedback
M1 – M48

The plan for how we will ensure we deliver on our outcomes & inform policy

D1.1	D1.2	D1.3	D1.4
DMP M6	Initial policy briefing M12	Interim policy briefing M30	Final policy recommendations report M48

Current State Analysis
M1 – M12

Uncovering the goals for institutional transformation. Where are HEIs now?

D2.1	D2.2
Strategic Vision Statements – M12	Synthesis Report – M12

Developing Roadmaps & ITAPs
M6-M18

What needs to change to achieve the goals and how will you do it?

D3.1	D3.2
Roadmap Analysis report - Draft M12	Roadmaps Analysis report - Final M18

Acceleration services pilot-testing
M12 – M48

What will you test and implement?

D4.1	D4.2
Summary report - common ITAP issues M12	Case study report- ITAPs and results M48

Capacity Building & Knowledge Exchange Program
M1 – M48

The plan for how HEIs gain skills and insights for acceleration & transformation

D5.1	D5.2	D5.3
Program overview & delivery plan M12	Program delivery progress report & updated plan M30	Summary of the learning outcomes M48

Acceleration Impact – Monitoring & Evaluation
M1 – M48

We will monitor progress and evaluate impact of ITAPs

D6.1	D6.2	D6.3
Monitoring & evaluation plan – M12	ITAPs Progress report – M30	Final Impact Report

Communication and Dissemination
M1 – M48

We plan to share our key learnings so others can benefit

D7.1	D7.2	D7.3	D7.4
Initial Plan M6	Updated plan & first dissemination report M12	Interim dissemination report M30	Final dissemination report M48

02

M&E methodology and how to use it

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02 I M&E methodology and how to use it

Brief context

Technological developments, the climate crisis, the COVID-19 pandemic and related global trends are putting unprecedented pressure for transformation at Higher Education Institutions (HEIs). In response, HEIs are implementing programmes, policies and projects to foster entrepreneurship and innovation as a strategy to keep pace with the rapidly changing environment. Inevitably, they are faced with the question: "How do we know if the measures we have adopted are leading us toward our long-term goals?" The results-based Monitoring and Evaluation (M&E) methodology presented in this guideline is an instrument to answer this question. Based on a results-based monitoring approach developed by the World Bank (Zall at all. 1970) and HEInnovate (2023), a self-assessment tool provided by the European Commission in partnership with the OECD, the guideline at hand was created specifically for HEIs wanting to evaluate measures taken to foster entrepreneurship and innovation for long-term transformation. This guideline and M&E plan has been specifically developed for UIIN's Entrepreneurial and Innovative Universities Acceleration Programme, but it can also serve other HEIs interested to track progress on specific actions related to entrepreneurship and innovation.

The Acceleration programme acknowledges the necessity of "a holistic standardized yet still contextually flexible methodology for EU […] to embrace entrepreneurial, engaged, innovative and open universities spirit on institutional and HEI network levels" (Horizon-Widera 2022 ERA 01). The result-based M&E system's flexibility and customizability makes it perfectly suited to this task. The methodology allows the HEIs to assess progress over a defined period of time, based on current situation and the final desired outcomes. Moreover, the methodology gives a clear overview of the program goals' achievement, helping the HEI to take future strategic decisions, for instance, decide whether it is worthy to allocate resources, capabilities, and budget to the innovation and entrepreneurial area in a qualitative and quantitative way.

This document guides you through the process of setting up and maintaining a results-based M&E system. It starts with an explanation of results-based M&E, followed by a description of how this methodology fits into the goals of the Acceleration Programme. Next, the features of an entrepreneurial and innovative HEI will be presented as the four pillars: Entrepreneurial activities, Mindset, Organizational Capacity, and Ecosystem. It then continues with a step-by-step explanation of the methodology. It is intended to be customized to your HEI's individual needs, to measure your HEI's progress, regardless of other HEIs' performance. The methodology is not designed to show you what to measure, rather, it will show you how to select the factors you could measure, and, more importantly, how to measure, report, and evaluate those factors. This will be done in five steps: First, you formulate outcomes and goals, then develop indicators to monitor said outcomes, gather baseline information on the current condition, set specific targets to reach and dates for reaching them, and finally report and evaluate the results. To facilitate implementation, it also provides you with examples of indicators that can be considered for the various pillars.

The M&E Process

Results-based M&E is a powerful public management tool that can be used to help policy- and decision-makers track progress and demonstrate the impact of a given project, program, or policy. It is characterized by a greater emphasis on outcomes and impacts, as opposed to traditional input or implementation monitoring. Information is continuously collected and analyzed to compare how well a measure is being implemented against expected results. Results-based M&E provides continuous feedback enabling organizations to develop a knowledge base of the types of projects and what works, what does not, and why.

Possible uses of the information obtained from an M&E process (Zall et all. 1970):

- Document project outcomes.
- Help make resource allocation decisions: expanding, redesigning, or dropping the initiative altogether.
- Identify Emerging Problems: highlight issues that are not yet widespread.
- Support decision making on competing or best alternatives.
- Support reform and innovation by providing evidence to the HEI ecosystem that reform efforts are working.
- Communicate better with the public to build public trust.
- Build consensus on the causes of a problem and how to respond.
- Promote understanding of projects, programs, and policies.
- Trigger in-depth examinations of what performance problems exist and what corrections are needed.
- Help motivate personnel to continue making program improvements.
- Formulate and monitor the performance of contractors and grantees.
- Provide data for special, in-depth program evaluations.
- Help provide services more efficiently.
- Support strategic and other long-term planning efforts.
- Help make operational resource allocation decisions.
- Help formulate and justify budget requests.
- Help rethink the causes of a problem.
- Demonstrate accountability.

M&E can answer questions like:
Have our policies, programs, and projects led to the desired results and outcomes?
How do we know we are on the right track?
How do we know if there are problems along the way?
How can we correct them at any given point in time?
How do we measure progress?
How can we tell success from failure?

Figure 1. MONITORING VS EVALUATION

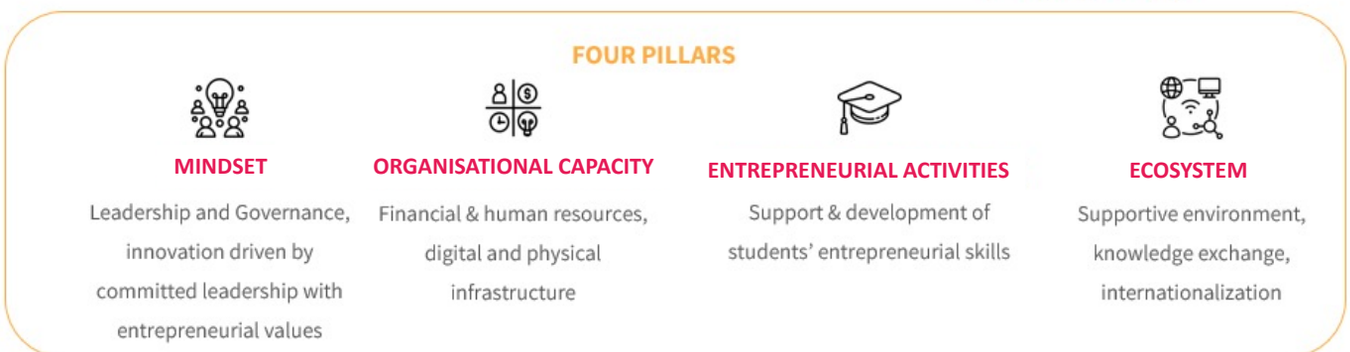
Monitoring refers to the descriptive collection of data on specified indicators, whereas evaluation concerns the objective assessment of an ongoing or completed program, including its design, implementation, and results. Monitoring asks where a policy is relevant to its targets, evaluation asks why the targets were (not) achieved, addressing issues of causality.

Source: Zall Kusek & Rist, 1970

Four pillars of an entrepreneurial and innovative HEI

This section describes the features of an entrepreneurial and innovative HEI. Such an institution is described by key characteristics, which the current methodology categorizes in four pillars: Entrepreneurial Education, Mindset, Organizational Capacity, and Ecosystem. The pillars have been selected and developed based on the eight dimensions of the HEInnovate framework and additional research by the authors.

Figure 2: Four pillars of an entrepreneurial and innovative HEI



Source: Authors' own design

Entrepreneurial Activities

Entrepreneurial activities target the development of students' entrepreneurial skills through teaching, research, and other related activities. They should be prioritized considering that Teaching and Learning areeffective for entrepreneurial growth on students in the long term (Hernandez-Sanchez 2019). The development of innovation and entrepreneurship skills have a direct relationship with what is taught in the courses, thus making it one of the most important dimensions.

To maximize the expansion of students' entrepreneurial mindsets, formal and informal learning opportunities and experiences should be offered in the HEI. Formal opportunities focus on internal curriculum, training and pedagogical practices (Kliewe et al. 2019; Meyers and Pruthi 2011), whereas informal opportunities facilitate access to external clubs, competitions and business events (Lima 2021). As stated before, the new innovative and entrepreneurial curriculum shapes students, hence, its design should consider entrepreneurship learning outcomes based on the HEI's and students' expectations. The validation and regular feedback of the outcomes is required for future understanding of the impact of the new innovative and entrepreneurial curriculum on students (Lima 2021; Griebler 2018). Linked with knowledge exchange, the engagement of external stakeholders is a key component of teaching and learning co-development. Regular involvement and review of business professionals in curriculum provides additional experiences and further collaborations (Lima 2021; Kliewe et al. 2019). Moreover, it supports diversity of possible future partnerships.

Therefore, interdisciplinarity across university bodies, disciplines, curriculum, and collaboration with industries (Kliewe et al. 2019) should be considered in an innovative and entrepreneurial HEI to create better understanding and connections. In addition, part of the curriculum should be specifically designed to develop the sense of self-esteem and personal development among the students and to encourage an effective mindset (Lima 2021) to teach students how to work in an uncertain environment. The university is, after all, a place for study, so providing opportunities to learn about entrepreneurship is a central element of an entrepreneurial and innovative HEI.

Mindset

The Mindset-pillar ensures that the innovation in the HEI is boosted by committed leadership with entrepreneurial values. The leadership and governance align the systems and interactions of HEI, thus HEI's innovation and entrepreneurship is driven from the core of the institution, by the inclusion of entrepreneurial vision on the mission statement and strategy in a clear way to achieve it and to attribute its importance (Lina 2020), defining those elements in an entrepreneurial agenda. The commitment to implementing the entrepreneurial agenda relies on every stakeholder of the institution, being boosted by the senior management level. To do so, the strategy is communicated across the institution, and understood as a priority (Kliewe et al. 2019). Moreover, in order to increase and strengthen the positive outcomes of the entrepreneurial and innovation strategy (Gjerding et al. 2006), coordination and integration of activities across the HEI departments and the local entrepreneurship ecosystem should take part, as an example of a good mechanism is the boundary spanning unit, which also avoids having doubles internally (Kliewe et al. 2019).

Leadership and Governance seeks HEI's growth, creativity allows and encourages innovation and entrepreneurship idea development, therefore handing in the responsibility of new activities and initiatives to the HEI's faculties is viewed to have a positive impact. In addition, as part of the governance, HEI supports regional, social and community development, being beneficial for both the external ecosystem and the institution itself. A leadership strongly committed to entrepreneurship is the indispensable bedrock of any innovative and entrepreneurial HEI.

Organizational Capacity

Organizational capacity contains financial and human resources as well as digital and physical infrastructure. The organizational capacity is the glue of the institution, its actions and actors; moreover digital technologies can act as catalysts for innovation and scientific advancement (Harman 2022). Therefore, an innovative and entrepreneurial HEI actively integrates those values in its vision, as well as develops and sustains a digital infrastructure to support its entrepreneurial goals.

Fundamentally, HEIs are funded by the Federal State (Federal Ministry of Education and Research 2022). However, to be able to support the creation and development of innovation and entrepreneurship a higher financial amount is required, thus HEIs should be supported by a wide variety of funding sources, internal and externally (OECD 2010; Olearnik and Pluta-Olearning 2015). In addition, self-investment and a separate budget specifically for innovative activities, should be allocated (Kliewe et al. 2019) in pursuance of claiming its importance and ensuring entrepreneurship and innovative activities' evolution. Furthermore, the provision of training and support for employees is necessary to combat lack of knowledge, to have up-to-date professionals (Lima 2021), and to leverage the full potential of the digital infrastructure (Santor and Fernandes 2019). Offering clear incentives and rewards for internal and external stakeholders who actively support the entrepreneurial strategy encourages the change towards an innovative institution and gives the opportunity to expand its capacity in its own time (OECD 2010).

The basis for the digital transformation is a continuously developing digital infrastructure suited to the HEI's individual targets and strengths (Peris-Ortiz et al. 2017). Several requirements are to be satisfied with regard to said infrastructure: for ease of collaboration and to support Ecosystem ambitions, particular attention should be paid to ensure the infrastructure is compatible with other prevalent systems (Volkmann and Audretsch 2018). An effective system of evolving infrastructure can yield a plethora of benefits for the HEI: The use of open educational resources, for instance, can increase the HEI's impact on its ecosystem, attract more interest by potential partners or future students or staff who gain insight into the HEI's activities while themselves being outside the HEI (Kliewe et al., 2019).

Investment in growing digital capabilities can spur innovation, improve communication and collaboration across the institution and widen the reach of the HEI's activities. A fit-for-purpose digital infrastructure is the HEI's catalyst for amplifying entrepreneurial activities.

All in all, the participation of a wide a range of stakeholders can result in maximization of effectiveness, potential innovative ideas, building relationships and synergies across the institution, and an accessible and equitable system, which helps the HEI overcome internal barriers and promote an inclusive culture Meletiadou 2022). Creating ample organizational capacity allows the HEI to implement its entrepreneurial vision and make it a reality.

Ecosystem

This pillar has three key elements: A supportive environment for entrepreneurs, internal and external knowledge exchange, and internationalization. An innovative and entrepreneurial HEI actively raises awareness of the importance of developing entrepreneurial abilities among staff and students through communication channels (Griebler 2018). Students have the possibility to access innovative and entrepreneurial courses and opportunities, independent of their corresponding program and location. Curricula allow for study at the home university in presence mode, 'internationalization from home', i.e., students can remotely partake in international activities, and 'internationalization abroad', meaning the institution actively encourages students to study abroad as part of their degree (Kliewe et al. 2020).

Moreover, HEI supports the transition from idea generation to business creation with opportunities such as project research (OECD 2010), team building, mentoring, networking and financial support (Olearnik and Pluta-Olearnik 2015; OECD 2008). An innovative and entrepreneurial HEI promotes knowledge exchange and collaboration within and across the Quadruple Helix, which refers to the connection of society, industry, the public sector, and the HEI itself (Gjerding et al. 2006). The HEI builds and manages partnerships with external actors and provides opportunities for dialogue among the stakeholders (OECD 2022a), for instance, mentoring for students to share career advice and expanding the student's network, or access to incubators or science parks, which provide avenues for the pursuit of entrepreneurial activities and value creation (OECD 2022b).

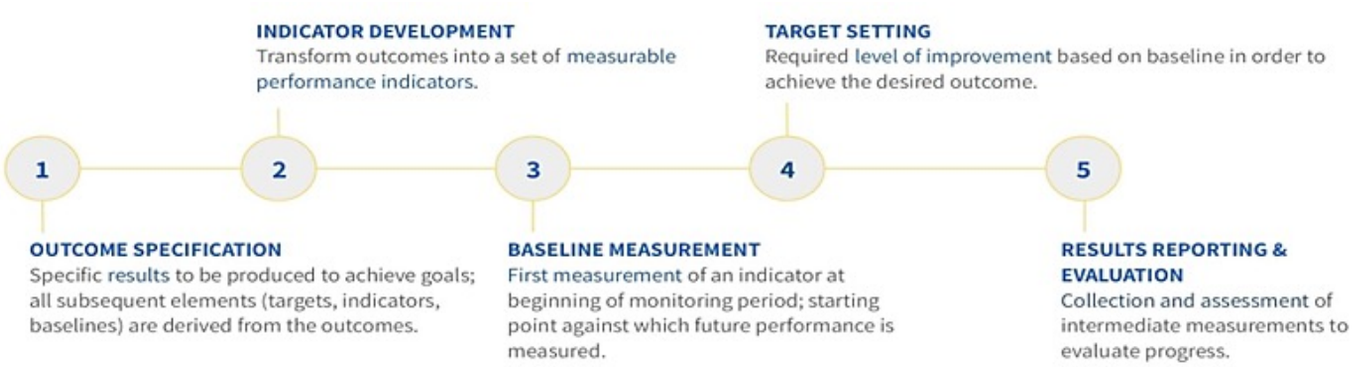
In addition, the institution recruits international personnel and supports their international mobility, while building and maintaining relationships with international research networks (ibid.). Research cooperation and participation by all faculties and schools is encouraged. The university aids students and staff in securing financial assistance and grants for stays abroad (Yusof and Jain 2008).

This pillar is beneficial because it establishes links between the HEI and its external environment and can act as a catalyst for idea generation and resource exchange, creating a supportive environment to nurture entrepreneurs-to-be. The desire for Ecosystem is reflected in the university's mission, clearly communicated across the institution and connected to targeted measures.

The M&E Methodology

This section contains a step-by-step explanation of the results-based M&E methodology. Each step contains a detailed description, definitions of the relevant terms, and illustrating examples.

Figure 3: Result-based M&E process (own source)



A prerequisite for building a results-based M&E system is institutional readiness. Based on your participation in the UIIN Entrepreneurial Universities program, it is assumed you are willing and ready to engage in M&E efforts. For the sake of completeness, the following is an explanation of a readiness assessment. You may skip this section and go straight to 4.2. for Step 1.

The purpose of a Readiness Assessment is to decide if the HEI is ready to implement a M&E system. The basis for this is an analysis of three important factors: Organizational capacity, the willingness to monitor and evaluate, and the motivation for wanting to measure entrepreneurship and innovation levels. Answering the seven questions provided can help determine the HEI's readiness.

Figure 4. 7 KEY QUESTIONS FOR READINESS ASSESSMENT

1. What Potential Pressures Are Encouraging the Need for the M&E System within the HEI and Why?
2. Who Is the Advocate for an M&E System?
3. What Is Motivating the Advocate to Support Such an Effort?
4. How will the System Directly Support Better Resource Allocation and the Achievement of Program Goals?
5. How Will the Organization, the Advocate, and the Staff React to Negative Information Generated by the M&E System?
6. Where Does Capacity Exist to Support a Results-Based M&E System?
7. How will the M&E System Link Project, Program, Department, and HEI goals, Vision, and Mission?

Source: Zall Kusek & Rist, 1970

Step 1. Specifying Outcomes to Monitor and Evaluate

In this step, you develop outcomes related to your HEI's mission and goals. You create outcomes by breaking down your long-term goals into 5-10-year outcomes. An outcome thus represents specific results to be produced to achieve the mission and goals. The purpose of outcomes is to visualize what success will look like, in other words, to illustrate what the indicators will later measure progress towards. All subsequent elements (targets, indicators, baselines) are derived from the outcomes, creating the need to choose explicit and descriptive outcomes.

Issues to consider when formulating desired outcomes hence should be the HEI's mission and strategy and the resources available. As a participant of UIIN's Acceleration Programme, you will already have developed outcomes as part of a previous workshop. Next, you need to ensure that your outcomes are sufficiently descriptive and explicit to provide useful downstream results. Ask yourself, if each outcome answers the questions "For whom?", "By When?", "Where?". An outcome satisfying these requirements will later clearly show if success was achieved.

Example

By 2030, the HEI supports internal stakeholders in the development of idea generation to a real business creation in collaboration with external partners.

For Whom?: All staff and students.
By When?: 2030
Where?: Internal Policy

The following paragraph provides information on how to develop new desired outcomes, should you want to do so. New outcomes should be formed through a participatory process with relevant stakeholders. First, identify representatives of relevant stakeholders by considering the key parties involved (e.g.: students, administration, research and/or teaching personnel, external stakeholders, etc), and second, identify their major areas of concern (e.g.: through focus groups, interviews, brainstorming to discover interests). Third, translate the identified concerns into positive statements of desired outcomes. If the concern is, for example: "Most staff don't have the time and capacity to pursue entrepreneurship in addition to their other activities.", a desired outcome can be: "Pathways and incentives exist for staff to pursue entrepreneurial ambitions."
Next, the specified outcomes will be used to derive indicators to monitor the outcomes.

Step 2. Indicator Development

In this step, you develop indicators to transform outcomes into a set of measures, thus an indicator is the tool to monitor the degree of success or achievement of the HEI outcomes. The purpose of the indicators is to collect objective and relevant data for future analysis and reporting to make better-informed strategic decisions. Indicators should cover the interest of multiple stakeholder groups. It is also recommended to have at least three measurements per outcome to help establish a proper baseline in the following step.
For you to assess whether the developed indicator is meaningful, a checklist of requirements is given in the accompanying excel file:

Figure 5. CHECKLIST FOR ASSESSING INDICATORS

Is the indicator a direct reflection of the outcome?

Is the indicator precise to ensure measurement?

Is the indicator a practical, cost-effective collection of data?

Is the indicator flexible to changes?

Is the indicator disaggregated for the reporting?

Is the indicator characterized with the CREAM features?
- Clear: precise and unambiguous.
- Relevant: targets objective information on actual progress.
- Economic: available at a reasonable cost.
- Adequate: not abstract, problematic or difficult to understand.
- Monitorable: independently verified, reliable and valid.

Once the indicators are developed and you are sure that they will represent the outcomes set in Step 1 in a disaggregated way, you are ready to jump into Step 3.

Example

Outcome: By 2030, the HEI supports internal stakeholders in the development of idea generation to a real business creation in collaboration with external partners.

- **Indicator 1:** The percentage of social science students involved in research projects related to entrepreneurship per semester.
- **Indicator 2:** The number of team-building activities per year.

Step 3. Baseline Measurement

The definition of indicators is followed by the measurement of baseline data. A baseline refers to the first measurement of an indicator at the beginning of the monitoring period and represents the starting point against which any future performance will be measured. The purpose of a baseline is to find out where you are at present relative to the outcome you want to achieve.

At the same time, a baseline provides feedback for your indicator choice, because it shows the feasibility of each indicator's data collection, analysis and reporting, and thus can help refine and improve an impractical indicator. To build baseline information for an indicator, answer these eight key questions, which serve as a sort of 'mini M&E System' for each indicator.

Figure 6: Example of Baseline information

Question	Indicator 1: number of co-authored publications with industry, HEI, other organizations	Indicator 2:
Data Sources	Internal publication records	…
Data collection methods	Scanning records, potentially adding indicator as attribute to be automatically registered	…
Who will collect data?	Department/School	…
Frequency	Annually	…
Cost & difficulty	Low	…
Who will analyze the data?	Administrative staff	…
Who will report the data?	Administrative staff	…
Who will use the data?	Administration for resource allocation, marketing, internal comparison, rewards design, departments for feedback	…

Source: Authors' own design

Now is a proper point in time to conduct a small pilot to test the indicators and collection systems. Starting the M&E system without a pilot is extremely risky, and a pilot will help you learn what works and what doesn't, in order to choose indicators that deliver the best information at lowest cost.

Step 4. Target Setting

Next, you set targets for each indicator. A target is the difference between the baseline indicator level and the desired level of improvement. Therefore, the aim of this step is to decide how much improvement your HEI needs to achieve based on your baseline in order to realize the selected outcome. The accompanying Excel file sets annual targets, however, it is possible to establish short-term objectives within each of them to reduce uncertainty on your HEI's performance (e.g quarterly).

Please keep in mind that the formulas in the file are set for annual targets, so if you decide to use a different interval, you might have to adjust those formulas. When setting a target, please take into consideration expected funding and resource levels throughout the target period (existing capacity, budgets, personnel, funding resources, facilities). Target setting is the final step in building the performance framework, now you are ready to monitor your progress.

Step 5. Results Reporting & Evaluation

The previous steps have explained how to make decisions about which information is to be gathered and set targets to be achieved. This step covers the reporting and evaluation of said information. Additionally, an optional step provides an explanation of setting up a data collection plan to implement the monitoring system.

First, you report the results by recording each indicator's annual measurement in the accompanying M&E Excel file, which the table automatically evaluates. By comparing the measurement to the annual target, it will show you whether you have achieved the target. It will also provide a measure of progress, showing you where you are relative to the baseline measurement, and the change year-on-year. If a target has not been achieved, the table provides space to collect and identify potential causes and propose measures to address those, in order to create better progress until the next measurement. Once you have entered the measurements on all your indicators, the table also provides an overall index, showing you the numbers of targets you have reached and your average performance score.

You can now use this evaluation information to support a result-based management system in your HEI by determining the relevance, efficiency, effectiveness, impact, and sustainability of the projects, policies, and programmes. The evaluation of the results can be used for a wide range of purposes, depending on your specific needs and questions. Examples include discovering divergences between planned and actual performance, finding out if the design as well as the implementation has been carried out properly, or analyzing resource allocations by checking what is or is not working efficiently and effectively. In short, you can use the results to manage in-& outputs as well as outcomes, and to support decision-making processes.

Optional Step: Setting up a Data Collection & Analysis Plan

In case you require information from a large number of stakeholders across different departments, it might be helpful to set up a data collection and analysis plan to ensure proper and timely reporting by considering the following aspects for each indicator's data collection: The unit of analysis, the data collection instruments, frequency of data collection, methods of data analysis and collection, person responsible for collection, analysis, interpretation, reporting; dissemination procedures, and follow-up on findings.

When you build a monitoring system on a Data Collection & Analysis Plan, make sure it exhibits the following four attributes: ownership (stakeholders understand the need and use of data collection), management and maintenance (the provision of incentives and resources to carry out the data collection), and credibility (trust exists to report all kinds of data, including negative information). You might also consider pretesting your data collection instruments and procedures to adjust, improve, and select the most suitable ones.

Figure 7: Example of Data collection and Analysis Plan

Outcome	**Outcome 1**	
Indicator	**Indicator 1.1**	**Indicator 1.2**
Unit of Analysis	Campus	
Data collection instruments	Scan of internal records	
Frequency of data collection	Annual	
Next deadline	01.06.2023	
Methods of data analysis & interpretation	Secretary to the campus management	
Person responsible for collection	M&E manager	
Person responsible for analysis	Program Coordinator	
Person responsible for interpretation	M&E manager	
Person responsible for reporting	Inclusion in M&E report	
Dissemination procedures	Program evaluation	
Follow-up on findings		

Source: Authors' own design

Indicator Examples

To illustrate the indicator development process, the following section contains examples for each pillar of an innovative and entrepreneurial HEI.

Figure 8. Pillar 1: Entrepreneurial Activities

Pillar: 1. Entrepreneurial Activities Goal: The HEI offers diverse entrepreneurial education, research, and related engagement opportunities to prepare students for future careers.					
Outcome	Indicator	Baseline (2023)	Target 2024	Target 2025	Target 2026
By 2030, the HEI continuously engages external stakeholders in teaching and learning co-development.	The number of Business professionals involved in undergraduate entrepreneurship education Development and Design per year and program.	1	10	15	20
	The percentage of social science students participating in extracurricular learning activities with external Entrepreneurs.	5%	10%	18%	20%
By 2030, students will participate in a diverse range of informal learning opportunities and experiences.	The number of students who are members of entrepreneurship-related student clubs.	150	250	300	350
	Participation of graduate students in networking events between students and businesses	2%	5%	7%	8%
	Number of applications for X business plan/idea competition.	50	70	80	100
	Total number of extracurricular activities with recognition/involvement of the HEI department per semester.	10	12	15	18

Source: Authors' own design

Figure 9. Pillar 2: Organizational Capacity

Pillar 2: Organizational Capacity Goal: The HEI creates the necessary organizational and technical capacity to implement its entrepreneurial vision					
Outcome	Indicator	Baseline (2023)	Target 2024	Target 2025	Target 2026
By 2030, the HEI's clear staff recruitment criteria and development policies ensure that staff are capable of and incentivized to further the entrepreneurial agenda.	The percentage of individuals recruited in the past year with strong entrepreneurial backgrounds from the private, public or voluntary sectors and outside of academia.	2%	5%	10%	15%
	The weighting of entrepreneurship teaching and knowledge transfer activities in hiring, promotion and tenure decisions compared to traditional criteria.	1	2	3	4
	The percentage of staff training hours linked to career objectives that support the entrepreneurial agenda.	5%	6%	7%	8%
By 2028, quality in teaching and learning will be enhanced by a fit-for-purpose digital infrastructure.	Percentage of digital systems interoperable with other national systems and relevant EU initiatives.	85%	90%	95%	99%
	Percentage of undergraduate curricula which include discussion of digital competences and skills.	30%	40%	50%	80%
	Staff participation rate in coaching and regular training, including peer learning, on the use of digital technologies for teaching, learning and assessment.	5%	10%	40%	70%

Source: Authors' own design

Figure 10. Pillar 3: Mindset

Pillar 3: Mindset Goal: Leadership and governance drive inclusive innovation and entrepreneurship from the core of the institution.					
Outcome	Indicator	Baseline (2023)	Target 2024	Target 2025	Target 2026
By 2028, a deep commitment at the senior management level of an HEI drives the implementation of the entrepreneurial agenda.	Existence of a dedicated person at a high level / senior management responsible for the implementation of the entrepreneurial vision and strategy.	0	1	1	1
	Participation rate of industry and/or community in university board.	0%	1%	2%	5%
By 2028, the HEI's inclusive institutional framework fosters diversity in activities related to its entrepreneurial agenda.	Reflection of desire to include evidence-based strategies that support the varied needs of all learners in mission statement.	1	2	3	5
	Frequency of external evaluation of Diversity & Inclusion Management practices per year.	0	1	2	2
	Percentage of entrepreneurship education-related classes whose syllabi include an expansion of the values and attributes associated with entrepreneurship to reflect a broader understanding and move away from a male-centered perspective.	0%	5%	30%	70%

Source: Authors' own design

Figure 11. Pillar 4: Ecosystem

Pillar 4: Ecosystem. Goal: The HEI creates an ecosystem in order to support and facilitate internal stakeholders' entrepreneurial future.					
Outcome	Indicator	Baseline (2023)	Target 2024	Target 2025	Target 2026
By 2030, the HEI supports internal stakeholders in the development of idea generation to a real business creation in collaboration with external partners.	The percentage of social science students involved in research projects related to entrepreneurship per semester and program.	2%	5%	10%	15%
	The number of team-building activities per year and program.	1	2	3	4
	The number of start-up pitch events co-organized with external stakeholders per year.	1	1	2	3
By 2030, the HEI has a strong network within the entrepreneurial ecosystem in order to facilitate students' access to future opportunities.	The number of collaboration agreements with the private economic environment effective per year in the HEI.	3	5	6	8
	The number of open spaces/facilities for collaboration with external actors per year in the HEI's.	0	1	2	4
By 2030, the HEI explicitly supports the international mobility of its staff and students, including PhD students.	Reflection of international mobility objectives linked with the entrepreneurial agenda of the HEI in the university's annual strategy.	1	2	3	5
	The number of international mobility programs, including exchange programmes, scholarships, fellowships and internships per year and per program	5	6	8	10
	The number of talks/events/webinars explaining how the international mobility programs work, in order to attract/recruit more students per semester and program.	0	1	1	2

Source: Authors' own design

03 M&E Plan

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03 I M&E plan

The M&E plan is meant to explain the testing partners the journey they must embark on once the ITAPs are defined, in order to ensure that the outcomes in terms of entrepreneurship and innovation are achieved. The testing partners will be supported throughout the process with guidance via various workshops and the results will be documented through several interim reports. The journey is separated into two parts, as the figure below illustrates: The blue part represents the kick-start of the M&E process, to settle the ground, define the status quo and target goals, while the red/violet part represents the consolidation phase and the ongoing monitoring and evaluation of the ITAP progress.

Preparation phase: ITAPs should be defined by each university within the ITAP workshops. These will guide the testing partners regarding the type of actions they may have to take.

Phase 1 – Goal and outcome: In the first quarter of 2024, simultaneously to developing the ITAP projects, each university should start thinking about their goals and the outcomes of each ITAP and fill this into their own M&E tool (see the Excel template circulated during the March 2023 workshop). This is done by each testing partner individually.

Phase 2 –KPIs identification and target setting: Based on the agreed outcomes, concrete indicators and KPIs are to be defined and targets are to be set for each indicator. We recommend doing Phase 1 and Phase 2 in a timely manner, e.g. within one working session. Ideally, Phase 2 should be finished until the second Impact Workshop, which will take place in the first half of 2024.

Second Impact Workshop: The second Impact Workshop aims for each university to present their M&E tool and chosen indicators, opening it up for recommendations and sharing of experiences from peers. TUMint will answer any open questions regarding the M&E tool. After this Workshop, the testing partners will need to prepare the first Interim Report to show their progress in the M&E journey. TUMint will provide the templates for the Interim Report.

Acceleration Board Creation: In the first half of 2024 TUMint with support from the other acceleration partners will set up and implement an acceleration board with experienced experts that will review the interim reports of the testing partners (see more in chapter 04).

Phase 3 – Data collection process: In the course of 2024 each university should collect the respective data regarding the defined KPIs. This will give an overview of the status quo of each indicator in Phase 4.

Phase 4 – Measurement of the baseline: Based on the data collected, the indicators should be calculated and evaluated relative to the targets set in Phase 2. This allows the testing partners to establish the baseline. This phase should be completed until the end of 2024 in order to determine how close or far the KPIs are relative to the set goals/targets at the starting point in time (i.e., first evaluation of the KPIs relative to the set target).

Third Impact Workshop: The third Impact Workshop will take place at the end of 2024 or the first quarter of 2025. It aims to create a platform for the testing partners to share their journey of collecting baseline data and defining target, sharing challenges and solutions with other peers. TUMint will guide the group through this process. The universities will need to hand in a second Interim Report after this Workshop.

Phase 5 – Regular monitoring and evaluation: After having collected the baseline data and measured the first status for each of the KPIs relative to the target for each indicator, each testing partner shall start the regular monitoring and evaluation process in 2025. This means defining a time in 2025 where a second batch of data is being collected for each indicator and included in the M&E toolkit (Excel sheet) entering it in the Excel template and observing progress relative to the target. Ideally this is planned and conducted in Q3 or Q4 2025, before the next Impact Workshop. With this step the consolidation phase of the M&E process of each university within this project.

Fourth Impact Workshop: This will most likely take place at the end of 2025. The testing partners can share their journey, their challenges and solutions with the group. TUMint will guide this process and answer all M&E tool related questions. The third Interim Report will need to be prepared and will be reviewed by the acceleration board.

Fifth Impact Workshop: In the first half of 2026 the fifth Impact Workshop will be conducted. Again, the aim is to guide the testing partners on their M&E journey and give them the platform to showcase their progress and exchange with peers. The fourth Interim Report needs to be prepared by the testing partners after this workshop.

Sixth Impact Workshop: This final Impact Workshop will be organized at the end of the project timeline end of 2026. Each university will have the opportunity to present their M&E tool and celebrate their ITAP progress. A discussion of next steps at each university to create a long-term and sustainable M&E procedure will be included. The last Interim Report will need to be handed in after the sixth Impact Workshop.

Final Report: Based on all the Interim Reports TUMint in cooperation with all other project partners and the acceleration board will prepare a final report showcasing the process of the universities in becoming more entrepreneurial and implementing their ITAPs.

The M&E plan is meant to explain the testing partners the journey they must embark on once the ITAPs are defined, in order to ensure that the outcomes in terms of entrepreneurship and innovation are achieved.

M&E Plan

M&E plan of each HEI within the Accelerate FutureHEI project

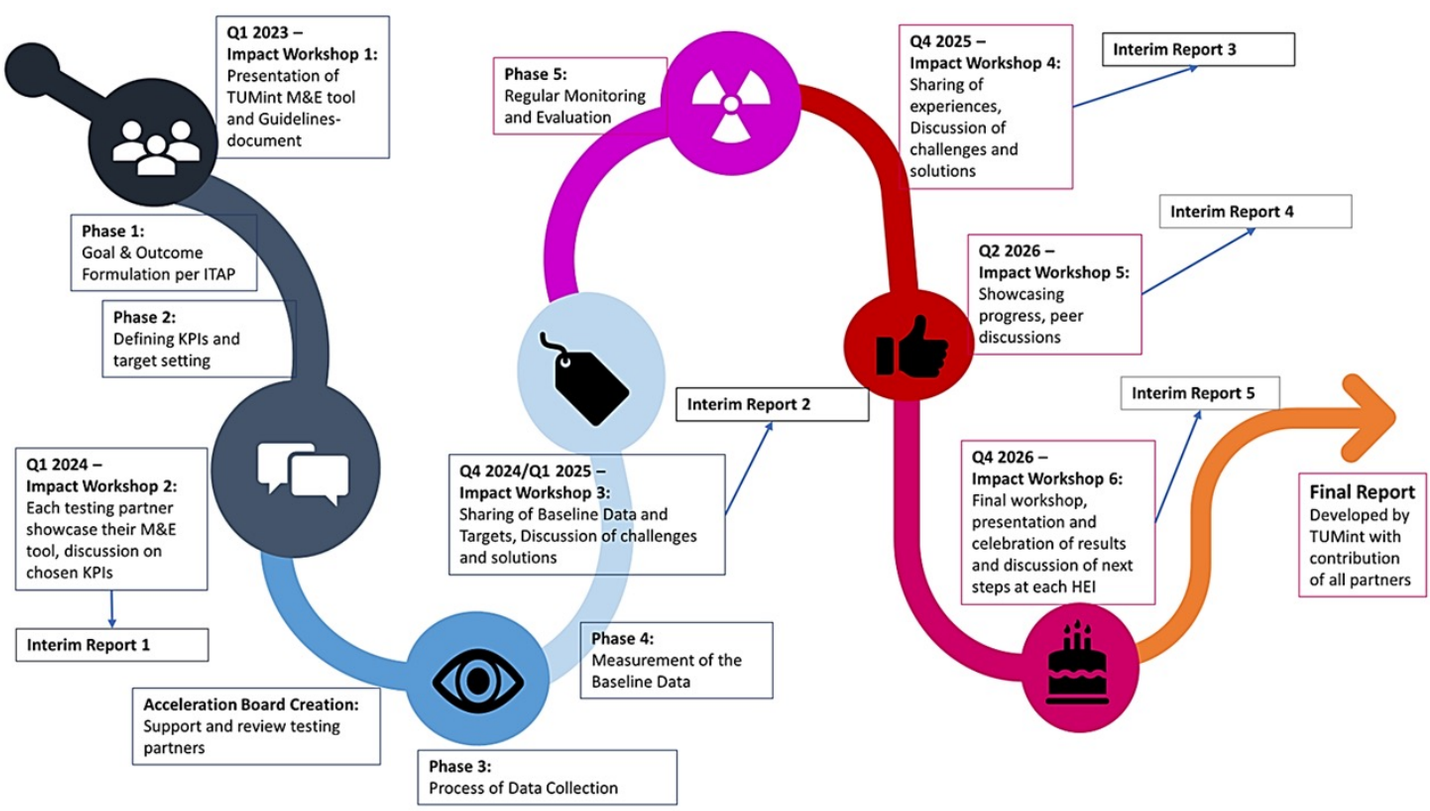

Figure 2: M&E process at each HEI (own illustration)

04 Board of Experts

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04 I Board of Experts

The whole process of monitoring and evaluating the progress of becoming more entrepreneurial and innovative at each testing partner is supported by an ‘acceleration board’. This board will be put together by TUMint together with the other acceleration partners of the Accelerate_FutureHEI project. The experts on the acceleration board are independent, meaning they are not part of the consortium or directly involved in the project. This independence ensures objectivity and instils a sense of accountability into the M&E process of each testing partner. Their role is a supervisory one, overseeing the progress of the testing partners against their defined indicators, ensuring that the HEIs stay aligned with its goals and objectives of their ITAP projects.

In the dynamic landscape of research and innovation projects, unexpected challenges are inevitable. The acceleration board serves as a support mechanism by providing guidance and coaching to testing partners when they face unexpected obstacles. This proactive assistance helps in realigning strategies, addressing challenges, and ensuring continuous progress. The knowledge and experience the experts will bring to the M&E process offer valuable insights into best practices, potential improvements, and innovative solutions. By actively engaging with the testing partners, providing feedback, and suggesting adjustments, the experts contribute to the iterative enhancement of project activities and outcomes.

The 'acceleration board' is scheduled to be established in 2024 and will commence its operations following the conclusion of the second input workshop, after which the testing partners will have to hand in their first interim report. Its active involvement will primarily entail reviewing the interim reports submitted by the testing partners, providing recommendations, and sharing constructive feedback. The ‘acceleration board’ will also support the review of the final report at the end of the 4-year project.

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06 I Annex

See the Excel template with the M&E Toolkit

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Results-based Monitoring and Evaluation for innovative and entrepreneurial HEI

This template is designed to help you monitor and evaluate your institution's performance with regard to innovation and entrepreneurship.
You will design indicators to reflect the four pillars of an innovative and entrepreneurial HEI: Entrepreneurial Activities, Mindset, Organizational Capacity, and Ecosystem.
The template is intended to be used in conjunction with "Guideline: Results-based M&E for entrepreneurial & innovative HEI". For detailed explanations and definitions of the terms used, please refer to the guideline.

The file contains the following sheets:

Sheet 1
- Overview

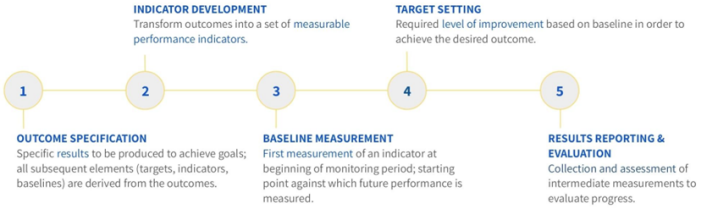
Sheet 2
- Step 1. Outcome Specification
  - Step A. Focus group identification
  - Step B. Major areas of concern
  - Step C. Translation of concerns into positive outcomes

Sheet 3
- Step 2. Indicator Development
- Step 3. Baseline Measurement
- Step 4. Target Setting

Sheet 4
- Step 5. Results Reporting & Evaluation

Sheet 5
- Factors of an entrepreneurial & innovative HEI (for inspiration)

Figure 3. M&E Steps



Source: Authors' own design.

Step-by-step explanations are provided on the right in each sheet.
Lastly, this template is supposed to fit your needs, so you should feel free to adapt it accordingly. It provides space for many more indicators than you might need, you can just leave those cells empty, and, for a more clean appearance, hide the unused rows.

Step 1: Outcome specification					
Goal	**Outcome**		**For whom?**	**By when?**	**Where?**
Example					
The HEI will create an ecosystem in order to support and facilitate internal stakeholders' entrepreneurial future.	Outcome 0	By 2030, the HEI supports internal stakeholders in the development of idea generation to a real business creation in collaboration with external partners.	All staff and students	2030	Internal Policy
Enterpreneurial activities					
	Outcome 1				
	Outcome 2				
	Outcome 3				
Mindset					
	Outcome 4				
	Outcome 5				
	Outcome 6				
Organisational Capacity					
	Outcome 7				
	Outcome 8				
	Outcome 9				
Ecosystem					
	Outcome 10				
	Outcome 11				
	Outcome 12				

This sheet is intended to help you develop specified outcomes.

As explained in the guideline Section 4.2, outcomes are specific results to be produced to achieve your long-term goals. The purpose of 5-10 year outcomes is to visualize what success will look like and to illustrate what the indicators will later measure progress towards.

Please enter your desired outcomes in column C and specify them according to the questions asked in columns I - L to create a specified outcome. The yellow boxes turn white when you enter a specification. If you have entered one in each and modified your indicator accordingly, all boxes will be white, showing you that your outcome satisfies the requirements.

Adding your long-term goals determined during previous UIIN workshops in column B is an optional step which can be very helpful in deriving useful outcomes.

Steps A - C (below)
These are optional steps to identify desired outcomes. It is assumed that you have already identified desired outcomes as part of the ITAP creation within the UIIN Entrepreneurial Universities programme.

The specified outcomes will then be used for indicator development in Steps 2-4 on the next sheet.

Step A: Focus group identification	**Step B: Major areas of concern (identified e.g.: through focus groups, interviews, brainstorming)**		**Step C: Translation of concerns into positive outcomes.**	
(e.g.: students, administration, research and/or teaching personnel, external stakeholders, ...)	Example:	"Most staff don't have the time and capacity to pursue entrepreneurship in addition to their other activities."	Example:	"Pathways and incentives exist for staff to pursue entrepreneurial ambitions."
	Concern 1		Desired outcome rel. to Concern 1	
	Concern 2		Desired outcome rel. to Concern 2	
	Concern 3		Desired outcome rel. to Concern 3	
	Concern 4		Desired outcome rel. to Concern 4	
	Concern 5		Desired outcome rel. to Concern 5	
	Concern 6		Desired outcome rel. to Concern 6	
	Concern 7		Desired outcome rel. to Concern 7	
	Concern 8		Desired outcome rel. to Concern 8	
	Concern 9		Desired outcome rel. to Concern 9	
	Concern 10		Desired outcome rel. to Concern	
	Concern 11		Desired outcome rel. to Concern	

This sheet is intended as a template for Indicator development as well as Baseline measurement and Target setting.

To illustrate the process, an example is provided in row 37 to 41. Indicators are developed based on the outcomes formulated on the previous sheet. The four pillars each have one goal with three outcomes. Each outcome is to be monitored using up to four indicators. This results in a maximum of 48 possible indicators, each with one baseline measurement (2023) and three targets (2024, 2025, 2026).

Step 1. Goal and Outcome
The goals and outcomes are filled up automatically with the content specified in the sheet 'Step 1: Outcome formulation'.

Step 2. Key indicators
In this step, you select indicators to monitor the chosen outcomes. For guidance on how to develop indicators, please refer to Section 4.3 in the guideline. You can also find sample indicators for inspiration in Section 5, or in sheet "HEI Innovation & Entrepreneurship Factors".

Your indicator should be one of three types: Absolute Number (e.g.: "Number of students"), Percentage (e.g.: "Percentage of students"), or Qualitative (e.g.: "atmosphere of support for students' entrepreneurial ambitions"). Qualitative indicators are to be measured on a 5-point Likert Scale, with '1' corresponding to the least and '5' to the most applicable measurement for an indicator's statement. Examples can be:

1	*2*	*3*	*4*	*5*
Strongly disagree	Disagree	Neutral	Agree	Strongly agree
Not true	Rarely true	Neutral	Sometimes true	Always true
Does not apply	Applies rarely	Neutral	Applies somewhat	Applies perfectly

Please enter your indicators in Column F. If it is a numerical indicator (percentage or absolute number), enter it in a row in which column G says 'N'. If it is a qualitative indicator, column G should say 'Q'. It is important that adhere to this separation, since only then proper evaluation can be guaranteed. Evaluation criteria and formulas contained in this file are based on this distinction and differ depending on the type of indicator.

To make sure that the indicator provides useful measurements, check whether it satisfied the requirements asked in column H-Q 'Checklist for assessing indicators'. In case of a positive answer to the requirement, please select 'Yes' in the cell, in case of negative, please select 'No'. Depending on your answer, yes or no, the cell will turn green or red, respectively. For example, the Indicator 0.1 doesn't fulfill all the requirements, thus it should be reformulated to "The percentage of social science students involved in research projects related to entrepreneurship per semester". Once the reformulation is done, please change the No per Yes in the Checklist.

If all cells are green, your indicator satisfies all the necessary requirements and you can move to Step 3.

Step 3. Baseline
Please enter an indicator's current measurement (2023) based on the data collected in the Work Package 2 in columns R and S. Enter your baseline measurement in column R (e.g.: percentage as "10%", quantity as "5", or select the appropriate number on the Likert Scale for qualitative measurements by using the drag-down menu in the cell). Please make sure that your type of entry stays consistent across one indicator. E.g.: If you enter your baseline measurement as "5%", your target should also carry the percentage sign, and be "20%", not just "20". If the entry format is inconsistent for one indicator, the excel file will not be able to compare and evaluate the entries.

Step 4. Target
Finally, enter the annual targets for each indicator (columns T, U, V, respectively).

Step 1. Goal and Outcome			Step 2. Key Indicators development												Step 3. Baseline measurement	Step 4. Targets setting		
					Checklist for assessing indicators. Is the indicator…													
Goal	Outcome	Indicator			a direct reflection of the outcome?	precise to ensure measurement?	a practical, cost-effective collection of data?	flexible to changes?	disaggregated for the reporting?	Clear?	Relevant?	Economic?	Adequate?	Monitorable?	Baseline 2024	Target 2025	Target 2026	Target 2027
Example																		
The HEI will create an ecosystem in order to support and facilitate internal stakeholders' entrepreneurial future.	0 By 2030, the HEI supports internal stakeholders in the development of idea generation to a real business creation in collaboration with external partners.	0.1 Social science students involved in research projects.	N	Yes	No	Yes	Yes	Yes	No	No	Yes	Yes	Yes	10%	15%	20%	25%
		0.2 The number of team-building activities per year.	N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	1	2	3	4
		0.3 The number of start-up pitch events co-organized with external stakeholders per year.	N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	1	2	3	4
		0.4 The Internal stakeholders actively make use of the HEI's offers for business development collaboration.	Q	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	1	2	4	5
Enterpreneurial activities																		
0	1 0	1.1	N															
		1.2	N															
		1.3	N															
		1.4	Q															
	2 0	2.1	N															
		2.2	N															
		2.3	N															
		2.4	Q															
	3 0	3.1	N															
		3.2	N															
		3.3	N															
		3.4	Q															
Mindset																		
0	4 0	4.1	N															
		4.2	N															
		4.3	Q															
		4.4	Q															
	5 0	5.1	N															
		5.2	N															
		5.3	Q															
		5.4	Q															
	6 0	6.1	N															
		6.2	N															
		6.3	Q															
		6.4	Q															
Organisational Capacity																		
0	7 0	7.1	N															
		7.2	N															
		7.3	N															
		7.4	Q															
	8 0	8.1	N															
		8.2	N															
		8.3	N															
		8.4	Q															
	9 0	9.1	N															
		9.2	N															
		9.3	N															
		9.4	Q															
Ecosystem																		
0	10 0	10.1	N															
		10.2	N															
		10.3	N															
		10.4	Q															
	11 0	11.1	N															
		11.2	N															
		11.3	N															
		11.4	Q															
	12 0	12.1	N															
		12.2	N															
		12.3	N															
		12.4	Q															

This sheet is intended as a template for reporting your results.

The indicators you developed in the previous steps are shown in column G.

Enter the indicator measurement in 2024 (2025, 2026) in column J (Q, Y). The table will then compare the measurement to the annual target.

If the column L (S, AA) turns green, you have achieved or even exceeded your target, congratulations! If it turns yellow, you have not achieved your annual target.

Column M (T, AB) compares your measurement to the baseline. If the numbers turn green, you have made progress compared to 2023. If the numbers are yellow, you have made neither progress nor regress, and if they turn red, your measurement shows deterioration. For the years 2025 and 2026, an additional column (U, AC) compares your measurement to the previous year's measurement to show the change year-on-year.

In case the target has not been achieved, columns N and O (V&W, AD&AE) provide space to collect and identify potential causes and propose measures to address those, in order to create better progress until the next measurement.

Below the table you can find an 'Overall Performance' Evaluation. Here, the number of targets (not) achieved is visible at a glance and illustrated in a diagram below.

In case you have less indicators than the template offers space for, and thus need fewer rows for your amount of indicators than are offered here, you can hide the excess rows to create a more visually pleasing appearance.

Goal and Outcome		Indicator			Measurement 2025						Measurement 2026								Measurement 2027							
Goal	Outcome	Indicator	Baseline (2024)	Target 2025	Measurement 2025	Baseline relative to target	2025 relative to target	Change 2024-2025	Potential Causes	Proposed measures	Target 2026	Measurement 2026	Baseline relative to 2026 target	2026 relative to target	Change 2043-26	Change 2025-26	Potential Causes	Proposed measures	Target 2027	Measurement 2027	Baseline relative to 2027 target	2027 relative to target	Change 24-27	Change 26-27	Potential Causes	Proposed measures
Example																										
The HEI will create an ecosystem in order to support and facilitate internal stakeholders' entrepreneurial future.	By 2030, the HEI supports internal stakeholders in the development of idea generation to a real business creation in collaboration with external partners.	0.1 The percentage of social science students involved in research projects related to entrepeneurship per semester.	10%	15%	4%	67%	27%	-40%	Lack of knowledge about research offers among social	Include offers on newsletter	20%	20%	50%	100%	50%	16%	...	...	25%	18%	40%	72%	32%	-2%	...	...
		0.2 The number of team-building activities per year.	1	2	2	50%	100%	50%			3	2	33%	67%	33%	0%			4	4	25%	100%	75%	200%		
		0.3 The number of start-up pitch events co-organized with external stakeholders per year.	1	2	1	50%	50%	0%			3	3	33%	100%	67%	200%			4	4	25%	100%	75%	100%		
		0.4 The Internal stakeholders actively make use of the HEI's offers for business development collaboration.	1	2	3	50%	150%	100%			4	3	25%	75%	50%	0%			5	3	20%	60%	40%	0%		
Entrepreneurial activities				0																						
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Overall Performance			
Year	2025	2026	2027
Number of targets achieved/exceeded	0	0	0
Number of targets not achieved	0	0	0
Out of those not achieved: Targets with no progress/regression	46	46	46
Total Number of targets	0	0	0

Formulas used in Performance table (Irrelevant for your evaluation, feel free to ignore).
Column L: Measurement relative to target

Count if column L >=100%

Count if column L <=99%
Count if Column Z <=O - (number of possible indicators - number of actual indicators) - number of unused indicator rows

Number of empty/unused indica 2
Number of possible indicators 48

48 possible indicators - empty cells in target column I
no formula

Overall Performance			
Year	2025	2026	2027
Number of targets achieved/exceeded	0	0	0
Number of targets not achieved	0	0	0
Out of those not achieved: Targets with	46	46	46
Total Number of targets	0	0	0
Performance Score	2025	2026	2027
Entrepreneurial Education	#DIV/0!	#DIV/0!	#DIV/0!
Mindset	#DIV/0!	#DIV/0!	#DIV/0!
Organisational Capacity	#DIV/0!	#DIV/0!	#DIV/0!
Ecosystem	#DIV/0!	#DIV/0!	#DIV/0!
Overall	#DIV/0!	#DIV/0!	#DIV/0!

Note for the table.
If you wish to see your performance score, please do the following:

In case you have not used some of the rows offered for indicators, please delete the cell content of those rows in columns L (2024), S (2025), AA (2026). For example, if you are not using Indicator 3.4 in the Entrepreneurial Education Pillar, delete the content of cells L23, S23, and AA23.

The reason for this is that the Performance Score shown in the above table is an average of your indicator performances. The table does not know how many indicator rows you are using and will assume you use all of them. If you don't use all of them, the table will read the formulas in the unused cells and give an error message.

This sheet is intended to inspire you.

This table provides factors related to each of the four pillars of an innovative and entrepreneurial HEI. It is intended as a checklist for you to find out if you are capturing each dimension in your M&E system and can also serve as inspiration for your indicator design.

In column D, select whether a factor is "Already present" (green), "Currently unfeasible/not applicable" (blue), or "To be considered" (in the M&E system, orange). If a cell is orange, you can develop an indicator based on the factor it relates to.

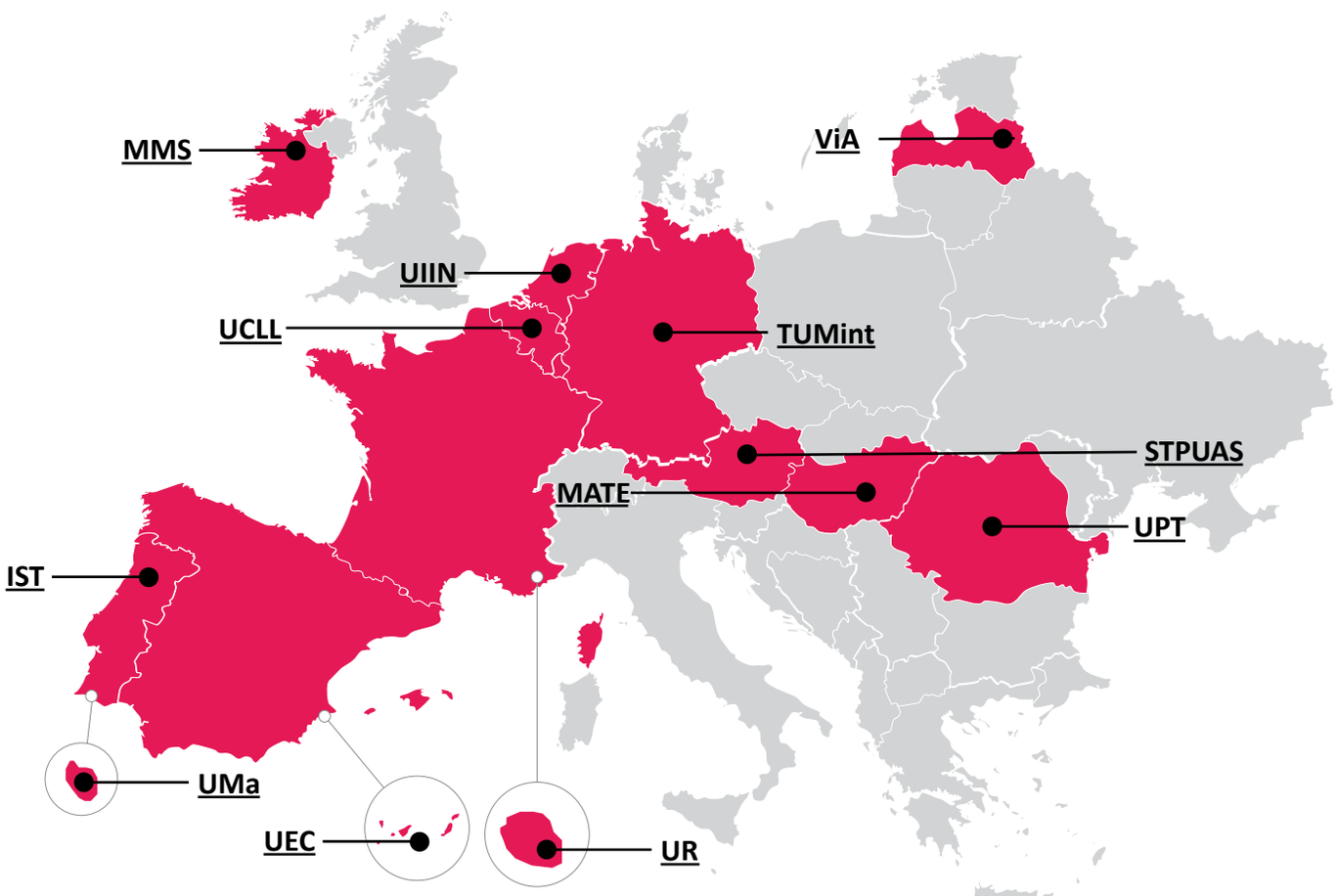
Pillar	Description	Factor	Your HEI
1. Mindset/ Leadership and Governance	**Mission statement & written strategy with entrepreneurial vision for the future of the institution**	Inclusion of entrepreneurial vision in mission statement	
		Strategy which clearly emphasizes the importance of entrepreneurship, culturally, socially and economically	Already present
		Expanded excellence definition (include other categories apart from number of publications etc), social impact...	Currently unfeasible/not applicable
		Clear implementation plan to achieve its strategy and vision with clear objectives and key performance indicators	To be considered
		Provision of examples of how the strategy and vision create opportunities across all aspects of the institution and its wider community	
	Deep **commitment at the senior management level** of an HEI to drive the implementation of the entrepreneurial agenda	Strategy is communicated across the institution, and understood as a priority by staff, students and stakeholders	
		Strategic roadmap presented in a simple format that is widely communicated throughout the HEI	
		Dedicated person at a high level / senior management responsible for the implementation of the entrepreneurial vision and strategy	
		Articulate how the entrepreneurial strategy is regularly reviewed and revised to keep it up to date and relevant	
		Participation of industry and/or community in university board	
	Effective model for **coordinating** and integrating **innovative activities** across the institution/university structure	Entrepreneurial activities across departments, faculties and other centers are coordinated and integrated	
		Activities are coordinated with other stakeholders within the local entrepreneurship ecosystem	
		Boundary spanning units	
	Environment that encourages idea creation and the emergence of new activities	Faculties or units within the institution are allowed to take full responsibility and ownership of the development of new structures and centers	
		Ownership of and responsibility for the development of new activities and initiatives that stimulate entrepreneurial capacity is ensured/allocated	
		Faculties or units are supported through a range of incentives and rewards linked to the demonstration of entrepreneurial and innovative outcomes	
	HEI's role to **support** and drive **regional, social and community development**.	Actively involved in the development and implementation of the local, regional and / or national innovation and entrepreneurship strategies.	
		General access to the facilities of the institution to others in the wider community is provided	
		Support for start-ups and / or established companies in the region to enhance innovation and growth	
		Strong presence in its communities, for example, by supporting local cultural and artistic activities	
	Inclusive Institutional Framework/**Infrastructure to foster diversity**	not 'othering' women, expanding the values and attributes associated with entrepreneurship at HEI to reflect a broader understanding and move away from a male-centered perspective	
		Reflection of desire to include evidence-based strategies that support the varied needs of all learners in mission statement	
		ongoing analysis and improvement process of potentially exclusionary structures	
		Diversity & Inclusion Management practices of the institution	
		Recognition of diversity and Commitment to fostering inclusive culture in mission statement	
		Presence of Non-Discrimination Statement or Diversity Code of Conduct	

2. Organisational Capacity	Entrepreneurial agenda is supported by a wide **variety of funding sources**/investment, including investment by external stakeholders	Diversity of funding sources (external and internal)	
		Aim for a balanced and diversified range of funding and investment sources, including in-kind contributions	
		Income from non-government sources: The proportion of external research revenues—apart from government or local authority core/recurrent grants—that comes from external sources (i.e. industry, private organizations, charities)	
		Reinvestment of revenues generated from leveraging their own research, teaching and third mission activities (self-funding)	
		Resources generated from third stream activities as a percentage of the universities budget	
		Close link between long-term commitment to investing in entrepreneurial and innovative activities and its financial strategy is ensured	
		Continuous engagement with funders and investors to secure financial resources to deliver on its objectives	
		Budget allocated specifically for innovative activities/existence of separate budget	
	Capacity and culture to build new **relationships and synergies** across the institution.	Promote shared facilities across faculties	
		Establish structures for staff-student dialogue and decision making	
		Create and support interdisciplinary structures	
		Support cross-faculty teaching and research groups	
	HEI is open to engaging and **recruiting individuals** with entrepreneurial attitudes, behavior and experience.	Demonstrate the importance it attaches to bringing in people with diverse backgrounds	
		Recruit individuals with strong entrepreneurial backgrounds from the private, public or voluntary sectors and outside of academia	
		Give status and recognition to those who contribute to the institution's entrepreneurial agenda	
		Have mechanisms in place for shared risk and rewards in engaging in entrepreneurial opportunities	
	Higher education institution **invests in staff development** to support its entrepreneurial agenda	Sustainable financing in place to sustain the entrepreneurial university strategy	
		Have a formal policy for career development for all staff linked to the implementation of the institution's entrepreneurial strategy and vision	
		Set individual objectives and performance indicators for all staff supporting the implementation of the entrepreneurial agenda	
		Measure staff progression against these objectives on a regular basis	
		Greater weight should be given to entrepreneurship teaching and knowledge transfer activities in hiring, promotion and tenure decisions	
		Link the training needs of staff with career objectives that support the entrepreneurial agenda	
		Regular programs for training entrepreneurship teachers.	
		Provision of peer-learning opportunities for staff	
	Clear **incentives and rewards for staff** who actively support the entrepreneurial strategy	Adjust staff teaching and research workloads for those who take on new responsibilities that support the institution's entrepreneurial agenda	
		Provide institutional funds to staff to stimulate innovation and change	
		Provide development sabbaticals for staff who seek to enhance their entrepreneurial capacity	
		Instigate systems for rewards beyond traditional research, publications and teaching criteria	
		Examples of rewards: Awards, for example for "student ambassador of the year", the "most entrepreneurial professor", and the "most enterprising administrative staff", Reduction of teaching hours, Study visits to successful ventures, regions and organizations, Additional monetary resources (budget, personnel, infrastructure), Part-time options for staff starting and running businesses, Development sabbaticals, Utilization of office and laboratory spaces for entrepreneurial activities	
		Provide opportunities for professors to work part time in their own companies (where permissible)	
		Make office and laboratory space available for staff to pursue entrepreneurial activities	
		Incentive Structure: More flexible arrangements should be developed for mobility between universities and industry, including leaves of absence and sabbaticals	
	Higher education institution gives status and **recognition to external stakeholders** who contribute to the entrepreneurial		
	Improving the inclusiveness of existing programs	Offer support in care responsibilities, include information on financial support for working parents in entrepreneurship ecosystem	
	Targeted services for enhancing inclusive participation & experience	Decrease inhibiting factors: females' interrupted careers, need for child-care, stereotypes, female perceptions about males as more capable of dominating the entrepreneurial profession → include awareness training	
		Availability of Counseling for discriminatory risk factors (sex, gender, race, religion...)	
		Entrepreneurship ecosystems should reflect the needs of diverse women entrepreneurs (diverse funding opportunities)	
	Staff training	Unconscious bias training (e.g. using M'gadzah's Six Stages Framework)	
		disability awareness training	
		Online diversity course	
	Institutional Framework/**Infrastructure**	Provision of assistive technology: Technology that reads texts or presentations, videos with subtitles, sign language interpreters	
		channels to report discriminatory practices exist	
		accessibility of venues/existence of physical barriers to participation	
		HEI website/staff can redirect to sources for self-education	
	The HEI fosters a **digital culture** and implements and monitors a **digital strategy** supporting innovation and entrepreneurship	Have commitment and vision from the leadership for a digital culture that fosters the digital transformation on the basis of shared values, and enables active participation of staff, students and the wider stakeholder community.	
		Develop a strategy that sets out the goals of how the HEI will seek to innovate and improve through digital transformation.	
		Have an action plan based on sufficient resources and support to implement the various aspects of that strategy.	
		Monitor and assess the implementation of the strategy on the basis of a clear set of objectives and performance metrics.	
		Communicate broadly the benefits and added value of the digital transformation across all activities of the HEI for innovation and entrepreneurship	
	The HEI invests in, manages and continuously improves a **fit-for-purpose digital infrastructure**.	Plan, manage and improve the digital infrastructure in consultation with, and informed by the needs of all users, including staff, students and its wider stakeholder community.	
		Ensure that there is an operational plan with clear objectives and performance metrics in place for the management, integration, optimisation and adaptation of HEI's digital systems and services.	
		Ensure interoperability with other national systems and relevant EU initiatives.	
		Ensure that appropriate legal and ethical standards - specifically related to digital aspects - are in place and widely understood. These should also cover data security and privacy, as well as intellectual property rights.	
	The HEI actively supports the use of digital technologies to **enhance quality and equity** in teaching, learning and assessment	Provide coaching and regular training, including peer learning, for all staff on the use of digital technologies for teaching, learning and assessment.	
		Make digital technologies a viable, ressourced and supported part of the learning design process to ensure quality and equity in education.	
		Embed digital competences and skills in the curriculum and its intended learning outcomes across all disciplines with a lifelong learning perspective.	
		Support innovation and entrepreneurship through a wide range of pedagogical approaches that are implemented at scale, including those based on the use of digital technologies.	
		Monitor, evaluate and improve the use of digital technologies for teaching, learning and assessment, and ensure that good practices are shared throughout the HEI and beyond.	
	The HEI actively uses **open educational resources**, open science and open data practices to improve the performance of the institution and increase its impact on its ecosystem.	Develop and implement a comprehensive open education, open science and open data strategy and action plan, supported by a range of assessment and reward mechanisms.	
		Promote the principles and practice of open education, open science and open data across the HEI and its partnerships.	
		On-line information system of pedagogical practices freely accessible for teachers, researchers, students and other organisations	
		Provide training and support at all education and career levels to create an open and FAIR (Findable, Accessible, Interoperable and Reusable) data and research culture.	
		Implement the principle 'as open as possible, as closed as necessary' to protect the privacy, confidentiality, safety and well-being of staff and students and to promote their innovative and creative efforts.	
	The HEI makes full use of its digital capacity to **promote sustainable and inclusive innovation** and entrepreneurship.	Provide digital leadership as well as advanced and tailored digital services to foster seamless and integrated knowledge and information exchange, both with internal and external stakeholders.	
		Invest in and incentivise human resources to foster innovation and entrepreneurship through digital communication, collaboration and networking across the HEI and with its ecosystem.	
		Take actions to ensure the continued usefulness and relevance of the HEI's digital presence for the society and citizens in its regional, national and international outreach.	

3. Entrepreneurial activities	Diverse **formal learning opportunities** to develop entrepreneurial mindsets & skills	Support curriculum change to stimulate and develop entrepreneurial mindsets and skills through new pedagogies, student-centred, cross-disciplinary and practice-based learning (e.g. living labs, the use of case studies, games and simulation)	
		Provide support and training to staff in creating new curriculum related to entrepreneurship	
		Provide mechanisms for students to engage in review and feedback on courses	
		Introduce new mechanisms for supporting students, including experiencing starting new ventures within the students' formal education or delivering entrepreneurship education with practising entrepreneurs	
	Diverse **informal learning opportunities** and experiences	Support access to student enterprise clubs, awards and societies	
		Organise networking events between students and entrepreneurs / businesses	
		Engage students in business idea / plan competitions as part of their extracurricular opportunities	
		Formally recognise extracurricular activities	
	Staff take an **entrepreneurial approach to teach** in all departments, promoting diversity and innovation in teaching and		
	Entrepreneurial behaviour is supported throughout the higher education experience; from creating awareness and		
	The higher education institution validates **entrepreneurship learning outcomes**, driving the design and execution of the entrepreneurial curriculum	Codify the expected entrepreneurial learning outcomes in relation to knowledge, skills and competences in all degree programmes	
		Ensure students have a clear understanding of the entrepreneurial learning outcomes expected and achieved	
		Validate entrepreneurial learning outcomes at the institutional level	
		Recognise entrepreneurial learning outcomes in the students' records of achievements	
		Regular feedback	
		Teachers emphasize the importance of ethical questions when creating new ventures, as well as the positive and negative social impacts of innovation.	
		Entrepreneurship activities are designed with student expectations and needs in mind.	
	Engagement of external stakeholders is a key component of teaching and learning co-development	Involvement of Business professionals into the D&D of curriculum	
		Regularly review and assess the involvement of external stakeholders in course design and delivery	
		Provide a mechanism for staff to work with external stakeholders to develop and deliver high quality course content	
		Integrate external stakeholders' experience and expertise into the development and delivery of extracurricular learning activities and support services	
		Support a diversity of collaborative partnerships with local communities and organisations, local and regional governments, chambers of commerce, industry and HEI alumni	
	Research results are integrated into entrepreneurship education	Encourage staff and educators to review the latest research in entrepreneurship education	
		Provide a forum whereby staff and educators can exchange new knowledge and ideas, incorporating the latest research	
		Provide access to inspiration from other HEIs through networking and sharing good practices	
	Interdisciplinarity	Interdisciplinary courses/programs	
		Interdisciplinarity of the university bodies (committees, etc.)	
		Interdisciplinary collaborations with industry and communities	
		Opportunity for staff to collaborate across disciplines	
	Mindset	Part of the curriculum is specifically designed to develop the sense of self-esteem and personal development among the students.	
		An effectuation mindset is encouraged (students taught to deal with the uncertainty and ambiguity of an environment)	
	Improving the inclusiveness of existing programs	universal access for students & staff to entrepreneurship activities (not limited to business school & tech transfer office),	
		Entrepreneurship education at early stage (undergraduate)	
		Inclusion of different entrepreneurship values in entrepreneurship education: shift focus from largely economic objectives (an issue that males appear to put the most emphasis on) to include more intrinsic factors such as self-actualization and personal enjoyment; ensure that programmes account for different attitudes, different educational backgrounds, and specific needs of women entrepreneurs	
	Targeted services for enhancing inclusive participation & experience	Fostering self-efficacy	
		increase awareness of existing support offers	
		Gender-neutral and women-focused education must be offered early to instill confidence, skills, abilities	

4. Ecosystem	The university raises **awareness** of the value/importance of developing **entrepreneurial abilities** amongst staff and students and actively encourages individuals to become entrepreneurial	Provide conducive framework conditions for start-up, such as enabling staff to own shares, work part-time, take sabbaticals, and the possibility for students to extend the duration of their study programmes to support starting a new venture whilst studying	
		Make effective use of communication channels to raise awareness of opportunities and showcase entrepreneurship among staff and students across all parts of the institution	
		Celebrate and recognise successes of student, graduate and staff entrepreneurs	
		Prepares students for future intrapreneurial and entrepreneurial careers and promotes the commercialisation of research results.	
	The HEI supports students, graduates, staff to move **from idea generation to business** creation	Provide opportunities for students to be involved in research projects leading to entrepreneurial opportunities and to take up internships with entrepreneurs	
		Offer entrepreneurial team building support and conflict management	
		Provide intellectual property assistance for potential start-ups	
		Support for graduate entrepreneurship: Provision of mentoring, networking, financial support and other assistance to graduate students who wish to start firms	
		Create an expert advisory panel for early-stage concepts	
		Organise interdisciplinary idea generation activities (e.g. start-up weekends)	
		Organise idea and start-up pitch prizes	
		Offer funds to support market feasibility studies	
	Business start-up education is offered across the curricula and faculties, is	Offer tailored entrepreneurship courses across all subject areas and levels of study	
		Actively recruit students and staff to training activities and monitor levels of engagement	
		Involve entrepreneurs and key actors from the entrepreneurship ecosystem	
	A suite of **business start-up courses** exists, which uses **creative teaching method**s and is tailored to the needs of undergraduate, graduate and	Implement mechanisms to increase rates of take-up by diverse groups	
		Use up to date teaching methods focused on learning-by-doing and critical reflection	
		The suite of business start-up courses has a differentiated offer that covers the pre-start-up phase, the start-up phase and the growth phase. For certain courses active recruitment is practiced.	
	The university provides **opportunities to experience entrepreneurship**		
	Mentoring by academic and industry personnel is available	Organise visible, accessible and good-quality mentoring and personal development activities	
		Actively recruit mentors and provide them with training, resources (e.g. IP assistance), formal recognition and rewards	
		Facilitate matchmaking of mentors and protégés	
		Provide feedback mechanisms on the contributions from entrepreneurs	
		Provide opportunities for peer-to-peer mentoring, such as entrepreneur clubs, where members help each other	
	The university facilitates **access to private financing** for its potential entrepreneurs	Offer financial education to entrepreneurs and potential entrepreneurs to better understand financial concepts and how to apply them	
		Organise networking and financing events for aspiring entrepreneurs to pitch their ideas to investors and to get feedback	
		Offer microfinance instruments such as grants, prizes, loans and equity	
		Utilise its network of potential investors for crowd-funding	
		Closely link access to financing activities with training, mentoring and incubation	
	The university provides **access to business incubation** facilities	Host their own incubators or facilitate easy access to external incubators	
		Ensure that their incubators offer a full range of soft support (networking, mentoring, etc.) as well as physical infrastructure	
		Promote the incubator widely across campus and host events that engage potential entrepreneurs	
		Embed the incubation facilities with the research and education infrastructure of the HEI to enhance synergies	
	Improving the inclusiveness of existing programs	Consult with women entrepreneurs during support programme design stage, representatives of minorities	
		ensure that selection processes for participants are not biased/favor men; hiring process	
	Targeted services for enhancing inclusive participation & experience	efforts to legitimise, celebrate and normalise women's entrepreneurship	
		Entrepreneurship ecosystems should reflect the needs of diverse women entrepreneurs by providing them with direct support.	
		increase awareness of existing support offers	
	Quadruple Helix: The university is committed to knowledge exchange with industry, society and the public sector	Ensure knowledge exchange and collaboration is a high priority at senior level and that implementation is in line with the institution's entrepreneurial agenda	
		Establish structures to exploit knowledge exchange and collaboration opportunities, and encourage staff to engage in such activities	
		Include support mechanisms for coordinating and sharing relationships across the HEI	
		Give guidance on how to develop and implement all types of relationships with the public and private sector	

4. Ecosystem	The university demonstrates **active involvement in partnerships** and relationships with a wide range of stakeholders	Involve external stakeholders in the work of the institution through governance, teaching, research, support for student activities and positions with institutes and centres	
		Play an active role in influencing regional governance and regional / local development including entrepreneurship development / reflecting SDGs	
		Support entrepreneurship development of schools and colleges through networking and broader engagement	
		Provide monitoring and feedback of the mutual value developed through stakeholder relationships	
		Partnership outcomes	
	The university has strong **links with the entrepreneurial ecosystem**: incubators, science parks and other external initiatives, creating opportunities for dynamic knowledge exchange	Alumni involvement in knowledge exchange activities	
		Encourage the joint use of facilities	
		number of contracts / collaborations with the private economic environment	
		number of partnerships with public institutions, number of participation in research networks, number of participation in entrepreneurship networks, clusters.	
		Have direct financial or management interest in science parks and incubators, ranging from participation to ownership	
		Ensure that the flow of people is incentivised in both directions	
		Monitor the added value generated through linkages and cross-fertilisation activities	
	Opportunities for connection: The university provides opportunities for staff and students to take part in entrepreneurial activities with business/the	Provide open spaces and facilities for collaboration with external actors	
		Organise events that encourage engagement with external stakeholders, such as lectures, joint workshops, breakfast meetings and other networking events and opportunities	
		Encourage, support and recognise mobility of staff and students through internships, sabbaticals, dedicated study programmes (e.g. industrial doctorates, sandwich programmes)	
	The university specifically supports staff and **student mobility** between academia and the external environment		
	The university links/integrates research, education and industry (wider community) activities together to affect the whole knowledge ecosystem/**knowledge transfer mechanisms**	Have mechanisms in place to integrate and absorb information and experience from the wider ecosystem	
		Monitor research activities regionally, nationally and internationally to identify new and relevant knowledge	
		Initiate dialogue and discussion between the HEI and the external environment for mutual benefit	
		Provide support for the identification of new ideas and their mutual exploitation/ technology transfer mechanisms	
		Have clear mechanisms for exploiting entrepreneurial opportunities with commercial and industrial partners	
	Knowledge Exchange with other HEI	Collaboration amongst different local universities and other higher education institutions should be promoted to allow student participation	
		Inviting international visiting entrepreneurship professors on a regular basis strengthen the research base	
	Improving the inclusiveness of existing programs	employ jargon-free and clear communication and outreach messages to attract women with little experience in entrepreneurship	
	Targeted services for enhancing inclusive participation & experience	Women entrepreneurial networks, mentoring and coaching offers	
	Internationalization is a key part of the university's entrepreneurial strategy	Ensure the internationalisation strategy reflects its entrepreneurial agenda	
		Build common objectives and synergies between internationalisation and the entrepreneurial agenda	
	The university explicitly supports the **international mobility** of its staff and students (including PhD students)	Link international mobility objectives with the entrepreneurial agenda of the HEI	
		Promote international mobility through exchange programmes, scholarships, fellowships and internships	
		Apply for European mobility programmes and support the application of staff and student to mobility grants, scholarships and programmes	
		Incentivise, recognise and reward international mobility	
	The university seeks and **attracts international and entrepreneurial staff** (including teaching, research and PhDs)	Explicitly set out to attract international staff which match the needs of its entrepreneurial agenda	
		Have specific international recruitment drives in place	
		Develop PhD programmes in collaboration with other partner institutions	
		Have a support system in place for the cultural integration of international staff	
	International perspectives are reflected in its approach to teaching	Invest in an international-orientated curriculum which supports the institution's entrepreneurial agenda	
		Ensure the curriculum is set up to prepare students for performing professionally and socially in an international and multicultural context	
		Design and develop a curriculum which considers both 'internationalisation abroad' and 'internationalisation at home' experiences for staff and students	
		Support international partnerships and networks which add value to teaching entrepreneurship	
		Increase the number of joint / double degrees which include entrepreneurship and innovation in their curriculum	
		Include classroom-based activities with an international perspective	
	The **international dimension** is reflected in approach to **research**	Ensure that relationships with international research partners support its entrepreneurial agenda	
		Develop extensive links with international research networks and innovation clusters	
		Have internal support structures in place to manage and grow international relationships	
		Use networks and partnerships to feed back into its research agenda	
		Ensure all departments and faculties actively participate in international research partnerships and networks	



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