



Co-funded by the
Erasmus+ Programme
of the European Union

Final External Evaluation Report

Reference
609957-EPP-1-2019-1-DE-EPPKA2-CBHE-JP

January 2024

David Alpera Green
External Evaluation



Table of Contents

EXECUTIVE SUMMARY	3
ABOUT THE AUTHOR	6
1. FRAMEWORK	7
2. BACKGROUND; THE TAKE-UP PROJECT	8
2.1 OBJECTIVES	8
2.2 PROJECT PARTNERS	9
3. EVALUATION SCOPE AND METHODOLOGY	10
3.1 OBJECTIVE	10
3.2 EVALUATION COMPONENTS	11
4. ANALYSIS BY WORK PACKAGES, OUTCOMES AND ACTIVITIES	14
4.1 WORK PACKAGE 1 – KICK-OFF AND SELF-ASSESSMENT (ENTREPRENEURIAL CULTURE AT UNIVERSITIES).....	14
4.2 WORK PACKAGE 2 – STRATEGIC ACTION PLANNING	17
4.3 WORK PACKAGE 3 – ESTABLISHING FABLABS IN PAKISTAN	20
4.4 WORK PACKAGE 4 – DEVELOPMENT OF LOCALLY RELEVANT TRAINING AND TEACHING MATERIAL FOCUSED ON DEVELOPING ENTREPRENEURIAL SKILLS IN STUDENTS.....	39
4.5 WORK PACKAGE 5 – PROFESSIONALIZING ENTREPRENEURIAL COACHING	28
4.6 WORK PACKAGE 6 – TRAINING AND CERTIFYING ENTREPRENEURIAL COACHES IN PAKISTAN (TRAIN-THE-TRAINER).....	55
4.7 WORK PACKAGE 7 – DEVELOPMENT OF A NATIONAL TAKE-UP NETWORK.....	58
4.8 WORK PACKAGE 8 – DISSEMINATION, VISIBILITY AND EXPLOITATION	41
4.9 WORK PACKAGE 9 – QUALITY MANAGEMENT	41
4.10 WORK PACKAGE 10 – PROJECT MANAGEMENT.....	41
5. CONCLUSIONS AND RECOMMENDATIONS	44
5.1 GENERAL ASPECTS.....	49
5.2 FEEDBACK FROM INTERNAL & EXTERNAL STAKEHOLDERS.....	49
5.3 INSTITUTIONAL PERSPECTIVE	68
5.4 INDIVIDUAL PERSPECTIVE.....	68
5.5 CONCLUSIONS PER DAC CRITERIA.....	69
5.6 RECOMMENDATIONS AT MICRO AND MACRO LEVEL.....	79

EXECUTIVE SUMMARY

Saarland University (UdS), Project Coordinator for TAKE-UP, selected Mr. David Alpera as Expert to undertake the external formative evaluation of the main results achieved.

The Final External Evaluation Report was delivered in January 2024 –with a time scope from the beginning of TAKE-UP throughout the end of the Project-.

Main focus of the Evaluation: 1) The context of the project and activities implementation with focus on expected work plan 2) Analysis of the involvement of key stakeholders 3) Analysis of main results achieved, especially considering: Effectiveness, Coherence, Impact, Relevance and Sustainability.

The methodology for the evaluation was agreed with the Project Consortium, including a Basic Intervention Logic, Assessment Criteria and Evaluation Questions; this methodology was carried throughout TAKE-UP Project, by means of analysis of relevant deliverables and reports and interviews with main stakeholders and project partners.

As it is detailed in the Methodology section of this Report, the expert did, among other tasks, performed desk review of all available documentation, implemented a Questionnaire for partners, engaged in regular communication with the Project Coordinator, participated in several Project Management Meetings and retrieved feedback from external stakeholders; to be noted, the expert wants to express his gratitude to the external stakeholders that provided varied and comprehensive input, regarding several critical aspects.

Main findings, in terms of Evaluation Criteria, and linked Project results, identified by the external evaluator, below:

A) Effectiveness

D4.1 Development of locally relevant training and teaching material focused on developing entrepreneurial skills in students – Corresponding localized training, created, addressing local challenges, therefore, making it relevant. Positive outcomes, compiled.

D4.2 Digital transformation – Digital delivery, converting -developed material- into digital delivery formats (YouTube, Moodle), enabling self-administered learning. Positive outcomes, compiled.

WP5 Professionalizing Entrepreneurial Coaching – After initial assessment of current situation of Entrepreneurial Coaches at Pakistan, appropriate and comprehensive training material for entrepreneurship coaching, developed -both-general and domain-specific; aim of professionalizing Entrepreneurial Coaching at the 4 local Project partner HEIs, confirmed.

B) Coherence

D6.4 Awarding the TAKE-UP Certificate for Entrepreneurship Coaches – Proper process not only described but implemented, for awarding said certificates.

Critical importance of the unforeseen Certification for Master Coaches.

The Certificates, are surely to lead to increased impact-s, visibility and sustainability of Project's results.

D6.5 Train the Trainers – ToT program, designed and implemented, towards improving skillset of Entrepreneurial Coaches, creating corresponding multiplier/'cascade' effect. Assessment of this result, clearly positive.

C) Impact

WP3 FabLabs – Clearly, one of, if not the, most impactful outcomes of TAKE-UP, as also has been agreed by partners. 4 FabLabs (3 brand new, 1 enhanced), up and running.

D) Relevance

D1.2 – Self-Assessment – An important document/deliverable, with Self-Assessment Tool, providing a 360° assessment; as well, a detailed self-assessment coaching was implemented by AUEB.

Positive rating of the action, also shared by partners.

D7.5 – Joint Publication for Best Practices to transform Pakistani universities into entrepreneurial universities - A comprehensive document, with detailed content in terms of challenges and lessons learned, along with key sustainable Project outcomes.

E) Sustainability

D2.1 Strategic Action Plan – Clear objectives have been set by the 4 Pakistani Project partners, achieving the set goals of this output. It has been confirmed the need to regularly update the Plans.

D7.1 Establishment of the TAKE-UP Network – Still needs to be formalized (constitutional documents, not produced at the time of delivering this Final External Evaluation Report) and launched. But, *de facto*, a proper network is in place.

F) Efficiency

Project partners **confirmed** that, **resources** (and, TAKE-UP Project activities, actions, events, ...), were implemented in a **cost-efficient manner**.

Overall, activities were delivered in a **timely manner** (given Covid 19 and negative effects/restrictions and how it affected some TAKE-UP Project's activities/deliverables). Covid 19 **effects**, were also properly handled.



ABOUT THE AUTHOR

David Alpera is a Monitoring & Evaluation Expert of Capacity Building Projects in the field of Higher Education; a Consultant, with an M.A. in International Trade and Commerce, and a Law Degree.

He has several years of experience as an evaluator for several organizations such as the European Union, National Agency (UK) or the European Foundation for Management Development (EFMD).

Focus areas include R&D, Energy, Innovation, Climate Change, Social Innovation, among others.

Last assignments have been the external evaluation of projects such as IPICA, CAP4INNO, MUSE, LAURDS, FREE, REACT, LASIN, S4C, FORINT, SEASIN, IHEI, INSPIRE, CIPnet, PACES, MORALE, DIGIPASS, LATWORK, MEANING, EMINENT, OPEN or COMMONGOODFIRST, among others.

1. FRAMEWORK

Saarland University (UdS), Project Coordinator for TAKE-UP, selected Mr. David Alpera as Expert to undertake the external formative evaluation of the main results achieved.

The External Evaluation consisted in a Final Evaluation Report and has been delivered on January 2024.

Main focus of the Evaluation: 1) The context of the project and activities implementation with focus on expected work plan 2) Analysis of the involvement of partners and key stakeholders 3) Analysis of main results achieved by the project until now.

A methodology for the evaluation was delivered, including Evaluation Criteria, Metrics and Indicators. Considering the stage of the project, the current report will be focused on: 1) the analysis of the activities via performance indicators and the progress of the Project; 2) the analysis of the performance of each partner; 3) providing some recommendations considering the main results of the evaluation.

This methodology was carried throughout TAKE-UP Project, by means of analysis of relevant reports, analysis of relevant deliverables and interviews / Questionnaires with Project partners.

2. BACKGROUND; THE TAKE-UP PROJECT

TAKE-UP (Transforming Academic Knowledge to develop Entrepreneurial Universities in Pakistan) was an Erasmus+ Capacity Building project, within KA2 – Cooperation for innovation and the exchange of good practices – Capacity Building in the field of Higher Education.

TAKE-UP Project was founded on the need to uplift the potential of Pakistani HEIs in the area of entrepreneurial culture, especially the development of entrepreneurial skills in students by improving the coaching process of students, researchers and alumni with strong entrepreneurial intentions.

2.1 Objectives

The project aim was to use trained entrepreneurial coaches, at Pakistani HEIs, to develop an entrepreneurial culture, creating sustainable business ideas, that would lead to an increase in startup initiatives by students and researchers, creating jobs for qualified graduates in Pakistan.

As TAKE-UP specific objectives:

- To reflect on entrepreneurial efforts at HEIs through prioritization of areas
- To develop localized training and coaching material based on national and international best practices.
- To create Fab Labs at Pakistani HEIs, to improve entrepreneurial spirit of students and researchers.
- To develop entrepreneurial coaching capacity at HEIs in Pakistan by training relevant staff.
- To multiply TAKE-UP results by addressing non-partnering institutions



2.2 Project partners

TAKE-UP brought together the efforts of four universities in Pakistan and two across Europe (Germany, Greece):

- Athens University of Economics & Business (AUEB), Greece
- Saarland University (UdS), Germany - Project Coordinator-
- Government College University Lahore (GCU), Pakistan
- University of Gujrat (UoG), Pakistan
- Lahore University of Management Sciences (LUMS), Pakistan
- COMSATS University Islamabad (CUI), Pakistan

3. EVALUATION SCOPE AND METHODOLOGY

The current Methodology was proposed by the External Evaluator to the Project Coordinator (UdS), in order to reach an agreement for the evaluation exercise. Causal Pathway and Quality Control Monitoring & Evaluation Matrix have been included, and did become the base for analysis and recommendations.

Impact could have, some of its expected effects in the mid/long term, not all within the time scope of the Project. Logical Framework for project is a planning tool, closely related to previously mentioned elements, and it was also considered in the evaluation process.

3.1 Objective

The external evaluation did examine the extent to which the Project reached the objectives stated in the application and work-plan. Some specific issues, among others, included:

- The extent to which the Project achieved its results
- Analysis of documentation
- Proposals for improvements to assist with Project Sustainability
- Mentioning good practices
- Evaluate project's Impact, Relevance, Coherence, Effectiveness and Sustainability.

3.2 Evaluation Components

- Evaluation Workflow (Figure 1). Steps proposed for carrying out the Evaluation;
- Basic Intervention Logic (Figure 2). Basic Diagram showing the interaction of inputs, activity, outputs, outcomes and impact, to obtain the desired goals;
- Assessment Criteria and Evaluation Questions (Table 1);
- Main Evaluation Questions and Expected/Proposed Results (Table 2)

Figure 1. Evaluation Workflow

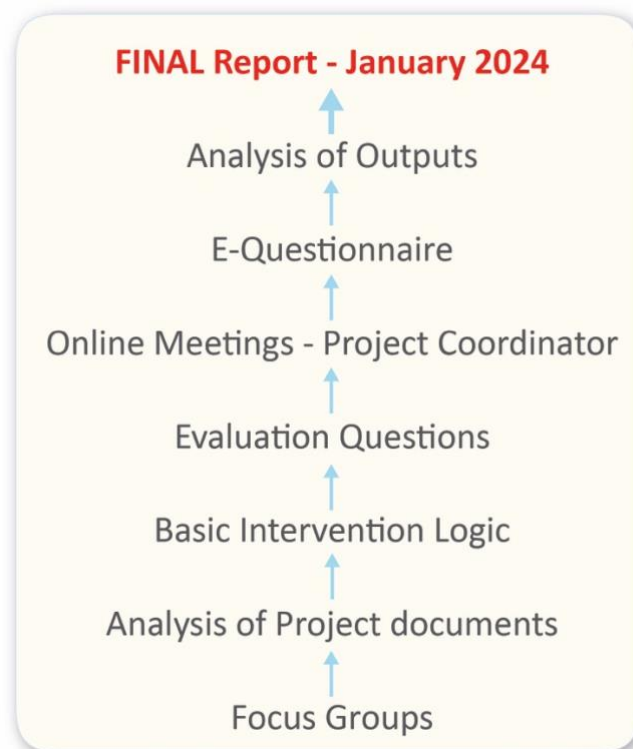


Figure 2. Basic Intervention Logic

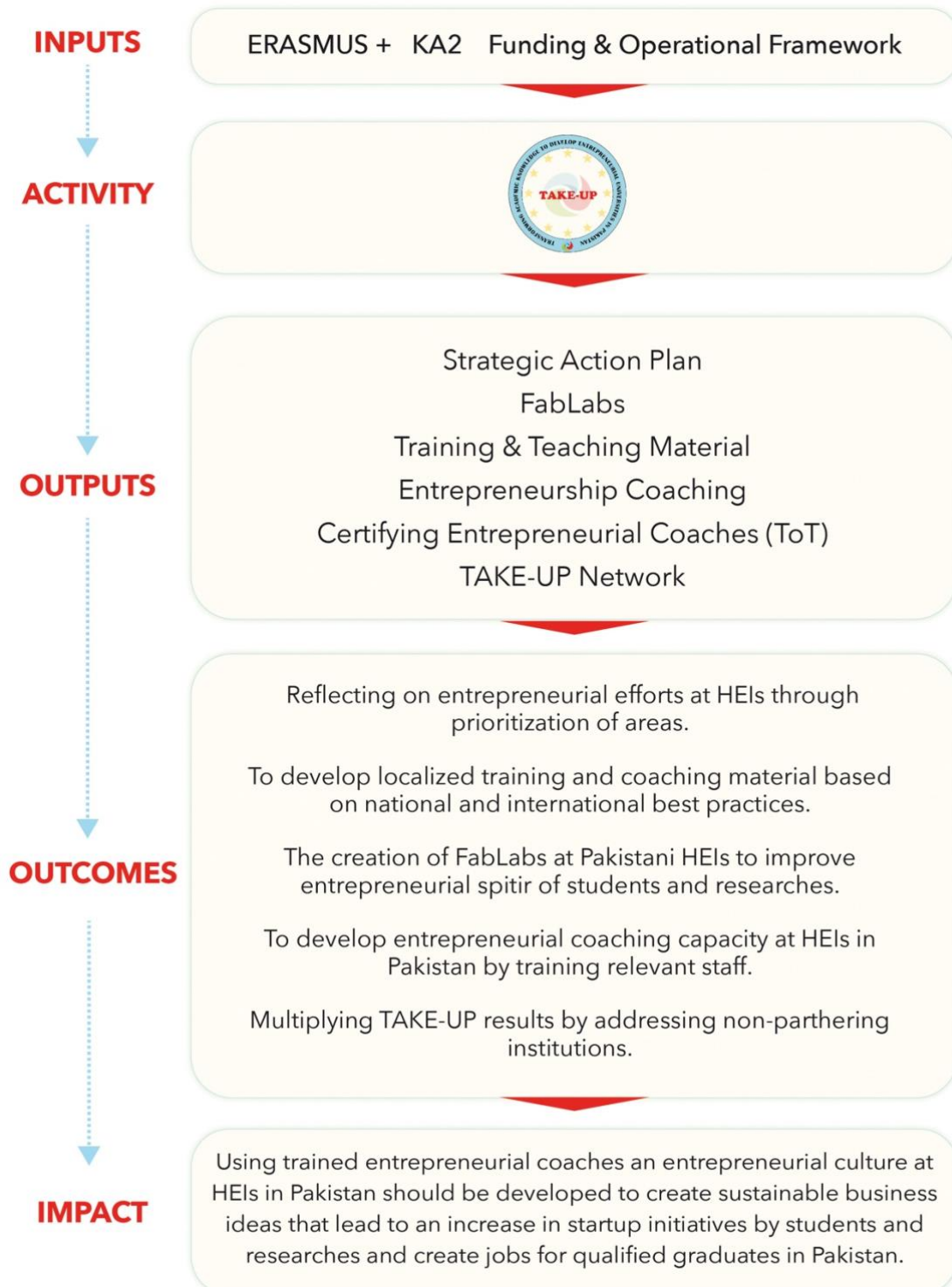


Table 1. Assessment Criteria and Evaluation Questions

RELEVANCE	Objectives are consistent with beneficiaries’ requirements and needs.
EFFECTIVENESS	Objectives were achieved or are expected to be achieved
COHERENCE	Activities undertaken allow the EU to achieve its policy objectives.
IMPACT	Looks at the potential long-term effects produced, directly or indirectly, intended or unintended.
SUSTAINABILITY	Benefits continue after intervention.

Table 2. Main Evaluation Questions and Expected/Proposed Results

CRITERIA	MAIN EVALUATION QUESTIONS	RESULTS ASSESSED
RELEVANCE	How relevant is the contribution of TAKE-UP with regards to the needs identified?	D1.2 – Self-Assessment D7.5 – Joint Publication of Best Practices
EFFECTIVENESS	Have the TAKE-UP activities developed been appropriate and consistent with regards to the final results?	D4.1 – Locally relevant teaching/training material for entrepreneurial skills in students. D4.2 – Digital transformation WP5 – Profesionalizing Entrepreneurial Coaching.
COHERENCE	Have the TAKE-UP Intervention Logic and sequence of activities been coherent?	D6.4 – TAKE-UP Certificate for Entrepreneurship Coaches. D6.5 – Tran the Trainers
IMPACT	What has been the main impact of TAKE-UP?	WP3 - FabLabs
SUSTAINABILITY	Benefits continue after intervention.	D2.1 – Strategic Action Plan D7.1 – TAKE-UP Network

4. ANALYSIS BY WORK PACKAGES, OUTCOMES AND ACTIVITIES

4.1 Work Package 1 – Kick-Off and Self-Assessment (entrepreneurial culture at universities)

Coordination	UdS, AUEB
Dates	M1 – M5
Objective	To create a common ground for a well-founded collaboration between Pakistani and EU universities, revealing specific challenges in terms of entrepreneurship.
Tasks	1.1 – Kick-Off meeting 1.2 – Self-Assessment and Report
Expected Deliverables/ Results/ Outcomes	1.1 – Kick-Off Meeting 1.2 – Self-Assessment

Deliverable 1.1 – Kick-Off Meeting

- The **launching** of the Project took place at an event, held at GCU (Lahore), on March 4th 2020; 11 participants, from all Project partners, were in attendance.
- **On file**, presentation, pictures, guest list (22 participants, in said list) and Minutes.
- A **recommendation** was made by the expert, to provide all type of evidence after each event/activity, including feedback survey. Most common useful evidence, include signed participants list, agenda, report, presentations, feedback survey-s and link to news (social media, ...).
- Set **goals** for this event, **achieved**, such as laying out the roadmap and agreeing on collaboration terms.

Deliverable 1.2 – Self-Assessment

- Deliverable (.pdf 9 pages), **on file**, produced on June 2020, compiling strengths and weaknesses per partner (so far, no content about GCU).

The document, with following **content/structure**: A) General discussion B) How, each HEI, was willing to assist the Project C) Entrepreneurial universities understanding and needs D) Becoming an entrepreneurial university.

- Another relevant document (.pdf 34 pages) is the **Strategic Action Planning**, a series of slides addressing relevant concepts such as general concepts and examples of a strategic action plan, HEInnovate Tool (8 dimensions, ...), results of self-assessment and discussion, Mentimeter, analysis, project management tools, SAP -Strategic Action Plan- draft and final agreement.
- As it was confirmed by UdS, as Project Coordinator, **HEInnovate Tool** <https://www.heinnovate.eu/en> was used for the self-assessment in the context of Pakistani culture -via online WS (workshop).

As well, AUEB conducted a detailed self-assessment, individually with all 4 local Project partners.

- **On file**, a myriad of documents, such as minutes of meetings, reports or presentations.
- In terms of assessment, this deliverable, **reached** its **aimed result** of providing insights in recent entrepreneurial institutions, efforts, future trends along with raising awareness on common regional challenges.

To be highlighted the **self-assessment** (as source of content and information) in place, leading to the final results for further analysis and implementation of actions, within other WPs.

- <https://takeup.eu/wp-content/uploads/2022/11/1.Work-Package-1.2-Self-Assessment-and-Report.pdf> , <https://takeup.eu/wp-content/uploads/2023/08/WP-1.2-Slides-Introduction-Self-Assessment-Tool-and-Strategic-Action-Planning-with-Project-Management-Tools-1.pdf> Links for download from Project's website.
- *For the rating of Self-Assessment Report (D1.2) including the Self-Assessment Tool, also refer to the Conclusions section of this Final External Evaluation Report, under the Relevance evaluation criteria.*
- *For an assessment on, if D1.2, does provide a proper knowledge on challenges and opportunities for entrepreneurial activities, also refer to the Conclusions section of this Final External Evaluation Report, under the Relevance evaluation criteria.*

Conclusions WP1

- W.P. 1 did reveal **specific challenges, and opportunities**, in terms of entrepreneurship, as a foundation for subsequent activities, implemented in other WPs.
- **D1.2**, is a result assessed under **Relevance – Evaluation Criteria**-.

4.2 Work Package 2 – Strategic Action Planning

Coordination	AUEB, UdA
Dates	M4 – M24
Objective	Creating vision for individual universities on which areas to focus their efforts in becoming entrepreneurial universities by employing project management tools.
Tasks	2.1 – Strategic Action Plans (SAP) 2.2 – Extended exposure to entrepreneurial universities and business incubators in the EU (job shadowing).
Expected Deliverables/ Results/ Outcomes	2.1 – Strategic Action Plans 2.2 – Extended exposure phase and job shadowing

Deliverable 2.1 – Strategic Action Plan

- On file, **produced** in September 2021 (.pdf 26 pages), ‘Report of Strategic Action Plan’.

Main structure and **content**, include, per each of the set Objectives (for the 4 local Project partner HEIs), addressing the following factors: Objective, Output, Tasks, Measure of progress, Resources, Barriers/Interventions, Stakeholders, Responsible person and Time frame.

Objectives, mostly common to GCU (5 Objectives), UoG (3 Objectives), LUMS and CUI (10 Objectives) -being these 6 from LUMS-: 1) Increase the number of startups and therefore people who want to be entrepreneurs 2) Exposure of startups to the entrepreneurship ecosystem 3) Expansion of entrepreneurship opportunities to relevant candidates, enrolment of quality startups, achieving quantity with good applicants 4) Acquisition of targeted applications with more serious approach and mature business ideas, attain good viewership scores to create good reach 5) Make the best out of possible networking opportunities 6) Relationship building with Alumni startups, provision, and dissemination of entrepreneurial training/investment opportunities.

- **Related tasks** towards the final result (D2.1) started with an online self-assessment WS (HEInnovate) and another WS (Transforming individual challenges into SAPs), followed by face-to-face discussion with all local Project partners -August 2021, in Pakistan-.
- As well, of relevance is the learnt **Best Practices**, via a field **trip** (Study Visits, WP3), by Pakistani Project partners, to AUEB and UdS, during March and April 2022; **agendas**, available: https://takeup.eu/wp-content/uploads/2023/08/WP-2.1-Program-Best-Practices_March-2022_Athens.pdf , https://takeup.eu/wp-content/uploads/2023/08/WP-2.1-Program-Best-Practices_March-2022_Saarbrucken.pdf

<https://takeup.eu/wp-content/uploads/2023/12/2.-Work-Package-2.1-Report-of-Strategic-Action-Plan-Revised.pdf>

- The external evaluator confirms that, **Strategic Action Plan** has been **produced**, for each of the 4 local Project partner HEIs, compiling the project management strategies towards developing entrepreneurial culture in their context.

And, positive relevance of the **study visits** made to the EU partners, allowing - Pakistani partners- to enhance knowledge about start-ups and other key entrepreneurship related aspects, along with being exposed to good/best practices.

- *For the assessment of, Strategic Plan (D2.1), achieving its goal of creating knowledge of project management strategies towards developing entrepreneurial culture, refer to the Conclusions section of this Final External Evaluation Report, under the Sustainability evaluation criteria.*
- *And, in terms of, D2.1, needing to be regularly updated, also refer to the Conclusions section of this Final External Evaluation Report, under the Sustainability evaluation criteria.*

Deliverable 2.2 – Extended exposure phase and job shadowing

- As confirmed by UdS (Project Coordinator), due to **Covid-19** and its negative effects on the Project (e.g. travel restrictions, ...), this deliverable -foreseen as a face-to-format- was, basically, produced via a good amount of **online meetings**.

Said change has been mentioned in the revised Project Plan document.

And, as well, the rationale behind the internships (D2.2) was to intensively work on the content for the Entrepreneurship Course, and even more, if feasible.

Conclusions WP2

- **SAP (D2.1)**, delivered, addressing requested issues.
It is one of the assessed results under **Sustainability** as an **Evaluation Criteria**.
- WP 2, **achieved its goal** of creating a vision, for the 4 local partner HEIs, to focus efforts in becoming entrepreneurial universities.

4.3 Work Package 3 – Establishing FabLabs in Pakistan

Coordination	UdS
Dates	M4 – M4
Objective	To establish FabLabs at the partner HEIs that will assist entrepreneurial coaches in guiding students interested in starting up their own company to develop their ideas into visible prototypes.
Tasks	3.1 – Preparation 3.2 – Installation of equipment and startup of FabLab
Expected Deliverables/ Results/ Outcomes	3.1 – Preparing the establishment of FabLabs 3.2 – Installation and setup of FabLab

Deliverable 3.1 – Preparing the establishment of FabLabs

- This Deliverable **involved**, at Proposal stage, study visits to Germany and development of short course material.
- On file, **evidences** of the **study visit** to **Athens**, March 21st-25th 2022 (ACEin - Athens Center for Entrepreneurship & Innovation), such as Agenda: **A**) Presentation of ACEin **B**) Incubation Stages and Coaching Process, by ACEin **C**) Branding for Startups and the guidance process. The EUAccel Project, by ACEin **D**) Building entrepreneurship networks all over Europe: The EUFORIA Project, by ACEin **E**) The creation of a Technology-Transfer Office. The promotion of entrepreneurship in the Greek HEIs, by ACEin **F**) The essence of coaching and how to guide startups into success, by ACEin **G**) The innovation competition and Open Innovation Programs, by ACEin **H**) NBG and AUEB: Lessons learnt and knowledge transfer between public- private cooperation, by NBG **I**) The Astra project and the new European Universities Initiatives, by ACEin **J**) The Inter-Departmental Entrepreneurial Assignment (IDEA) Project explained. Engaging the Youth: The Youth Entrepreneurship Summer Program, by AUEB **K**) The startup journey.

https://takeup.eu/wp-content/uploads/2023/08/WP-2.1-Program-Best-Practices_March-2022_Athens.pdf

- Another **study visit** followed, to **UdS**, March 27th – April 1st 2022, with Agenda: A) Potentials of international networks - examples of international cooperation at UdS, by UdS B) Supporting start-ups at different stages during their entrepreneurial journey, by UdS C) Visiting the Starter Center (UdS) D) Reflection about Strategic Action Plans (WP2) E) Knowledge exchange and collaboration: ZeMA – Introduction and tour F) The internationalized institution: EUSMAT -European School of Materials-, by EUSMAT G) Entrepreneurial Teaching and Learning, by UdS H) 2 examples of start-ups, incubated within UdS: Mondata, Quantpi I) Incubation of IT startups, by Max Planck Innovation and UdS J) Technology Transfer Joint-Venture IT-Incubator K) Strategic digital transformation and capability, by CIO of Saarland L) Discussion about entrepreneurship course (WP4) M) Visit of FabLab at HBK (established FabLab)and CoHub (new FabLab): Tour and practical exercises N) CISPA - Helmholtz Center for Information Security.

https://takeup.eu/wp-content/uploads/2023/08/WP-2.1-Program-Best-Practices_March-2022_Saarbrucken.pdf

- **On file**, as well, other related documents, including: a comprehensive document ‘Short courses based on shared material’, by CUI -with infographies, links to videos, detailed instructions, regarding the proper use of the specific types of procured equipment- or screenshots of held online trainings.
- UdS, has confirmed that, during the pandemic, an **online WS** was produced, providing Project partners with insights into the available equipment along with guidance on its usage.
- The evaluator confirms that, above mentioned activity has **reached its goal** of providing knowledge on how to run a FabLab, learning about existing EU good practices/examples of similar units; Agendas of both study visits, clearly show a practical approach.

Also, in place, knowledge on how to use the machines and tools.

As usual, it is **recommended** to gather **feedback** via **surveys**, along with compiling all evidence.

Deliverable 3.2 – Installation and setup of FabLab

- **FabLabs** in UoG GCU and CUI are new, while, the one in LUMS was preexisting and has been upgraded with equipment.
- **On file**, evidence such as pictures (GCU, CUI, LUMS) and Official Inventory Lists (GCU, UoG, CUI).

Other available **evidence**, including a relevant number of documents dealing with equipment, processes and related FabLabs' aspects.

<https://takeup.eu/wp-content/uploads/2023/12/03a-Revised-FAB-LAB-CUI-Lahore-Final-doc-by-MAFarooqui-2Nov2023-1.pdf>

- *For the rating of, FabLabs (D3.2), refer to the Conclusions section of this Final External Evaluation Report, under the Impact evaluation criteria.*
- *And, in terms of, D3.2, effectively improving the entrepreneurial skills of students and researchers, also refer to the Conclusions section of this Final External Evaluation Report, under the Impact evaluation criteria.*

Conclusions WP3

- Deliverables from this **WP3**, in **place**; **FabLabs**, up and running, at the 4 Pakistani partner HEIs, one of the main impactful outcomes of TAKE-UP.

4.4 Work Package 4 – Development of locally relevant training and teaching material focused on developing entrepreneurial skills in students

Coordination	UdS, AUEB
Dates	M10 – M24
Objective	Need to improve upon training material (used at incubation centres of the universities) for students and researchers interested in starting their own company, need to localize trainings fitting the context and need to develop material for mentors/coaches from the industry and for faculty members who are willing to mentor/coach students.
Tasks	4.1 – Generate teaching/training material for different target groups who are involved in sensitizing, motivating, developing and mentoring entrepreneurial ideas from within and outside universities. 4.2 – Digital transformation of generated material 4.3 – Implementation
Expected Deliverables/ Results/ Outcomes	4.1 – Development of locally relevant training and teaching material focused on developing entrepreneurial skills in students. 4.2 – Digital transformation 4.3 - Implementation

Deliverable 4.1 – Development of locally relevant training and teaching material focused on developing entrepreneurial skills in students

- **Via this outcome**, at least, 4 different training plans and contents for mentioned target groups -to enhance entrepreneurial thinking- were to be delivered.

- **‘Training Plan Entrepreneurial Thinking, for Students with entrepreneurial intentions (Target group)’, delivered** on September 2021.

Main structure and **content**, include: A) Objective, Target Group B) Training information [Semester; Resource Person; Supporting Team Members; Contact Hours; Working Hours; Course Introduction; Learning Objectives; Course Content and Implementation; Further Information] C) Training Manual [Content per each Session -12 Sessions, total-, includes: Learning objectives; Content; Teaching material; Exercises for students during session; Activities for students; Essential readings for students; Material for students] D) Feedback E) After the e-learning course.

Modules:

- Module 1: Problem Solution Fit
- Module 2: Marketing & Finance
- Module 3: Legal challenges and Intellectual property concepts and management
- Module 4: Into action

https://takeup.eu/wp-content/uploads/2022/12/WP4.1_training-plan-entrepreneurial-thinking_students_TZ_DRAFT_EN_TZ_JG.pdf

- **‘Manual for in-person sessions - Summer/Winter School-, for Mentors/Coaches for the Entrepreneurship 101 course (Target group)’, delivered** on August 2022.

Main structure and **content**, include: A) Aims, Target Group B) Training information [Timing; Resource Person; Supporting Team Members; Contact Hours; Working Hours; Course Introduction; Learning Objectives; Course Content and Implementation] C) Training Manual [Content per each Session -12 Sessions, total-, includes: Learning objectives; Content; Teaching material; Exercises for students during session; Activities for students] D) Feedback E) After the e-learning course.

Modules:

- Module 1: Validation of the problem
- Module 2: Validation of the solution
- Module 3: Validation of the involved stakeholder network
- Module 4: Validation of the business idea

<https://takeup.eu/wp-content/uploads/2022/11/3.-Work-Package-4.1-Training-plan-entrepreneurial-thinking-summer-winter-school.pdf>

- Deliverable, **produced**, with **documentation uploaded**.

Deliverable 4.2 – Digital transformation

- The outcome **consisted in** setting up the E-Learning platform with training/teaching material.
- **Moodle** was chosen as the E-Learning platform; and, as confirmed by UdS, course videos have been uploaded on **YouTube**, being easily compatible with the Moodle platform.
- **‘Overview of the Entrepreneurship Course Offered on the E-learning Platform Moodle’, delivered** on April 2021; providing an Example of Digitalized Entrepreneurship Course -CUI version-, a comprehensive document with screenshots of the mentioned course, including links to videos.

<https://takeup.eu/wp-content/uploads/2023/08/WP-4.-Entrepreneurship-Course-Offered-at-CUI-Lhr-1.pdf>

Above link, refers to the actual document (CUI) that, besides the Course - August-November 2021-, does compile general information, including a feedback survey, with positive replies. 14 students did finish the Course.

- 'Case Studies: Entrepreneurship Course (LUMS)', compiling 2 relevant case studies: A) Gharpar <https://gharpar.co/> B) JBnJaws <https://jbnjaws.com/>

https://takeup.eu/wp-content/uploads/2023/08/WP-4.2-Case-Studies-Entrepreneurship-Course_LUMS-1.pdf

- **Deliverable completed**, with content available in YouTube.

Deliverable 4.3 – Implementation

- **On file**, a variety of documents confirming the mentioned implementation of CB actions within this WP4, including: presentations (Online Teaching, Hybrid Entrepreneurship Teaching), Minutes for related meetings, reports, presentations, ...

Per local Project partner -with existing evidence-:

- **GCU** – A total of 57 participants in the CB actions (17+19+21); compiled feedback showed positive ratings.
- **UoG** – Evidence available
- **LUMS** - A total of 81 participants in the CB actions (18+9+26+28); compiled feedback showed overall positive ratings.
- **CUI** - 14 participants; compiled feedback showed positive ratings

- As it has been confirmed by UdS, **more evidence should be made available**, at the earliest, by the local Project partners.
- *For the assessment of, WP4, specifically, the developed training and teaching material focused on developing entrepreneurial skills in students, refer to the Conclusions section of this Final External Evaluation Report, under the Effectiveness evaluation criteria.*

Conclusions WP4

- Deliverables from **WP4, in place**; no relevant deviation-s to be noted.
- **Training material, developed and improved**, not only for students and researchers but, as well, for mentors/coaches from the private sector and for faculty staff, willing to coach students.

4.5 Work Package 5 – Professionalizing entrepreneurial coaching

Coordination	UdS, AUEB
Dates	M113 – M24
Objective	Assessing competencies of entrepreneurial/business development coaches, creating selection assistance for promising entrepreneurial coaches, creating guidelines for entrepreneurial coaching that help with onboarding but also existing staff to improve their general, and domain-specific entrepreneurial coaching competences.
Tasks	<p>5.1 – Entrepreneurial coaches in Pakistan (current situation).</p> <p>5.2 – Developing an evidence-based guideline for entrepreneurship coaching (general).</p> <p>5.3 – Developing evidence-based guidelines for entrepreneurship coaching (domain-specific).</p>
Expected Deliverables/ Results/ Outcomes	<p>5.1 – Entrepreneurial coaches in Pakistan (current situation).</p> <p>5.2 – Developing training material for entrepreneurship coaching (general).</p> <p>5.3 – Developing training material for entrepreneurship coaching (domain-specific).</p>

Deliverable 5.1 – Entrepreneurial coaches in Pakistan (current situation)

- **Via this deliverable**, a document was **produced** – ‘Requirement profile entrepreneurial coaches’-, in May 2021, with the description of the requested profile for Entrepreneurial Coaches, as a result of the requirement analysis.

A comprehensive Table, compiles the requirements and behaviors of entrepreneurial coaches, rating said requirements with a scale (1-7) in what relates to the frequency at which those behaviors are encountered and the relevance, of said behaviors, in the broader context of job success.

Requirements: A) Being able to keep knowledge up to date B) Being aware of legal aspects related to founding C) Being able to create active learning environments D) Being able to independently acquire, apply, and convey expertise E) Being able to communicate professionally and engagingly interact with others F) Customer acquisition G) Being able to lead and organize a team H) Emotional resilience I) Networking ability J) Being flexible and capable of finding adaptive solutions (for oneself) K) Ability to motivate oneself and others L) Embodying and passing on the startup mindset.

https://takeup.eu/wp-content/uploads/2023/08/WP-5.1-Profile-Entrepreneurial-Coach_Result-Requirement-Analysis_FINAL_TZ.pdf

- On file, other **working documents** -towards above-mentioned task and result- such as the list of contacts that were to be interviewed, along with guidelines for cited interview-s (12 were in place, with entrepreneurial coaches).
- It is **confirmed** that, via above document, competences for entrepreneurial coaches have been identified; as well, analysis has been developed, both, from a qualitative and qualitative aspect, as shown in the Table.

Deliverable 5.2 – Developing training material for entrepreneurship coaching (general)

- ‘Coaching Guidelines - Entrepreneurial Coaching (Target group: Entrepreneurial Coaches)’, delivered, with following structure and content: A) Entrepreneurial Coaching [What is entrepreneurial coaching?; The concept of coaching; Who is an entrepreneurial coach?; Coaching dynamics; What’s the difference between entrepreneurial coaching, consulting, and mentoring; When is entrepreneurial coaching necessary? -including a Table with Measures of supporting entrepreneurs related to specific problems -; Networking & linkage] B) Coaching methods and Models [Focus on resources and solutions -including a Table with Questions related to principles of the effectuation approach-; The GROW model (Goal, Current Reality, Options (or Obstacles), and Will (or Way Forward)); Constructive feedback] C) The relationship between coach and coachee [Respect and valuing; Confidentiality; Responsibility; Neutrality].

https://takeup.eu/wp-content/uploads/2023/07/WP-5.3_development-of-evidence-based-general-coaching-guidelines-1.pdf

- The external evaluator **confirms** that, expected results were achieved of providing the mentioned digitalized guidelines, leading to an understanding of the process behind coaching and its benefits.

Deliverable 5.3 – Developing training material for entrepreneurship coaching (domain-specific)

- ‘**Specific Coaching Guidelines**’, delivered in August 2022, with following structure and content: **A) Specific Coaching Guidelines B) Focus on the project-related areas while coaching entrepreneurs -providing practical examples- [Vision and Goals; Market Research; Value Proposition; Business Model; Strategic Planning; Customer Focus; Execution and Iteration; Team Building; Financial Management; Networking and Mentorship] C) Sector specific coaching guidelines – Table, with specific examples, from several sectors.**
- *For a view of, WP5, having achieved its aim of professionalizing entrepreneurial coaching, in the participating institutions, refer to the Conclusions section of this Final External Evaluation Report, under the Effectiveness evaluation criteria.*

Conclusions WP5

- Deliverables from this **WP5, in place**; no relevant deviation-s to be noted. **Aim achieved**, being the assessment of required competencies for Entrepreneurial Coaches -with guidelines- as well as, for staff, improving -both- their general and domain-specific competencies.

4.6 Work Package 6 – Training and certifying entrepreneurial coaches in Pakistan (Train-the-Trainer)

Coordination	UdS, CUI
Dates	M20 – M32
Objective	To train entrepreneurship coaches on different levels to provide a more profound consulting inside and outside the incubation centres and train the trainers to become trainers themselves so that, different groups, are able to benefit from an entrepreneurial coaching and spread their knowledge.
Tasks	<p>6.1 – Develop training plans and implement a trainee scouting.</p> <p>6.2 – Implement pilot capacity building training</p> <p>6.3 – Conducting micro-coaching and an internal workshop for supervision and revision.</p> <p>6.4 – Creating a process for the TAKE-UP certification for entrepreneurship coaches.</p> <p>6.5 -Train the trainers</p>
Expected Deliverables/ Results/ Outcomes	<p>6.1 – Develop training plans and implement a trainee scouting.</p> <p>6.2 – Implement pilot training</p> <p>6.3 – Micro-coaching and internal workshop for supervision and revision.</p> <p>6.4 – Awarding the TAKE-UP certificate for entrepreneurship coaches.</p> <p>6.5 – Train the trainers</p>

Deliverable 6.1 – Develop training plans and implement a trainee scouting

- ‘Training Plan Entrepreneurial Coaching - Faculty members, alumni, mentors involved in supporting entrepreneurs (Target group)’, delivered, a comprehensive document (.pdf 115 pages).

Main structure and **content**, include: A) General Training information such as Resource Person, Contact Hours, Working Hours, Course Introduction, Learning objectives/outcomes B) Learning objectives, Content, Procedure, Materials for exercises during the session, for the following topics: Why supporting entrepreneurs; Who entrepreneurs are and how they operate?; Phases of starting a business; Entrepreneurial coaching; Assessment of specific challenges of entrepreneurs; Challenges related to the business idea; Obstacles in social interaction; Own identity as entrepreneurial coach; Practice and transfer to individual working context C) Material for exercises during sessions - Effectuation grid [Purpose; Means/Resources; Affordable Loss; Partnerships; Next steps], along with Example for additional questions for the effectuation grid, Template for a business model canvas, Example of an elaborated business model canvas (UBER), Example A + B of a business model canvas (developed by students in an Entrepreneurship Course), Example of misunderstandings in communication, along with several related examples and practical material.

The **content** of the Training Manual was based on a requirements analysis, via 20 interviews with subject matter experts and improved based on the evaluation results of 12 pilot participants. As well, microcoaching sessions were in place, with subsequent revision.

- **‘Entrepreneurial Coaching -Training’, delivered;** a comprehensive document (.pdf 162 pages), compiling a myriad of exercises, in 9 sessions, addressing above-mentioned, and other related, content.
- **On file,** several supporting documents -uploaded: <https://takeup.eu/fab-labs/> -. And, as it has been confirmed by UdS, for the videos of coaching situations, reports and log sheets of past coaching situations, can be used as valid examples; to be underlined that, this material, was not requested at Proposal, but it has been taken into account.

Deliverable 6.2 – Implement pilot training

- **On file**, a myriad of evidence (signed participants list-s, videos, pictures, Certificates, feedback surveys, reports, agenda/program-s, presentations) of the several capacity building actions, confirming its proper implementation.
- A total of **4 batches** were implemented, corresponding to:

Pilot – 14 participants, with 9 trainees from the 4 local partner HEIs, held at Uds on July 25th – 29th 2022

1st Training – Held in February 2023, 33 Entrepreneurship Coaches

2nd Training – Held during 5 days, on July 2023, at the 4 local partner HEIs; retrieved feedback showed very positive and positive feedback. At GCU, 20 participants, 30 at LUMS, 18 at UoG, and 16 at CUI.

- Though not requested at Proposal stage, **log-sheets** are being compiled, clearly a positive reporting outcome.
- And, as it has been confirmed by Uds (as Project Coordinator) **final numbers** and data, have been included in the Joint Publication; to be noted that, foreseen numbers (i.e. 16 trained trainers, 80 staff, ...) have been **reached**.
- The external evaluator **confirms** that, expected results, have been achieved, since, pilots, have been tested, experience-based learning -along with practical approach- in place and, feedback from participants, showed clearly positive ratings of these CB actions.

Deliverable 6.3 – Micro-coaching and internal workshop for supervision and revision

- **5 Micro-coaching sessions** were implemented (November 2022, December 2022, March 2023, May 2023, July 2023), with a total of 27 participants.

- Evidence, **on file**, such as corresponding Report, Log Sheets (and its feedback; a relevant document, addressing general improvement suggestions and 2 advanced examples where, Log Sheets, have been effectively used), Minutes of the Session dated November 24th 2022 and template of Evaluation Sheet.

Deliverable 6.4 – Awarding the TAKE-UP certificate for entrepreneurship coaches

- **On file**, a graphic dealing with the Certification process (Certified Entrepreneurial Coach & Certified Master Entrepreneurial Coach; with the specific mandatory requirements so to become Master Coach), a template for the Log Sheet for Coaches -a requirement for Certification- and a Report of Certification Procedure for Entrepreneurial Coaches, dated February 2023, detailing the requisites in order to be Certified Entrepreneurial Coach and a Certified Master Entrepreneurial Coach.
- Certified Entrepreneurial Coaches are only allowed to coach, while, Certified Master Entrepreneurial Coaches are allowed to train Coaches.

The Consortium is in the process of updating the data and other details of who have been awarded the 2 above-mentioned Certificates.

- **Aims** of this deliverable have been **reached**, developing and publishing the corresponding guidelines leading to awarding the TAKE-UP Certificate; obviously, impact is positive in relevant in what relates to dissemination of the Project as well as raising awareness about the activities, events, results and topics.

Needless to mention the ‘cascade’ effect, both, via the Coaches and the Master Coaches in increasing the number of professionals being awarded the cited Certificates.

- *For an evaluation of, TAKE-UP Certification for Entrepreneurial Coaches (D6.4), having led/will lead to increased impact, visibility and sustainability of the Project and its results, refer to the Conclusions section of this Final External Evaluation Report, under the Coherence evaluation criteria.*

Deliverable 6.5 – Train the trainers

Due to its interrelation also refer to D6.2

- As it has been confirmed by UdS, during the development of the Certification process, the Consortium decided to implement a ‘**master**’ WS for ToT; it was confirmed that, creating Certificates for **Master Coaches**, did increase the commitment to become a trainer for future Coaches. Therefore, participants received an extra short training on how to deliver the training for Coaches - besides having participated in the corresponding CB actions. Afterwards, mentioned participants, did train, at least, 1 Batch of Entrepreneurial Coaches.
- **On file**, completed Log Sheets and other relevant material that has been already mentioned and addressed at other WP6 deliverables.

Uploaded material, for WP6: <https://takeup.eu/how-to-become-a-certified-entrepreneurial-coach/>

<https://takeup.eu/entrepreneurial-coaching-cui-nov-2023/>

- *For the opinion of, Project partners, about -D6.5-, refer to the Conclusions section of this Final External Evaluation Report, under the Coherence evaluation criteria.*

Conclusions WP6

- Deliverables from this WP6, in place; no relevant deviation-s to be noted.
- Critical relevance, and impact, of the **Certified Entrepreneurship Coaches** in the future sustainability of the Project and its results; to be underlined, since it was not foreseen at Proposal stage, the creation of the role of **Certified Master Coach**.

4.7 Work Package 7 – Development of a national take-up network

Coordination	CUI, AUEB
Dates	M6 – M25
Objective	To establish a national network -TAKE-UP- comprising entrepreneurship coaches, entrepreneurs, industry representatives interested in mentoring young entrepreneurs on a national level and enable steady exchange and learning from each other.
Tasks	<p>7.1 – Establishment of the TAKE-UP network</p> <p>7.2 – Building the network identity and public presence</p> <p>7.3 – Organizing training workshops for non-partner universities.</p> <p>7.4 – National TAKE-UP conferences to disseminate knowledge.</p> <p>7.5 – Joint publication on best practices to transform Pakistani universities into entrepreneurial universities</p>
Expected Deliverables/ Results/ Outcomes	<p>7.1 – Establishment of the TAKE-UP network</p> <p>7.2 – Building the network identity and public presence</p> <p>7.3 – Organizing training workshops for non-partner universities (beyond TAKE-UP project).</p> <p>7.4 – Round tables with stakeholders and exchange with potential international partners</p> <p>7.5 - Joint publication on best practices to transform Pakistani universities into entrepreneurial universities</p>

Deliverable 7.1 – Establishment of the TAKE-UP network

- ‘TAKE-UP Network – Vision, Mission, Objectives, Mediums’, **delivered**, on December 2023; a critical document, with specific mentions to key issues such as, website, to be operative for 5 years (UdS, in charge) along with detailing the several aspects of objectives and vision of the Network.

- **On file**, another relevant document, a spreadsheet compiling 242 contact data for Coaches – Entrepreneur Coaches Training; of special relevance since it identifies a great number of individuals interested in joining the Network and/or, at least, having attended Network activities.
- It is **confirmed** that, Consortium, is fully committed to the establishment of the Network; in any case, it is recommended to produce all constitutional documents at the earliest.

Deliverable 7.2 – Building the network identity and public presence

- As it was **agreed by the Consortium**, and reflected on above-mentioned critical document ('TAKE-UP Network – Vision, Mission, Objectives, Mediums'), regarding the **website**, these are relevant matters: A) UdS, responsible for maintaining it active at least for five years after the Project ends -extension of that period could be considered- B) CUI, responsible of updating it C) An additional individual (LUMS or CUI), as backup for maintaining the website D) Primary purposes, to include providing access to the entrepreneurship course and allowing HEIs to share and update reports on the number of students E) Featuring information on training of coaches and activities F) Certified Coaches' data, to be uploaded as well G) Updates on various rounds of Entrepreneurship Coaching Programs, also to be posted.

Deliverable 7.3 – Organizing training workshops for non-partner universities (beyond TAKE-UP project)

- CUI, delivered a 'Faculty Training Workshop for Entrepreneurial Coaching of Non-Partner Universities', in November 8th and 16th 2023; with 23 participants from 7 non-partner institutions.

On file, a comprehensive report, including presentations, signed participants list, feedback survey -positive, from participants- and a MoU template.

- LUMS, held a 'Certified Entrepreneurial Coach WS – External' on November 2nd, 3rd and 4th; with 55 participants (signed list) and a final participants list – external Coaches, of 38 individuals.

On file, program, brochure, attendance sheet and templates for feedback from and registration.

https://takeup.eu/wp-content/uploads/2024/01/WP-7.3-Trained-Trainers-Train-External-Coaches-From-Non-Partner-Universities_Evaluation_LUMS.1.pdf

- GCU, held a 'Certified Entrepreneurial Coach WS – External' on November 7th 2023; with 15 participants (signed list).

On file, pictures, attendance sheet and feedback forms (with very positive replies).

Deliverable 7.4 – Round tables with stakeholders and exchange with potential international partners

- **1st International Conference** on TAKE-UP, held on December 17th 2022, at CUI, with 84 participants.

Program: A) Entrepreneurship and the Youth of Pakistan, by CARE B) Studying and Researching in Germany: Outlook on international study programs for Pakistani Students and Academics, by DAAD C) Business Incubation Programs in Europe, by AUEB D) Project Status and Outcomes, by UdS E) Sessions on Project and WPs – RT WP1 & 2 'Identifying and Developing an Entrepreneurial Ecosystem at HEIs'; RT WP3 'FabLab's into Entrepreneurship Education'; RT WP4 'Interdisciplinary Entrepreneurship Education'; RT on WP 5 & 6 'Entrepreneurial Coaching' F) Sessions on the Future of Entrepreneurial Ecosystems – RT 'Women Entrepreneurship'; RT 'Unicorns vs. Part-Time Entrepreneurs' G) Panel discussion with External Stakeholders: The Future of Entrepreneurial Ecosystems in Pakistan.

On file, Report, program and presentations.

<https://takeup.eu/wp-content/uploads/2023/03/TAKE-UP-Conference-2022-Final-Report-1.pdf>

From a qualitative side of the analysis, **feedback** surveys confirmed **positive** ratings of different relevant aspects of the event.

- **2nd International Conference** on TAKE-UP, held on November 15th 2023, at LUMS.

Program: **A)** Fostering Female Student Entrepreneurs: Bridging the Gap from Campus to Market with HEIs Assistance, with panelists from Ciqam, LUMS, Alif aur Art, Roshni, Peervest and Skill2Success **B)** Prototyping Research at universities and the role of Makers, with panelists from GCU, UoG, Mycohues, Eco-Char and Heirloom **C)** Students' perspective on how to make universities more entrepreneurial, with panelists from UoG, LUMS, NICL, Entrepreneurship 101 participants **D)** Keynote speech **E)** Startup origins: Converting student projects into viable businesses, with panelists from LUMS, GCU, CUI, UoG, CardPay, Magnus Electric, Peervest and Roshni **F)** How early can an entrepreneurial mindset be inculcated in young students?, with panelists from

The City School, 'Junior Founder' program, STEM educators, Code School and Alif aur Art.

On file, pictures and signed participants lists for different sessions -participants in attendance at the opening ceremony, 75-.

Deliverable 7.5 – Joint publication on best practices to transform Pakistani universities into entrepreneurial universities

- **'Best Practices in the TAKE UP project - Joint Publication'**, delivered (.pdf 68 pages).

Main structure and **content**, include: **A)** Overview **B)** WP overview **C)** Per each of the 10 WPs – Objectives; Achievements & Outcomes; Activities undertaken and

ongoing activities; Challenges faced and Lessons learned; Future Prospects; Impact of the activities D) Sustainability and future outlook E) Recommendations for Future Projects / Building upon TAKE-UP Findings F) Overall Summary G) Attachment (Planned activities as defined in the Proposal).

This publication does summarize the collaborative initiatives pursued by TAKE-UP partner HEIs.

- The expert **confirms** the critical of this deliverable, since, based on the development and implementation of the Project, and the input from all the Consortium, it provides detailed content on lessons learned, challenges.

And of special importance, as well, is the content related to the key sustainable Project outcomes (FabLabs, Entrepreneurship Course, Entrepreneurial Coaching, Certification driven ToT Programs, Networking and Collaboration, Project website and TAKE-UP Network) and Recommendations for future projects.

- *For a further assessment and evaluation of, D7.5, refer to the Conclusions section of this Final External Evaluation Report, under the Relevance evaluation criteria.*

Conclusions WP7

- **D7.1**, with an issued document, compiling **Vision, Mission & Objectives**. Once again, missing documents and effective/formal start of the Network, it is of clear relevance.
- Training WS for non-partner HEIs (**D7.3**) – **delivered**, as well as the 2 International Conferences (**D7.4**)
- **Joint Publication**, with **Best Practices** (D7.5), a document with clear importance and with potential for wide impact within the ecosystem.

4.8 Work Package 8 – Dissemination, visibility and exploitation

Coordination	LUMS, GCU
Dates	M1 – M36
Objective	To develop a dissemination plan and publish a coherent project identity for a sustainable impact and enhanced national as well as international exposure of the project
Tasks	8.1 – Development of a dissemination plan 8.2 – Project identity expression and national as well as international exposure of the project
Expected Deliverables/ Results/ Outcomes	8.1 – Development of a dissemination plan 8.2 – Project identity expression and national as well as international exposure of the project

Deliverable 8.1 – Development of a dissemination plan

- This task was **comprised of** developing a comprehensive plan and guideline for the Project dissemination.
- **On file**, said Dissemination Plan, delivered on June 2022, with following structure and **content**: A) TAKE-UP Dissemination scope [Vision and Mission; Communication and Dissemination Goals] B) Dissemination within TAKE-UP [General Goals; Focus Topics for Dissemination; Dissemination Levels – Institutional, Regional/National; EU/International] C) Dissemination Plan.

Dissemination Plan – A comprehensive Table, addressing relevant aspects, per relevant dissemination activity, such as ‘Who’, ‘Target Audience’, ‘Objectives’ and ‘Timeline’.

- Other documents, **on file**, include the Dissemination Board (members) and the presentation produced at a Dissemination WS (July 2022) -along with a List of tasks and responsible persons, after said WS-.

Deliverable 8.2 – Project identity expression and national as well as international exposure of the project

- **On file**, a folder compiling a good variety of photos from different events/activities, along with Posts.

Most of the relevant material is uploaded at Project's website (Gallery <https://takeup.eu/gallery/>)

- The **website** is up and running <https://takeup.eu/>

It is of importance to keep, said website, in terms of news and content

- As per other social media (below links, at TAKE-UP Project's web page):

Facebook <https://www.facebook.com/takeuppakistan> , with 100 Likes and 128 followers.

- It is **confirmed** that the goal of this deliverable has been achieved, being the awareness raising and the enhancement of TAKE-UP impact.
- Overall **rating of dissemination actions**, performed **by Project partners**, in social media (e.g. TAKE-UP website, Facebook, and by any other means ...) is **positive**, and highly effective, with good visibility in social media.

This statement is also **shared**, overall, **by Project partners**.

The partners successfully executed an improved and extended marketing campaign for various project components, resulting in enhanced awareness.

- **Compiled recommendations towards improving –if needed- the Project's website and/or other social media**, include potential enhancements to the user

interface of the website for a more user-friendly experience as well as allocating designated resources for continued social media and website management - after the Project's completion-.

Also, to share or publish TAKE-UP project-related posts with tagging on the official websites and social media handles of partner HEIs; or focusing on interactive features (i.e. polls, to encourage audience engagement), regularly updating the website and social media channels.

Other mentions: tailor messaging to specific target audiences and encouraging collaborative content from Project partners -e.g. incorporate success stories/ testimonials, creating mechanisms for user feedback to foster community engagement, creating linkages to other Incubation Centres and entrepreneurship ecosystem partners may be added to the social media pages, translating the website into more languages or adding a search function to the website.

To be noted, that, the Consortium, has outlined a clear goal for the future use of the website and Facebook page.

Conclusions WP8

- **Dissemination Plan**, delivered; to be updated regularly, as a recommendation from the external evaluator, within the scope of the Network.
- Implemented dissemination actions, positively rated.
- It is advised to **implement**, when/where feasible, **recommendations** provided **by the Project partners**, towards widening impact and raising awareness as well as engagement with external stakeholders.

4.9 Work Package 9 – Quality management

Coordination	AUEB
Dates	M1 – M36
Objective	To ensure the quality or project impacts and outcomes
Tasks	9.1 – Setting up a quality board 9.2 – Developing feedback mechanisms 9.3 – Designing a contingency plan
Expected Deliverables/ Results/ Outcomes	9.1 – Setting up a quality board 9.2 – Developing feedback mechanisms 9.3 – Designing a contingency plan

Deliverable 9.1 – Setting up a quality board

- Quality Board (QB), **created**, list in the Quality Assurance Plan, with 1 member/partner HEI.
- **1st QB Meeting**, held on October 2022, with corresponding presentation, available.
- **2nd QB Meeting**, as confirmed by UdS, held on December 21st 2023.
- **External Evaluator**, appointed, after corresponding process. **Final External Evaluation Report**, delivered in January 2023.
- **Quality Assurance Plan**, produced, with following content and structure: A) Introduction [What is Quality Assurance; What is the purpose of Quality Assurance (QA); What is a QA Plan] B) Quality Assurance within the TAKE-UP Project [Internal QA measures – Criteria for the QB; Members of the QB; Internal QA measures – Activities of the QB; Internal QA measures – Activities of the Project partners; External Quality measures – External Experts; External Quality measures – Tasks of the External Experts] C) Contingency Plan.

Based on the PDCA cycle (Plan-Do-Check-Act), it compiles specific measures and processes, that were to be implemented throughout the Project's implementation such as evaluations, reporting or the Contingency Plan.

Main framework to be taken into account was the LFM.

- The external evaluator **confirms** that, the Quality Assurance Plan, was in place and reviewed, towards ensuring the quality of the Project impacts and outcomes.
- **Role and contribution to the Project made by the QB (Quality Board)** - Overall good and positive input, received about said contribution.

QB shared valuable insights during internal QB meetings, as well as -a comprehensive evaluation of Project's progress- that allowed to deliver actionable recommendations to improve overall project efficiency and effectiveness. Its role was of clear importance in maintaining and enhancing the overall quality of project processes. Their assessments not only provided valuable content-specific feedback on elements such as the coaching manual but also highlighted strengths and areas for improvement in various events and activities. The QB played a crucial role in maintaining and enhancing the quality of processes throughout the project's lifecycle.

And, it did provide significant insights into the culture of Pakistan, aiding in a better understanding of organizational dynamics and human behavior within the context of TAKE-UP.

Deliverable 9.2 – Developing feedback mechanisms

- **On file**, 10 feedback forms, of Project partner HEIs, from several events.

As well, 4 documents regarding 360 degrees qualitative feedback from stakeholders, such as questionnaires and Mentimeter-s results.

- As it was confirmed by UdS, as Project Coordinator, regular progress checking of LFM, Workplan/Gantt Chart and indicators, has been in place during the Project implementation.
- This deliverable has **achieved** the expected results at Proposal stage.

Deliverable 9.3 – Designing a contingency plan

- **Contingency Plan** – delivered, within the Quality Assurance Plan; addressing potential contingencies, per WP, and compiling mitigating countermeasures to overcome the mentioned contingencies and their effects.

Conclusions WP9

- D9.1 (Quality Assurance Plan & Quality Board), properly and timely delivered.
- **Contingency Plan (D9.3) – on file**, in the QAP.
- External feedback, has been delivered via this Final External Evaluation Report.
- Compiled **feedback** by the evaluator **indicates**, among TAKE-UP Project partners, an **overall positive consideration** of proper quality assurance processes and measures implemented.

As evaluation tool, a feedback survey (soscisurvey.de), implemented, along with dedicated meetings for critical outcomes as well as involving external parties, to maintain proper quality of deliverables, results and activities.

4.10 Work Package 10 – Project management

Coordination	UdS
Dates	M1 – M36
Objective	Ensure timely on budget and on target completion of all activities
Tasks	10.1 – Ensuring a sustainable project management 10.2 – Establish a mechanism of regular reporting
Expected Deliverables/ Results/ Outcomes	10.1 – Ensuring a sustainable project management 10.2 – Establish a mechanism of regular reporting

Deliverable 10.1 – Ensuring a sustainable project management

- **Slack** <https://slack.com/intl/en-gb/> , was the digital project management tool in place.
- **Management Board (MB)**, has been fully operative throughout the Project, with an organigram, on file.
- **Regular Management Meetings**, both face-to-face and virtual, were held.

Refer to D10.2 for more on the mentioned Meetings

- Several relevant, and supporting documents, also produced and available.

Deliverable 10.2 – Establish a mechanism of regular reporting

- **On file**, corresponding reports/Minutes of the held Management Meetings; as well as from other meetings.

Conclusions WP10

- It can be confirmed, that (**Project Coordinator**) has been **actively involved** in the **regular monitoring** of project progress and achievements.
- As well, gathered feedback, indicates that, TAKE-UP Project, has been **properly** and **efficiently managed**.
- **Covid-19** forced to reschedule some activities, but **-deviations-** were **properly handled**. A 1-year extension was granted.
- **Performance** of **WP leaders** throughout TAKE-UP Project - Overall, **good commitment** and **performance** along the Project timeline.

5. CONCLUSIONS AND RECOMMENDATIONS

5.1 GENERAL ASPECTS

- ◆ **Overall**, TAKE-UP Project, **has achieved all of its major objectives**; delays affected the development of some activities/deliverables within the work plan, but they were effectively overcome.

To be noted, the **need to formally launch the Network**, producing all constitutional documents at the earliest.

In any case, a **collaborative network within partner universities** have been **established**, collectively enhancing expertise in fostering entrepreneurial environments.

- ◆ **Initial plans** were **exceeded**, for instance, with the **Entrepreneurship Course** (WP 4) having been delivered 4 times, featuring various adaptations and improvements. As well, the **coach training** also progressed with a pilot run and two additional sessions within partner HEIs to ensure a high-quality training and a favourable outcome.

Although these iterations were not initially foreseen, the objectives were achieved within the specified timeframe.

- ◆ The Project has **effectively addressed** the **diverse landscape** of Pakistani HEIs, **emphasizing** the **need for thorough assessment** in planning the transformation of the entrepreneurial culture.
- ◆ The **key to sustainability** lies in **promoting TAKE-UP outcomes** and **identifying suitable partners** for future collaborations. **Sharing Project materials**, including open-source concepts such as the Entrepreneurship Courses and Coach Training, highlights the Consortium's commitment to widespread knowledge dissemination.

- ◆ Equipment of **FabLabs** serve not only as visible representations of the Project's success to external stakeholders but also as symbolic reminders to partners to continue their impactful work.
- ◆ Notably, a **standardized coaching framework** was created, ensuring quality support for entrepreneurs. The use of the TAKE UP manual and adherence to certification processes are crucial elements that can significantly influence the entrepreneurial support landscape at Pakistani HEIs.
- ◆ Now, **focus** remains on **maintaining enhanced project management skills along with continuing strategic planning**. The partnerships forged among TAKE UP partners are identified as pivotal for the future, forming the core resource team essential for nurturing entrepreneurship at Pakistani universities. The **TAKE UP** Project lays a **foundation** for a **sustainable** and **entrepreneurial future**, leaving a **lasting impact on the HE's landscape** in Pakistan.
- ◆ It can also be concluded that, TAKE-UP, has been a crucial initiative since, in Pakistan, there is a clear need for universities to evolve into entrepreneurial institutions.
- ◆ Above-related and more into detail, the **Project** has been confirmed as **clearly relevant**, since it has addressed **critical factors** that ought to be considered when dealing with the development of entrepreneurial HEIs, such as **curriculum relevance, faculty development, global (EU, in this particular case) trends and best practices, student engagement, industry collaboration** or **infrastructure/resources** (FabLabs).
- ◆ In terms of **Pakistan national initiatives (or regional)** -fostered by the Authorities- in the **target field of TAKE-UP Project** – mentions were done, such as: LUMS – with DAAD funding -Expansion of opportunities in women entrepreneurship with an academic orientation- or a past USAID project - aimed at women entrepreneurship, offering training and practical orientation-.

Or, various initiatives to promote innovation, start-up ecosystems, and entrepreneurial education within HEIs -including Prime Minister's Youth Entrepreneurship Scheme, National Incubation Centres (NICs), National ICT R&D

Fund, Business Incubation Centers by HEC; and, as well, HEC, has recently made it mandatory for all universities to teach “Entrepreneurship” in all undergraduate degree programs [<https://www.brecorder.com/news/40274551/gidc-collection-rs341bn-remains-un-utilised>, <https://www.hec.gov.pk/english/services/students/UEP/Documents/UGE-Policy.pdf> , <https://propakistani.pk/2023/07/19/hec-to-launch-nobel-prize-worth-1-million-for-students-with-entrepreneurial-mindset/>].

In what relates, for instance, to the Greek context, as part of the Greek Government's initiatives, the Elevate Greece platform has been created -there, start-ups can also receive support and training, as done in TAKE-UP-.

- ◆ Regarding **possibilities** (or already existing) of **synergies** with **similar projects** in the region, addressing **TAKE-UP topic-s** – there was a general agreement among partners about said possibilities.

Some mentions were made regarding the need to address the challenges, both regulatory and technical, via a concerted effort, open communication, and a collaborative approach to leverage synergies effectively, fostering a more comprehensive and impactful approach.

And, by CUI, specific proposals in place towards the existing huge potential to transform the current educational system into an “entrepreneurial educational system” [<https://medium.com/@mafarooqui1061/education-development-bank-a-way-forward-to-strengthen-education-sector-977d98b6f6ea> , <https://www.dawn.com/news/1631196/an-education-bank-may-do-the-trick> , <https://jisrmsse.szabist.edu.pk/index.php/szabist/article/view/544>].

From a EU perspective, cited were the Start for Future programme, running for several years or, synergies, with DAAD funded projects.

- ◆ Most **relevant challenges** for fully **widening** the **reach** and **impact** Project at **Pakistan Project partner HEIs**:
 - Time, cost, and availability constraints for faculty, staff, NIC team, and space, especially for entrepreneurial coaches' trainings.
 - Value addition should align with training participants' needs to maintain motivation and engagement.
 - Aligning the Project outcomes with the diverse needs of the university community, ensuring sustained engagement and buy-in from faculty and staff.
 - Fostering a culture of entrepreneurship that extends beyond the Project duration.
 - Continuous support mechanisms, effective communication, tailored training programs.
 - Integrating Project outcomes into existing structures
 - Aligning with institutional priorities as well as garnering support from key stakeholders.
 - Addressing potential resistance to change and ensuring sustained enthusiasm among staff.
 - Overcoming the reality that, in public HEIs, faculty and employees are not legally allowed to get into any business venture without formal permission from the University administration. Therefore, faculty members do not volunteer to share their private business activities with university officials or colleagues.
 - Above-related, changing the current mindset since, most of the faculty members consider -“entrepreneurial coaching”- a pre-requisite of a new business, expecting to have their due financial share in new business

venture; for this, the Certification process of Coaching (designed in TAKE-UP) is expected to play an important role.

- Raising further awareness about the Project's objectives and achievements (i.e. further WS should be organized to present the ToT and the Entrepreneurship Manual).
 - Ensuring the use of the tools created during the Project
 - Changes in personnel over time
- ♦ Most **relevant challenges** so to **widening the impact and reach** of TAKE-UP Project to **other local institutions / stakeholders** (and, even, at **regional level**), include:
- Cost of traveling to suburban and non-mainstream areas for delivery and promotion of trainings.
 - Time investment of master coaches and core TAKE-UP training team members for monitoring and QA.
 - Need for proper incentives to maintain the quality of volunteer efforts by trainers (adequate compensation for trainers, recommended).
 - Ensuring sustained engagement beyond the Project timeline
 - Overcoming institutional resistance to change
 - Tailoring the Project's methodologies, and curriculum, to suit diverse institutional contexts.
 - Active collaboration with key influencers and effective communication strategies.
 - Strategic approach to addressing specific needs and challenges of different institutions.



- Ensuring alignment with varying institutional goals
- Adapting to regional economic contexts
- Securing buy-in from different stakeholders
- Addressing resource disparities, and sustaining engagement beyond the initial implementation.
- Motivation and incentive for the faculty to become Entrepreneurial Coach
- Additional funding, required; for this purpose, it seems crucial to identify and secure funding from government agencies, private foundations, or international organizations.
- Above-related, financial support from universities
- Insufficient acknowledgment from university management
- High workloads for ongoing responsibilities of partners
- ♦ **Recommendations in terms of overcoming above-mentioned challenges –**
 - Establishing an appropriate framework for remuneration or financial incentives for trainers. Implementing incentive program-s.
 - LUMS - Collaboration with LUMSx towards developing a digital training course for entrepreneurial coaches, utilizing and modifying the training manual from the Project, and setting a nominal fee to create a stable revenue stream for ongoing implementation.
 - Training academic, domain-specific, and relevant faculty of entrepreneurship and coaches -from other HEIs- through digital courses and training programs, addressing the needs of the local academic and industrial landscape. Customize training programs to align with the academic and

entrepreneurial landscape of the university. Continuous implementation of the trainings to professors and students.

- Implementing a more flexible training schedule, focusing on essential topics relevant to participants' interests for better interaction and adjustability.
 - Conducting a thorough needs assessment, within the institution, to provide valuable insights into the specific requirements and expectations of faculty, staff, and students.
 - Active engagement with key stakeholders, including regular communication channels, WS, and forums, to ensure a sense of ownership and commitment.
 - Establishing long-term support mechanisms to sustain the momentum of entrepreneurial activities.
 - Integrating entrepreneurial principles into the university's culture and curriculum.
 - Developing a targeted communication strategy
 - Collaborating with other institutions in the region as well as staying adaptable to evolving needs.
 - 2nd Project, as an extension of TAKE-UP
 - Clear definition of the term “Entrepreneurial University”, based on numbers rather than non-visible theoretical statements.
 - Search for further financial resources through Pakistan’s National Agency
- ♦ **Awareness** of any other **EU funded project** (or **similar** initiatives), within this field
– Some Project partner HEIs were not familiar with any project-s.

On the other hand, mentioned initiatives were:

- <https://www.nation.com.pk/18-Feb-2023/improving-higher-education>
 - Project on Cyber Security, with UoS, CUI or NUST
 - Women Entrepreneurship (LUMS)
- ✦ **Collaboration between TAKE-UP Project partners –**
- **Trust, among TAKE-UP Project partners, in place**, contributing to the achievement of the Project’s deliverables and aims. Mentions were made to productivity, active collaboration, positive climate and open communication.
 - TAKE-UP Project **partners were committed to their tasks/roles** and to the Project results; their, overall, own perception about the issue coincided with the diagnosis. As it commonly happens in these type of Projects/Consortium, human factor-s is relevant and not always commitment was aligned for all institutions/persons.
 - **Decision-making** system was considered as **transparent**
 - **External stakeholders**, perceived, overall, as providing valuable input to the TAKE-UP Project, as well as **being actively involved and engaged**. As well, some **mentions** in place, towards **strengthening mentioned engagement**.

Provided positive examples of cited engagement, below:

LUMS - External engagement in Ent101, open to the public for the last two batches, attracted interest from various age groups. The involvement of LUMS alumni, industry mentors, and subject matter experts added value to Ent101 and provided practical learning experiences. Faculty from 17 different universities actively participated in external coaches training, demonstrating willingness for ongoing collaborations and future engagements. The TAKE-UP Conferences witnessed substantial engagement from both partners and external stakeholders.

UoG – Engagement, dynamic and productive, actively collaborating with a diverse range of stakeholders, including government bodies; providing constructive resources and strengthened ties with the external stakeholders, this collaborative approach enriched the outcomes of the Project, fostering impact and future sustainability.

- **External stakeholders actively contributed valuable input**, as well as enriched the Project’s outcomes and ensured alignment with broader needs and expectations to TAKE-UP; below, several compiled results:

LUMS - Internal and external stakeholders of Ent101, the Coaches Training Program, and Fab Labs provided positive feedback, and suggestions towards further improvement, on the outcomes of these initiatives. For instance, participants from non-partner HEIs found the Coaches Training Program beneficial, expressing interest in implementing similar programs at their institutions. And, there are ongoing discussions with various universities, such as Lahore Garrison University, UET, Hazara University Mansehra, UCP, FAST-NUCES, and National Defence University reflecting the success of the program and potential collaborations to be implemented.

♦ **Main strengths of TAKE-UP Project –**

- Establishment and development of Fab Labs
- Ent101 teaching and training materials
- Entrepreneurial Coaches Guidelines, Certification Programs for Entrepreneurship Coaches.
- Training Manual and Plan, emphasis on CB, comprehensive knowledge dissemination through various channels, developed curricula.
- Enhanced networking and collaborations among partner and non-partner HEIs across Pakistan, and extended involvement of internal and external stakeholders.

- Integration of entrepreneurial principles into institutional culture
 - Consortium of top universities from 3 different countries
 - Well thought out plan to achieve Project objectives
 - Motivated team
 - Holistic approach to entrepreneurship development, addressing both the educational and support needs of aspiring entrepreneurs.
 - Mentorship opportunities
- ◆ **TAKE-UP perceived as different from other initiatives, due to –**
- Holistic process, widespread and multidimensional approaches to foster an entrepreneurial culture throughout Pakistani HEIs.
 - Establishment of FabLabs, Certification Programs
 - Emphasis on CB
 - It covered not only the theoretical aspects but also the practical aspects
 - Addressing a diverse group of people/stakeholders which include students, faculty, researchers, academic leaders, administrators, technical staff, and accountants.
 - Embracing innovation and adapting its strategies/methodologies to the evolving entrepreneurial landscape in Pakistan; or, exploring new approaches to training and resource delivery, leveraging technology and incorporating local insights to enhance the entrepreneurial coaching and the ToT courses.

- UdS -Coordinator- background in Work and Organizational Psychology, leading to an effective addressing of cultural and organizational challenges within partner institutions.

- ✦ **Satisfaction with the overall development and implementation of TAKE-UP Project:**
 - Very satisfactory/very high, achieving results beyond the planned outcomes in certain extended areas.

 - Strategic and comprehensive approach to fostering entrepreneurial culture in HEIs.

 - TAKE-UP, effectively addressed its objectives

 - Adaptability shown during unforeseen challenges, such as the Covid-19 pandemic.

 - Involvement and satisfaction of stakeholders

- ✦ **TAKE-UP activities and objectives have been considered as relevant to the needs of the target groups –**
 - Several target groups, addressed, including entrepreneurship students, startups, young entrepreneurs, entrepreneurship and academic faculty, Incubation Centres members, technical staff, trainers, and -both- internal and external coaches.

 - TAKE-UP effectively dealt with the specific requirements of HEIs, coaches, and students involved, contributing to the long-term development and sustainability of entrepreneurial culture in the participating institutions.

 - Interventions have been meaningful, impactful, and directly contributed to the enhancement of entrepreneurial skills and knowledge among the intended beneficiaries.

- Entrepreneurial education and training in educational institutions is very much in need, in Pakistan; and the objectives and activities of TAKEUP project were clearly aligned to promote innovation and entrepreneurship among students.
- TAKE-UP conducted extensive needs assessments and stakeholder consultations to ensure that its activities and objectives were aligned with the needs of students, researchers, academic staff, and entrepreneurs in Pakistan.
- ♦ Overall rating/**assessment** of the project (regarding issues such as if –TAKE-UP Project- did **serve its purpose, if institutions involved performed well, suggestions for improvement, policy support, ownership by beneficiaries, use of appropriate technology, gender equality, consistency of activities with objectives** of the project, if TAKE-UP met its **specific objectives** and/or **future transferability of Project results**):
 - Very good and effective in terms of overall impacts and implementations for the target audience.
 - Ownership by Project partners, involved faculty, staff, and all beneficiaries, reflecting a sense of commitment and engagement.
 - Consistency with the objectives of the Project
 - Areas for improvement include customization of content for different audiences and early-level coaches.
 - TAKE-UP successfully served its purpose by fostering entrepreneurial culture in HEIs through a comprehensive approach.
 - Policy support contributed to the Project's success, aligning well with regional and national educational objectives.
 - TAKE-UP effectively utilized appropriate technology
 - Commitment to gender equality, but not uniformly at each partner

- Great potential for the expansion of TAKE-UP project in Pakistan and abroad. The following outcomes of the project are expected to promote entrepreneurial culture in Pakistani academia: a) The new Entrepreneurship Course, which will be shared with HEC, for onward adoption by the Pakistani universities b) Coaching/Teaching Manual for the teaching of Entrepreneurship, will be shared with HEC for onward use by the faculty in Pakistani HEIs c) Continuation of the Certification process for Entrepreneurial Coaching d) Conversion of Final Year Projects into Product based projects using the facilities of FabLabs e) Marketing and commercial use of FabLab for prototyping with compulsory participation of university students f) Registration of FabLab with Global FabLab Association and take advantage of the latest developments and innovation activities occurring across the globe g) Designing and offering of FabLab Courses for the students and faculty of Pakistani universities.
- The Project has been implemented in a cost-efficient manner, fostered a climate of trust among partners, and demonstrated a clear understanding of the cost-benefit analysis.
- TAKE-UP Project has developed a wealth of resources and methodologies
- The Project has fostered a network of experts and practitioners who are willing to share their knowledge and expertise.
- ♦ Other **comments** and **suggestions**, included:
 - Suggestions, include: a) Exploring the option of sharing coaching session videos as a podcast with the relevant community and partners, providing practical learning and understanding opportunities b) Creating video or audio recordings of coaching sessions with participants' consent, producing digital and easily shareable content to enhance visibility and accessibility.
 - TAKE-UP exceeded expectations in various aspects, showcasing a holistic and well-executed approach to entrepreneurship education.
 - A model for future projects, contributing significantly to the broader goal of fostering entrepreneurial skills and mindset within educational institutions.

5.2 FEEDBACK FROM INTERNAL & EXTERNAL STAKEHOLDERS

○ CUI

- [Impact](#) - Yet to yield immediate results in terms of reducing unemployment or creating successful startups; in any case, it has contributed significantly to foster an entrepreneurial culture among university students.

Several major activities completed, that can provide quantitative and qualitative assessment of the impact of the project; including, for instance: enthusiastic participation in meetings from partner universities, consensus in offering - Entrepreneurship101- to all undergraduate students regardless of their program of study, the equipment for FabLab and the new created research and academic collaborations among the faculty.

- [Sustainability](#) - It depends on how well university administrations embrace and continue the initiative (i.e. establishing startup offices and utilizing provided facilities led by a competent team of professionals).

In any case, the outcomes of TAKE-UP are to be carried forward at all partner universities. And, due to Covid-19, several new businesses and sectors have emerged, requiring university graduates with advanced and current training in entrepreneurship; therefore, the sustainability of this and similar programs, is guaranteed in a country with huge population of young people.

TAKE-UP has the formal endorsement of both, MoST and HEC; TAKE-UP Project was, in fact, one of the initial outcomes of the efforts made by MoST in the past, in this field.

- [Challenges & Suggestions](#) - Motivating university faculty to guide students toward entrepreneurship, with a suggestion to reconnect with failed startup students once they gain experience in their respective fields.



It has been confirmed that, despite the initial enthusiasm of participants (students, faculty) in capacity building actions, it has been uneasy to maintain a regular level of motivation.

Another challenge is posed by the administration and management, and, all partner universities have a bureaucratic administrative system that makes it difficult to get statutory approvals for adding entrepreneurship to degree programs.

As well, another factor that needs to be properly addressed is the reward model for internal and external stakeholders (or its absence); it seems logical to consider some of more/better appreciation of students and faculty's contribution through a better reward model (higher projection of projects, reconsideration of workload, for instance).

The process of awarding Certified Entrepreneurial Coach titles should also be revised, making it fast and easier to receive the actual Certificate.

- [Dissemination/Communication](#) - Utilizing various means effectively.

Via the following links, some of the shared experiences within the scope of the Project: <https://www.linkedin.com/pulse/my-entrepreneurial-journey-dr-ali-nawaz-khan> , https://www.linkedin.com/posts/tech4lifeltd-deliver-a-session-to-emba-students-activity-7125061188572372992-v896?utm_source=share&utm_medium=member_desktop

- [Project Management at CUI](#) - CUI's proactive role - despite Covid 19 challenges- with continuous coordination and stakeholder involvement.

The effective management of the TAKE-UP Project at COMSATS University (CUI) has played a pivotal role in steering the initiative towards success. From overcoming unforeseen challenges to strategically implementing project objectives, the management team's dedication has been instrumental. The following highlights key aspects of the project management at COMSATS University, shedding light on its strengths and contributions:



- Great resilience in overcoming unforeseen challenges; for instance, the adaptability to external factors, such as the global Covid-19 situation.
 - The management team successfully translated goals into actionable plans
 - Importance of the clearness and transparency in communication
 - Proper handling of financial aspects
 - Timely decision-making, especially during challenges e.g. import of the FabLab equipment.
 - Emphasis on stakeholder engagement, both internal and external, fostering a sense of ownership and commitment.
 - Establishment of strategic partnerships, such as the one with NIC LUMS Lahore for hosting the TAKE-UP International Conference 2023.
 - Approach to sustainability, encompassing constitutional documents, a membership policy, and continuous capacity-building initiatives, contributing to widening the long-term impact.
- [Entrepreneurship and Key Topics](#) - The cultural shift toward entrepreneurship requires not only time but a concerted effort to change the mindset of both faculty and students.
 - [Transferability/Scalability](#) - It has been suggested to develop a roadmap for transferring the gained knowledge to all universities in Pakistan, involving key institutions and the private sector -especially in the field of IT-.
 - [Efficiency](#) - Well-managed Project, meeting all KPIs.
 - [Engagement with Stakeholders](#) - Private sector engagement is noted as an area for improvement, with a call for increased collaboration and innovative approaches to involve relevant private sectors. Regular visits between academia and industry are recommended.

- Open Question/Reflection - One of the best-conceived projects, with a suggestion to emphasize its importance in faculty portfolios/CVs and clearly define ownership at the departmental level within universities, with a focus on new startups.

• UoG

- Impact - Below, summary:
 - Successfully promoted entrepreneurial culture not in partner universities, towards the development of a vibrant entrepreneurial ecosystem.
 - Significant professionalization of entrepreneurial coaching, via certification programs and comprehensive training initiatives.
 - Entrepreneurship 101 courses leading to an enhanced comprehension and understanding of entrepreneurship principles among over 600 students.
 - Micro-coaching by TAKE-UP coaches and master coaches, benefitting a large number of students, along with the display of exemplary projects at the TAKE-UP International Conference 2023 showcasing tangible outcomes.
 - Significant contribution to the development of an impactful entrepreneurial culture within the academic community, elevating the partner HEIs as recognized hubs for entrepreneurial development and knowledge dissemination.
 - FabLab as a platform for translating ideas into tangible prototypes, fostering creativity and innovation among students and faculty. Fab Labs, as a great opportunity, helping students and researchers to effectively improve the entrepreneurial skills by becoming a tangible platform to present their ideas along with expanding university-industry partnerships through prototyping joint research or products with digital fabrication machines.

- Commitment of Certified Entrepreneurial Coaches to conduct workshops for non-partner universities, extending the project's impact beyond the initial partner universities.

Certification for Entrepreneurship Coaches, is to lead to an increased impact on the project sustainability, due to the hands-on practice to train the coaches as well as the current shared experiences.

- Strengthening of collaborative ties with other academic communities have strengthened.
- Affirmative and upbeat impact on all stakeholders of the university
- The Entrepreneurial Certification Program has attracted significant interest, leading to a clear improvement in the entrepreneurial abilities of students as well as a higher rate of student-led entrepreneurial initiatives.

The increased visibility of the Certification Program has attracted external stakeholders, including local businesses and government agencies, creating new opportunities for engagement with the institution's entrepreneurial initiatives.

- Fostering of cross-disciplinary collaboration among target groups for joint workshops has been fostered.
- Target groups, selected by analyzing their needs and considering weaknesses and strengths of training staff.
- Material developed for different target groups involved, from within and outside HEIs.
- General involvement of all actors, coming from all academic backgrounds and disciplines (for teaching and training in entrepreneurship topics, subjects).
- Trainers, able to train more faculty members and employees

- Versatile concept of teaching and training not only cross culture but also cross disciplines.
- Sustainability –
 - A well-executed strategy embedded in every phase, e.g., Certification Programs, ongoing mentorship networks or the integration of entrepreneurial principles into institutional fabric.
 - Emphasis of the project on the capacity building, the formation of a networked community and the incorporation of entrepreneurial elements into academic curricula.
 - Setting up of the FabLab or the creation of a network of trained trainers
 - Focus on creation of an ecosystem of entrepreneurship coaches, institutionalization of best practices and promotion of cross-sector collaboration.
 - Cooperation among Project partners (and future members of the Network) increased.
 - Entrepreneurial practices, improved via learning from previous practices and by analyzing the weaknesses and strengths of previous batches.
 - TAKE-UP Networking, in the right track, promoting national integration and exchange by using established constitutional documents, website and logo to frame the public presence or the designed promotional materials to enhance visibility of the network (posters, folders).
 - Relevance of the regular update of the Network's website with current activities, news and events by all the partners.

- Challenges & Suggestions & Recommendations - Challenges encountered, offer thoughtful suggestions, and provides strategic recommendations aimed at enhancing the Project's impact and sustainability:
 - Collaborating with EU partner universities involved navigating legal, financial, and administrative aspects, posing, therefore, a clear challenge.
 - Workload of senior management
 - The Project effectively addressed its objectives, showcasing adaptability during unforeseen challenges like the Covid-19 pandemic and reflecting resilience.
 - Challenges during the process of FabLab's equipment, a common case in these type of EC funded projects.
 - Widening the Project's impact beyond the Consortium required addressing challenges like sustained engagement, overcoming institutional resistance, and tailoring methodologies to diverse contexts.

Below, some more encountered challenges:

- Developing the same content for all 4 local Project partners in context of local needs, since, 3 out of the 4, are situated in the provincial capital of Punjab; therefore, their infrastructure, facilities and audience are totally different from UoG (based in a remote area of the province). That lead to the necessity of traveling to Lahore, that proved not that easy to be managed.
- Training Mentors, Coaches and Faculty members with previous knowledge of different subjects other than business subjects.
- Registration of Students during running semester and to manage the physical classes of Courses 101 and 102, as per availability of students in their free slot during regular classes of semester.

- Availability of faculty for training on weekends was not possible and -during week days- their existing schedule is quite busy. For that purpose, offering flexibility of time is of relevance.
- Local community-related guidelines by being experts in one of the workshops as well as allocating space, and material-s, for WS (workshops).
- At UoG, aligning project outcomes with diverse needs, ensuring sustained engagement, and fostering a lasting entrepreneurial culture pose challenges. Recommended solutions include: customized training, continuous support and effective communication.
- Regarding strategic recommendations, towards securing sustainability and lasting impact in the ecosystem: conducting a thorough needs assessment, engaging key stakeholders actively, customizing training programs, integrating entrepreneurial principles and collaborating with other institutions.
- Critical relevance of fostering collaboration, strengthening the Network, providing continuous capacity-building, implementing robust monitoring, enhancing visibility, and integrating successful outcomes into curricula.
- Towards enhancing the online presence, some compiled recommendations include interactive features, regular updates, user-friendly design, tailored messaging, success stories, user feedback mechanisms, and collaborative content.

Below, several compiled suggestions, include:

- Trained Mentors, Coaches and Faculty members -of all disciplines- may get involved in future trainings of Entrepreneurship in each partner HEI.
- As well, Trained Mentors, Coaches and Faculty members may also be engaged in capacity building actions at other partner institution-s, towards cross-cultural learning.

- Universities, to invite the Coaches and Mentors from private sector, to retrieve their knowledge about market needs and to show new ideas of entrepreneurs in order to strengthen the Academia-Industry linkages.
- Replicating the Project in other Universities, or at HEIs of other countries, for future cross-cultural analysis about perception of Entrepreneurship.
- Regularly sharing the success stories of Entrepreneurs (who will use the Fab-Labs for their prototypes) on the Project's website.
- [Enhancing Entrepreneurship](#) - Below, actions that play a pivotal role in fostering a culture of entrepreneurship within the academic ecosystem:
 - TAKE-UP Certification for Entrepreneurship Coaches enhances project impact, visibility, and sustainability.
 - ToT, effectively building capacity for entrepreneurship coaching -targeting a diverse group, with tools for individual assessment, and ensuring a substantial and measurable impact.
 - WP5 achieved its aim via professionalizing entrepreneurial coaching, providing evidence-based guidelines.
 - In terms of UoG, the Project significantly impacts the promotion of entrepreneurial culture and enhances professionalization in coaching; a clear example being the Entrepreneurship 101 course.
 - As well, the Certification Programs, elevates coaching skills, fostering an improved entrepreneurial mindset among students. The Certified Coaches contribute to workshops for non-partner universities, extending the project's impact and strengthening collaborative ties with academic communities.
 - The holistic approach and multi-dimensional strategy of TAKE-UP distinguishes it from other initiatives.

- And, not of a lesser importance, due to the action of TAKE-UP; positive changes and added value have been brought to the participating HEIs, with innovative learning experiences, enhancing the quality of existing initiatives, and catalyzing a cultural shift towards an entrepreneurial mindset.
- [Dissemination & Communication](#) - Key highlights of the Project's dissemination efforts, include:
 - Dissemination efforts by partners could be categorized as highly effective, especially through the publication of articles in reputable English dailies such as Dawn, The Nation, and Pakistan. A comprehensive list of articles given, below:
 - <https://www.pakistantoday.com.pk/2022/10/02/transforming-academic-knowledge-into-entrepreneurship/>
 - <https://www.pakistantoday.com.pk/2022/10/19/importance-of-entrepreneurship/>
 - <https://www.pakistantoday.com.pk/2022/12/20/entrepreneurial-varsities/>
 - <https://www.pakistantoday.com.pk/2023/01/07/from-academia-to-business/>
 - <https://www.nation.com.pk/E-Paper/lahore/2022-10-08/page-7/detail-2>
 - <https://www.nation.com.pk/E-Paper/karachi/2022-10-14/page-7> ,
<https://www.nation.com.pk/14-Oct-2022/entrepreneurship-for-economic-growth>
 - <https://www.nation.com.pk/01-Nov-2022/global-innovation-index-2022>
 - <https://www.nation.com.pk/02-Dec-2022/going-entrepreneurial>

- <https://www.nation.com.pk/E-Paper/islamabad/2023-02-18/page-6/detail-5>
- https://epaper.dawn.com/DetailNews.php?StoryText=19_10_2022_007_009;
https://epaper.dawn.com/DetailImage.php?StoryImage=19_10_2022_007_009
- Relevant role of social media engagement, including the Project's website and Facebook, that significantly amplified the visibility and outreach of TAKE-UP activities.
- Or the strategic utilization of diverse communication channels, ensuring broad recognition and accessibility of the Project's objectives and accomplishments across varied audiences and target populations.
- Identification of communication, visibility and PR activities, necessary for reaching the Project's aims.
- In place, several mechanisms and channels for dissemination and communication (e.g. website and other web-based tools -social media, networking and pitch events, publications in printed and electronic media or internal publications-).
- Use of additional dissemination channels, such as dissemination at external events.
- As a recommendation, to implement the planning of post-Project dissemination activities, towards sustainable impact, ensuring sustainable improvement in Pakistani entrepreneurship culture.
- Also, and above-related, producing a Dissemination Plan, outside of the time scope of TAKE-UP Project.

- How, TAKE UP, dealt with Entrepreneurship and other key topics –
 - Holistic and multi-dimensional strategies, in place; a well-rounded approach ensuring a comprehensive impact on several aspects of entrepreneurial education.
 - Development of Certification Programs for entrepreneurship coaches, as a key strength; these programs do contribute to sustained high-quality entrepreneurial education. And, the Project's impact; extends beyond the consortium, fostering collaboration with other academic communities.
 - Heightening of coaching practices within participating HEIs, enriching the entrepreneurial ecosystem, via a focus on knowledge dissemination and capacity building through diverse channels.
 - The setting up of FabLabs lead to providing a practical and hands-on entrepreneurial education, allowing students and researchers to translate ideas into tangible prototypes, fostering innovation and creativity.
 - Importance of amalgamating principles of entrepreneurship into institutional culture as a key factor in fostering a sustainable entrepreneurial mindset.
- Transferability & Scalability of results – Compiled factors that must be taken into account, include:
 - Via strategic initiatives such as the FabLab-s or the evidence-based guidelines for entrepreneurship coaching, impact is emphasized, since -said initiatives- do serve as an adaptable blueprint with the potential for replication in other educational contexts.
 - The created collaborative networks, including external stakeholders, are essential for scaling up successful practices.
 - Significant contributions to the scalability of the outcomes, include the ToT, the comprehensive training and capacity-building components.

- And, the certification of best practices along with lessons learned, increases the transferability of its results.
- Efficiency and engagement with relevant, and external, stakeholders – Main outcomes that have contributed to overall impact, and sustainability, of TAKE-UP:
 - Cost-efficient implementation
 - Resilience and adaptability to unforeseen challenges such as the ones posed by Covid-19.
 - Collaboration with various bodies, including government entities, in a dynamic and productive manner.
 - Relevant and lively participation of external stakeholders, offering valuable input and significantly shaping the Project's direction, contributing to its overall success.
 - Trust, open, clear communication and transparency as cornerstones among all partners.
 - High level of commitment by all participants
 - Confirmed noteworthy achievements, integrating strategic planning and adaptability with strong collaboration.
- Coaching – Relevant aspects of the delivered Coaching, include:
 - The use of qualitative and quantitative techniques, along with the assessment of competencies in areas such marketing strategies, finances and networking.
 - Provision of coaching guidelines to conduct WS for entrepreneurial coaches, including faculty and staff members.

- The aim of professionalizing entrepreneurial coaching, achieved, since, a group of entrepreneurial coaches, was selected from all participating HEIs and trained through local and evidence-based guidelines.
- Another achievement was to assess the competencies, via the consideration of the challenges faced by entrepreneurial coaches.
- Micro Coaching through online supervision of trained staff
- Feedback from each participant and partners, regularly, provided the best coaching.
- [Project Management](#) – Positive aspects, to be noted, include:
 - The Project has been properly managed, with Coordinators from each partner HEIs and corresponding regular meetings.
 - Collection of feedback and regular reports towards planning of following activities.
 - Appropriate funding management, including Financial Audits

● GCU

- [Impact](#)
 - At GCU, the Project, has catalyzed a transformative impact on both students and entrepreneurial coaches; for instance, via immersive experiences and mentorship, students have improved their practical entrepreneurial skills, fostering a mindset of innovation and initiative.
 - Overall, TAKE-UP, has influenced both, curricula and pedagogical, approaches; to be noted, the networking opportunities within the broader educational landscape.

- Sustainability -
 - To be in place, due to the robust certification process for Coaches, ensuring consistent and high-quality delivery of entrepreneurial education.
 - And, not of lesser importance, the critical role of the follow-up Project, enhancing sustainability, fostering ongoing engagement with alumni and industry partners and creating a self-reinforcing cycle of support (iterative approach).
- Challenges & Solutions -
 - Some of the compiled challenges, include resource constraints, entrepreneurial mindset, sustainability of the project, support from the HEC and top management and adapting to diverse student backgrounds.
 - Partnerships with industry players and leveraging alumni networks for mentorship and funding were key solutions towards addressing resource limitations.
 - As per tailoring content to diverse student levels was dealt with via regular feedback mechanisms that facilitated agile adjustments to the curriculum.
- ToT Session - At GCU, priority was given to the ToT and CB initiatives, with partner and non-partner HEIs. These mentioned actions involved intensive coaching for instructors, so to ensure effective dissemination of entrepreneurial knowledge. And, the dual focus on trainer development and CB is to ensure a sustained impact, creating a cadre of skilled mentors.
- Dissemination & Communication -
 - Dissemination, and networking, have been emphasized through diverse channels; for instance, via targeted trainings and seminars with students and faculty members or through social media platforms, to share awareness with other institutions.

- A good example of proper and effective cooperation are the strategic MOUs, with industry partners such as The Lahore Chamber of Commerce & Industry (LCCI).
- Efficiency and Engagement with relevant stakeholders, external, mainly -
 - Said engagement it is a priority at GCU, by fostering collaborations with industry leaders, partner and non-partner HEIs, and community partners, thus, ensuring real-world relevance.
 - Efficient communication channels and stakeholder involvement enhance TAKE-UP impact, aligning academic initiatives with industry needs.
- Regarding **students, participants** that enrolled in the **Entrepreneurship Courses** at **GCU**, below, relevant retrieved **feedback** and **comments**, along with several **quotes**:
 - Chance for meeting numerous enthusiastic entrepreneurs and creating informal networks.
 - Getting exposure to the provincial cultural differences, contributing to professional visibility and new opportunities.
 - As cited challenges: balancing between theoretical concepts and real-world application, the communication about assignment deadlines -a clearer outline of expectations beforehand would enhance the overall learning experience- and, last but not least, the need for an improved communication on additional activities (related to TAKE-UP Project) that would provide better information and engagement.
 - “TAKE-UP has been a successful project because of its strategic partnerships, capacity building conferences and active engagement for entrepreneurship opportunities in Pakistan”.
 - “During the Project, engaging with accomplished individuals and learning from their experiences is really beneficial as these practicalities help in

strategic decision making. Moreover, the accessibility to the content online helps in flexible learning opportunities. On the other side, meeting with professionals from diverse backgrounds enhances the exposure and adds value to the professional grooming”.

- “Developing a risk-taking mindset is the most challenging which indeed is most crucial as our entrepreneurship journey encounters many unstable political and economic conditions. Following the stated challenges, often it becomes difficult to apply theoretical concepts on our running venture”.
- Crucial role of TAKE-UP in entrepreneurship spirit creation among the individuals from diverse backgrounds.
- Suggestions - scaling the Project or collaboration at global level can further change the dynamics of entrepreneurs' realm; as well, incorporating a diverse range of industry guest speakers, could offer additional perspectives on entrepreneurship and enrich the course content.

As well, providing complete guidelines for Finance Management techniques or more real-life case studies analysis.

- “Participating in the course has been a valuable experience for both myself and my colleagues. The impact on our understanding of entrepreneurship has been significant, fostering insightful discussions and contributing to our professional growth”.
- Positive rating of the integration of entrepreneurship principles into the course, with real-world scenarios and case studies adding a practical dimension to theoretical aspects.
- Positive outcomes, include: Idea Generation, Risk Management or Business Planning, in terms of subjects.
- Regarding overall impact, cited were the encouragement of innovation and network opportunities and of critical thinking along with the fostering of professional development.

○ LUMS

- [Impact](#) – The training has offered profound insights into the entrepreneurial world and the associated benefits.

“The training workshop had a profound impact. Personally, I found the content to be highly valuable and applicable. The trainers were excellent at delivering the material, and the interactive sessions provided practical insights. The collaborative nature of the training fostered a positive environment”.

- [Dissemination & Communication](#) - Suggestions, in place, to inform participants about all related activities and events – within the scope of the Project-.

Positive rating of the communication about the WS

- [Relevance of TAKE-UP within the Pakistani context](#) - Critical relevance of the initiative, since, entrepreneurship, is becoming increasingly vital within Pakistan’s education system; for instance, the practical approach of the program, ensures that the knowledge gained can be directly applied in the local context, making it a valuable resource for professional development.
- [Entrepreneurship, Coaching, and Key Topics](#) - TAKE-UP effectively addressed entrepreneurship and coaching, providing valuable insights into these key topics.
- [Project management at LUMS](#) - Positive feedback has been compiled
- [Suggestion](#) - To incorporate more hands-on activities from the manual, further enhancing the practical application of the concepts learned.
- [‘Open Question’](#) –
 - “It was an incredibly comprehensive course, accessible to individuals from diverse backgrounds, provided they have an interest in the subject matter. I only wish I could have joined earlier to glean more knowledge from the exceptional individuals at LUMS and GCU”.

- Mentions about how, collaboration among participants, could potentially enhance the overall impact of future TAKE-UP events.
- As well, the need to properly disseminate any plans for continuous support or follow-up sessions to reinforce the learning from the WS.
- “In conclusion, the TAKE-UP project has made a positive impression, and I look forward to its continued impact on professional development in Pakistan”.
- Positive feedback has been also gathered by the external evaluator, from **students**, for instance, attending the **101 Course**; below, some quotations from participants:
 - “Awesome content, brilliantly gathered to fit into the student landscape, and wonderfully delivered.”
 - “If I would have a chance to go for it again, I would definitely consider”

5.3 INSTITUTIONAL PERSPECTIVE

- ♦ In terms of **positive changes/added value** -due to TAKE-UP- perceived, within the institutions, regarding already **existing activities/initiatives**, or **new ones** (if any); some of the mentioned ones:
 - Increased university-wide collaborations and more collaborations of NICL with academic members and faculty from different departments (LUMS).
 - Entrepreneurial education and coaching enriched and elevated through the implementation of Certification Programs and the integration of FabLab facilities (UoG).
 - Opening avenues for innovative and hands-on learning experiences, enhancing the quality of existing initiatives, fostering a more

entrepreneurial mindset among faculty, staff, and students, establishments of the strategic partnerships to bring into new perspectives, resources, and collaborative opportunities (UoG).

- Existing activities related to entrepreneurship education have experienced an enhancement in terms of depth and scope; new level of innovation, incorporating modern pedagogical approaches and technology into our educational practices. Stimulation of a culture of creativity and risk-taking, fostering an entrepreneurial mindset not only among students but also among faculty members. Collaborative efforts between academia and industry have seen a significant boost, creating opportunities for real-world application of knowledge and skills (GCU).
- Promoting innovation and creativity among the students, faculty, and researchers (CUI).
- Entrepreneurship Manual and ToT material, embedded in the internal ToT program (AUEB).
- International project management skills, along with knowledge about the Pakistani context in the field of entrepreneurship (UdS).

5.4 INDIVIDUAL PERSPECTIVE

- ◆ Regarding main **results**, from a **personal angle**, derived **from** the involvement in **TAKE-UP**:
 - Better documentation and tracking of results
 - Identification and involvement of relevant resources
 - Enhanced and extended collaborations with Project partners and non-partners from other Pakistani HEIs.

- Skill development and professional growth and development
- Platform for networking and building lasting connections with stakeholders and peers, valuable professional relationships.
- Enhancing project management skills
- Becoming a strong advocate of Entrepreneurship

5.5 CONCLUSIONS PER DAC CRITERIA

○ SUSTAINABILITY

- ◆ There was a **perception**, among **Project partners**, that – due to **TAKE-UP Project-future** and **fostered cooperation among partners** (and future members of the Network) is **to increase**, in the field of **developing an entrepreneurial culture** at HEIs in Pakistan; aspects mentioned, include: A) LUMS - positive outlook for increased cooperation; e.g. current discussions to expand -training program- to other local partner universities (in underdeveloped areas, KPK and South Punjab). As well, the exchange of trainers/mentors from several partner universities, should enhance the diversity and quality of ongoing coaches' training and certification processes B) Existing strong foundation laid for ongoing collaboration by establishing effective practices, sharing resources, and fostering a culture of knowledge exchanges, generating enthusiasm among partners C) Many faculty members, regularly communicating with their counterparts in the partner universities, discussing joint training and project supervisions D) CUI - proposal to the local partner universities to sign an MOU for future cooperation, exchange of ideas and joint activities E) Collaborative discussions, in place, on a regular basis; additionally, an Excel chart -network of coaches-, detailing contacts and professions/training backgrounds.

- ◆ **Entrepreneurial practices at Pakistan Project partners' HEIs are foreseen to improve:** A) Promoting entrepreneurship is a priority for HEC B) Due to TAKE-UP, entrepreneurial practices have improved at the partner HEIs in Pakistan, which are now better equipped to support their students and faculty in their entrepreneurial endeavors C) Potential collaborations for the exchange of facilities and technical guidance on the utilization of equipment at Fablabs, expected D) Relevance of establishing a dynamic network for entrepreneurial coaches, as a platform for effective collaboration among different departments of partner universities E) TAKE-UP has introduced/reinforced best practices, certification programs, collaborative initiatives, fostering an environment conducive to entrepreneurial growth, along with structured curriculum and coaching certification available.

- ◆ **Strategic Action Plans (D2.1), did achieve their goal of creating knowledge of project management strategies towards developing entrepreneurial culture -**

This was also confirmed and shared by Project partners; for instance, LUMS, did provide a list of key accomplishments, such as regular conduction of Open House for start-ups, monthly follow-ups and analysis, improvement in applicant pool, simplification of application process, faculty and industry experts involvement, PI support and team collaboration, Project reach expansion or awareness and knowledge dissemination.

In any case, all local Project partners do confirm that, due to said Plans, significant improvements are seen in the ecosystem; for a better assessment, monitoring and evaluation to be implemented at a later stage.

- ◆ **Need for, these Plans, to be regularly updated -** It is confirmed that, a clear need is in place for regular updates to these Plans, maybe even annually.
- ◆ **Rating of the TAKE-UP Network (D7.1, D7.2):** A) Effectiveness in fostering communication among participants of various programs, connecting internal and external coaches; a proactive approach, ensuring continued networking, collaboration opportunities, and planning for future entrepreneurial coaches training programs B) Active contact information repository, enhancing reference building, facilitating resource allocation opportunities and quick dissemination of

relevant updates/news (entrepreneurship, learning, investment opportunities, events) C) Network, has successfully laid the foundation successfully for fostering collaboration and knowledge exchange among project partners; for instance, by creating a platform for shared learning and resource-sharing in the field/topic-s -in any case, relevance of properly addressing the establishment of constitutional documents and the development of a membership policy and strategy- D) Network, perceived as growing; involved teachers, good links with each other E) To be established, the networking with non-partner universities F) Potential to play a significant role in promoting national integration and exchange, enhancing awareness for entrepreneurship and the role of entrepreneurial universities G) The involvement of FabLabs is to amplify project awareness and facilitate the growth of the network H) At this stage, emphasis should be placed on internal collaboration.

- ♦ **Network**, perceived as being in the **right path** towards **promoting national integration and exchange, enhancing awareness** for entrepreneurship and the role of entrepreneurial universities: A) Network, facilitated post WS sustainability and exchange - news and updates on entrepreneurship-related events, opportunities, achievements, institutional collaborations, and facility exchange programs-, fostering cross-university linkages, entrepreneurial integration, and the expansion of the overall entrepreneurial landscape in Pakistan's HEIs B) Ongoing efforts (e.g. establishment of constitutional documents membership strategy) indicate clear commitment to fostering collaboration and knowledge sharing C) The increasing amount of teachers and universities getting involved, is to surely raise awareness on the project and related field-s and topic-s.
- ♦ **Recommendations** (or comments), towards **the future sustainability of TAKE-UP Project, and its results**: – A) Self-Sustainability of Ent101, pricing Ent101 to remunerate faculty, making it self-sustainable B) Customization of Ent101, adapting it into a shorter course for increased accessibility and effectiveness C) Integration of E101 participants, so they can work and incubate in the FabLab-s D) Community impact through Makers Lab (LUMS) E) Support for external coaches, ensuring that, PIs and master coaches, can assist external coaches in becoming master coaches F) Repository of external coaches G) Fostering ongoing collaboration among project partners and network members,

strengthening the network's structure (constitutional documents, clear membership policy) providing continuous CB actions for coaches and faculty members H) Implementing a M&E system, enhancing project visibility, and integrating successful outcomes into institutional curricula I) Engaging external stakeholders, establishing a feedback mechanism, and developing a comprehensive sustainability plan J) Aiming for 3-year project (jointly funded EC-HEC), reaching more HEIs within Pakistan, with emphasis on the ones that are not teaching/properly dealing with entrepreneurship subjects, practices, research K) Organization of an annual entrepreneurship conference.

● IMPACT

- ◆ **Rating of FabLabs (D3.2), very impactful and greatly positive.** Noted aspects, include: A) Very good, much-needed initiative, promoting cross-disciplinary collaboration, idea sharing, and skill development. As well, effectively improving entrepreneurial skills by offering a low-cost environment for testing ideas, encouraging creativity, and fostering practical skills crucial for entrepreneurial success B) Providing a hands-on learning environment, promoting innovation, creativity and practical skills, considerably contributing to the overall learning experience, empowering individuals to translate ideas into tangible projects; as well, enhancing the entrepreneurial spirit within the project and beyond C) Most important component of the project D) Their significance extends to students and researchers, serving as tangible evidence that entrepreneurial thinking goes beyond conventional lecture-based knowledge acquisition E) FabLabs contribute to the network by becoming sources of pride for partner institutions F) They are highly innovative, given the scarcity of similar entrepreneurial-focused facilities at Pakistani HEIs.

- ◆ **FabLabs, will effectively improve the entrepreneurial skills of students and entrepreneurs:** it has been confirmed by Project partners, and some of their mentions, include: A) Provide a unique and cost-effective environment for young entrepreneurs to develop and test their ideas, alleviating financial constraints and allowing for quick prototyping and idea validation B) The hands-on approach fosters creativity, resource management, and practical skills -

critical for entrepreneurial success- C) Collaborative atmosphere encourages innovation and teamwork, contributing to the development of a culture conducive to entrepreneurship D) Facilitates experiential learning and the application of theoretical knowledge, a practical engagement enhancing problem-solving abilities, project management skills, and a real-world understanding of entrepreneurship.

◆ **Examples of main impact-s of TAKE-UP Project at partner institutions:**

➔ LUMS

- At NICL, regular offering of the E101 course, extending project reach, promoting entrepreneurial awareness.
- 4 startups from E101, incubated in foundry training
- TAKE-UP, certified 9 entrepreneurial master coaches and 16 entrepreneurial coaches, contributing to credibility and structured support for startups.
- Implementation of latest machines for instance, CNC wood routers and 3D printers, empowering students and entrepreneurs for prototyping and in-house manufacturing.

➔ UoG

- Promoting the entrepreneurial culture
- Enhanced professionalization of entrepreneurial coaching; overwhelming response from students, with more than and for the first course, we received over 600 registrations for the 1st Course.
- Benefits for students through micro-coaching, with developed projects, and also displayed at the TAKE-UP Intl Conference 2023 (NIC LUMS Lahore).
- Development of a sustainable and impactful entrepreneurial culture within the academic community.

- Implementation of certification programs and comprehensive training initiatives, has elevated standard in coaching practices. For instance, Certified Entrepreneurial Coaches are committed to conduct WS for non-partner universities.
- Installation of the Fab-lab, a significant factor enhancing the Project's overall impact.
- GCU
 - Many teachers, researchers and students acknowledging the potential to become entrepreneurial, with their own start-ups.
 - Students, teachers and staff members, sharing their business ideas and discussing own potential ventures.
- CUI
 - FabLab, opened for students in November 2023; therefore, its impact, to be assessed at a later stage.
- AUEB
 - Enhanced, and enriching, collaboration with the Pakistani Universities, leading to knowledge exchange, sharing of best practices, and experiences in entrepreneurial education.
- UoS
 - Project management skills within the Pakistani cultural context
- ◆ **The impact that -TAKE-UP- has had on the target groups, is wide and relevant;** there was a general agreement on the issue, by Project partners, that provided specific examples:

→ LUMS

- Student level, via the ENT 101 Course, enhancing entrepreneurial awareness, mindset, and practical skills for startup execution.
- University level, since, relevant academics, entrepreneurship faculty, staff subject matter experts, NICL members and technical staff are involved in Ent101, coaches' training, and FabLab projects.
- As per impact at industry level, expansion of entrepreneurial knowledge and skills involving non-partner members in external coaches' WS along with engaging external stakeholders to develop the entrepreneurial ecosystem across Pakistan's HEIs.

→ UoG

- Impact confirmed on all the stakeholders of the university, including students and faculty; students and faculty have CB actions, curriculum/content and the opportunity to transform their ideas into prototypes (FabLab).
- Administrative staff, establishing linkages with other HEIs, at national and international level-s.
- The implementation of the certification program has significantly increased the interest of the students and elevated the coaching skills of faculty staff; the certified coaches, have reported a notable improvement in entrepreneurial abilities of the students, resulting in a higher rate of student-led entrepreneurial initiatives.

→ GCU

- Very positive impact on students as well as on the teachers; e.g. 2 of the start-ups are from the BS management students' group, 02 from MBA, 02 from Executive MBA. And, similarly, many of the teachers, already have started working on their product ideas.

→ CUI

- A student's club -"Entrepreneurship Club"-, established
- The faculty members who are trained as Coaches/Trainers, did form a group -"TAKEUP Group of Coaches"-

→ AUEB

- Developed entrepreneurial teaching skills, with, academic staff, having participated in ToT.
- Integrated Entrepreneurship into Curriculum, into various academic disciplines.
- Established entrepreneurial support networks

→ UoS

- Students: Fundamental entrepreneurial knowledge and skills, targeted coaching.
- Faculty, staff members: Increased awareness of the importance of entrepreneurship, deeper understanding of the entrepreneurial mindset, proficiency in teaching entrepreneurship courses, and skills in entrepreneurial coaching.
- University Management (Vice Chancellors, ...): Heightened awareness of the significance of entrepreneurship, active support for entrepreneurial activities.

◆ **Other relevant impacts, include:**

- Generation of case studies during Ent101 curriculum development, usable across entrepreneurship-related courses university-wide.

- Crucial role in fostering cross-disciplinary collaboration among target groups
- Increased visibility of the Certification Program and WS, attracting external partners (for examples, local businesses and government agencies).
- Teachers, guiding students to work on their research theses, which may be converted into real businesses.
- CUI - Comprehensive document about the FabLab <https://takeup.eu/wp-content/uploads/2023/11/FABLAB-post-inauguration-Document-Final-6Nov23.pdf>

● EFFICIENCY

- ◆ It is confirmed and, overall, agreed that, **TAKE-UP** Project, has been implemented in a **cost-efficient** manner.
- ◆ Activities, considered, as well, as having been delivered, overall, in a **timely manner**; only, due to **Covid 19**, delays occurred and, the Project, was affected. For instance, training activities, and others, needed to **switch to online mode**. There was a general consensus among Project partners, that, these issues were properly handled and, TAKE-UP Project, did not suffer any major disruption - only, FabLabs, experienced slight delays in being set up-.
- ◆ **As per relevant deviations to be mentioned (e.g. Covid 19, adaptation to some phases/tasks of virtual implementation)**, there were challenges in conducting in-house marketing events, promotions, and open house sessions during the pandemic; and, a shift to online activities, was mandatory in some cases, impacting participation.
- ◆ **Institutions and individuals, properly, overall, adapted to the not foreseen (Covid 19) virtual scenario for activities that were not planned in such a format** - Said adaptation was accomplished, for instance, via a hybrid model implementation, with online strategies, leveraging online platforms and tools.

● EFFECTIVENESS

- ◆ **Assessment of WP4, specifically, the developed training and teaching material focused on developing entrepreneurial skills in students -**

Compiles positive outcomes, include:

- E.g., at LUMS, the pool of applicants for Ent101 has seen growth and improvement in terms of quality, seriousness, and interest. As well, confirmed enhanced screening and selection along with, Ent101, having been improved and customized. To be noted, the active involvement of faculty, PIs and industry experts in Ent101 course sessions or the integration of case studies, written by entrepreneurship faculty, integrated into the course.

Also, an extended marketing campaign, in place for Ent101 or the quality enhancement of Ent101 course videos (including the local Pakistani context, scenarios, and relevant examples of local startups for better understanding, engagement, and learning of students).

- As per UoG, it is confirmed that, teaching/training material (4 Modules), is relevantly all-inclusive and wide-ranging, providing valuable insights and practical guidance.
- GCU, positively assessed the importance of enhancing skills in students, particularly in the field of entrepreneurship.
- CUI - Entrepreneurship Course, designed for the students, as a comprehensive conglomerate of all possible aspects that will educate Pakistani students to become an entrepreneur. The Coaching Manual, one of the unique outputs of TAKE-UP.
- The Entrepreneurship Course, raised awareness of entrepreneurial activities and their potential as a career path for students in Pakistani HEIs; additionally, students developed fundamental entrepreneurial skills.

- The mentioned training material, has high sustainability potential, with a hybrid training approach and easily accessible resources.
- In terms of challenges, all 4 local Project partner HEIs must, effectively, integrate the teaching/training material into their structures, with specific plans and responsible person-s for relevant tasks.
- ◆ WP5, considered as having achieved its aim of professionalizing entrepreneurial coaching, in the participating institutions –

Project partners do agree with the above-mentioned diagnosis; relevant aspects, include:

- Well-structured Training Manual and Program
- Capacity for participants to deliver training
- Framework for existing Coaches
- Continuous Improvement and feedback loop
- Exchange of Trainers and Mentors
- Set of evidence-based guidelines for entrepreneurship coaching in the participating HEIs.
- Novelty, since, coaching, was not being provided in a structured manner. And, Coaching Manual, has clearly helped in streamlining the entrepreneurial coaching.
- Process of Certification, designed after detailed deliberation; anyway, its success, to be measured at a later stage -for instance, assessing the continuation of coaching without any financial incentives to the coaches-
- WP5 activities helped to establish a common understanding of entrepreneurial coaching in the participating institutions; e.g. developing a

common definition of entrepreneurial coaching, identifying the key competencies of an entrepreneurial coach and raising awareness among faculty and staff.

- Based on the feedback received from participants in this course, it is confirmed that it has significantly contributed to enhancing their professionalism in supporting entrepreneurs.
- Regarding some challenges, to be cited the several adaptations of the Certification process, ensuring a common standard over time (even more, with multiple trainers involved) or the consistent use of the Training Manual by all trainers.

● RELEVANCE

◆ Rating of the Self-Assessment Report (D1.2), including the Self-Assessment Tool-

Ratings by the Consortium have been positive, considered (the Report, and the Tool) as highly effective in gaining comprehensive insights into challenges and opportunities for entrepreneurial activities, leading to the achievement of planned results -once activities, actions became started to be implemented-.

The Self-Assessment Report and Tool exhibit a thorough, meticulous and comprehensive analysis of strengths and weaknesses of the partner HEIs; a very good assessment, identifying areas of improvement.

One of the key findings was the lack of interdepartmental cooperation in entrepreneurial teaching -a common challenge for many universities-; another relevant conclusion was the need for more academic courses on entrepreneurship.

As well, the need for curriculum renewal in order to include at least one entrepreneurship course in all departments, was identified.

This deliverable played a critical role in creating a comprehensive overview and initiating discussions about the entrepreneurial ecosystem, as well as leading partners to engage in strategic thinking and long-term planning.

◆ **D1.2 provides a proper knowledge on challenges and opportunities for entrepreneurial activities—**

Project partners did agree with such statement, since, besides highlighting the areas for enhancement and future strategies, it effectively encapsulates the insights not only into the challenges but also the opportunities for the entrepreneurial activities.

◆ **Rating of the Joint Publication for Best Practices (D7.5) -**

- Good output, emphasizing the identification of common best practices shared among partner universities; crucial for not only acknowledging successful strategies but also for facilitating knowledge exchange and collaboration.
- A repository of successful practices that can be referenced and adopted by others in the field.
- An admirable step, and, the collaborative effort among partners in designing the content, is to ensure a broad-ranged and diverse perspective.
- Regardless of the initial challenges, a very good exercise, with some very useful recommendations.
- Potential to make a significant contribution to the field of entrepreneurial education and support; a valuable resource for educators, trainers, and entrepreneurs.

- A guide for future projects, with insights into the design and implementation of Project activities, providing a roadmap for others and a tool for expanding the network.

COHERENCE

- ◆ **TAKE-UP Certification for Entrepreneurship Coaches (D6.4), has led/will lead to increased impact, visibility and sustainability of the Project and its results -**

Above diagnosis, shared and confirmed, overall, by Project partners; some factors that underline said increased impact, sustainability and visibility include the diversity in trainers and participants, the exponential impact through coaches, opening the training to external participants, certification assuring the credibility of Project outcomes, coaches to foster sustainability through a network of qualified professionals, intangible value of certification, the common standard (Certification) established for entrepreneurial coaching in Pakistan.

Or, the Certification Program, has helped to raise the visibility of TAKE-UP, along with increasing the number of entrepreneurs receiving coaching via the pool of trained/experienced coaches.

All 4 local Project partners, have devised strategies for the future delivery of the training.

- ◆ **Assessment of the implemented Train the Trainers (D6.5) –**
 - Well-designed for sustainability and growth of awareness, in terms of how, information, can be effectively transmitted to the next set of coaches.
 - ToT sessions, with the active involvement of UdS, considered as particularly valuable in enhancing impact and ensuring the continued and effective implementation of the program (collaborative approach).

- ToT, extremely effective in CB for entrepreneurship coaching; diverse group of trainees and utilization of effective tools.
- A valuable initiative that played a crucial role in developing a network of skilled trainers capable of effectively disseminating entrepreneurial knowledge and skills to students and aspiring entrepreneurs.
- A sustainable mechanism for promoting entrepreneurship in Pakistan; the certification process, motivates coaches to transition into trainers.

5.6 RECOMMENDATIONS AT MICRO AND MACRO LEVEL

- ♦ **Consolidate and foster the actions and impact of FabLabs**, so they can provide/keep on providing, for instance, mentorship, resources and/or networking opportunities. As well, implement an effective **follow up** and **monitorization** of their **activities** (FabLabs).
- ♦ **Develop programs that embed students within industries** to gain practical experience, such as internship programs, industry-sponsored projects or joint research initiatives.
- ♦ Relevance of **increasing the number of Entrepreneurship Courses** -and related topics/sub topics- and **WS integrated into the curriculum** of the local Project partner HEIs.
- ♦ **Incentivize Research in Entrepreneurship and Innovation**, which is linked to motivating staff via offering grants, sabbaticals, and/or recognition for impactful research.
- ♦ Host **regular networking events** such as conferences, seminars, CB actions, ... bringing together students, faculty, entrepreneurs and industry leaders, facilitating knowledge exchange and collaboration.

- ♦ As well, place focus on **collaborating with the government to create/improve a supportive policy environment for entrepreneurship** -tax incentives, grants and other forms of support for startups emerging from HEIs-.
- ♦ Implement a system for **continuous evaluation and feedback from stakeholders** (students, faculty, industry partners, alumni, ...).
- ♦ **Human factor** – relevance of continued commitment (i.e. top management, Pls, ...), avoiding -high- rotation of key staff relevant to sustaining Project’s results.
- ♦ **Sustainability Plan** (TAKE-UP Network), **to be produced and updated on a regular basis**, followed up via indicators.

It is of relevance, among other factors, for sustainability purposes, to address and **foster engagement** with several actors within the ecosystem, including **researchers, other HEIs, policy makers, HEIs’ networks, similar Projects, local/regional stakeholders, private sector, students’ associations, ...**

- ♦ Proper **follow up** (of the Proposal) in what relates to, for instance, the **Table of Indicators**, regarding Long Term Impact ones, along with relevant aspects addressing Dissemination and Sustainability -also, at **Proposal-**.
- ♦ Effective and varied **external funding sourcing** (other bodies, government at different levels, ...), via customized plan and/or integrated at the Sustainability Plan to be delivered.
- ♦ Stress out the importance of a **wider dissemination** of the Project and its results, to **increase awareness, impact, visibility** and attract potential members for TAKE-UP Network.
- ♦ Deliver, when feasible, **all future events/activities in a face-to-face format**, and - overall- interaction, not only at internal level but with external stakeholders as well.

To be noted that, **hybrid mode**, also allows for a wider impact, awareness raising and dissemination.



- ◆ Foster **engagement** with **underrepresented groups**, ensuring **inclusivity** and **diversity**, not only in the actions but taking into account input and feedback.
- ◆ Ensure that, **all relevant** and **impactful resources** -current and future- (as long as the Consortium decides it and, i.e., there are not IP issues) are **freely available** and **accessible** at the Project's website and other social media, for the long-term scenario.
- ◆ Ensure the **highest impact**, multi-level.
- ◆ **Regular** and **active replication** of all sort of **CB actions**.