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R2/A3: DEVELOPMENT OF THE MANUAL ON ORGANIZING INTERNATIONAL SEMINARS

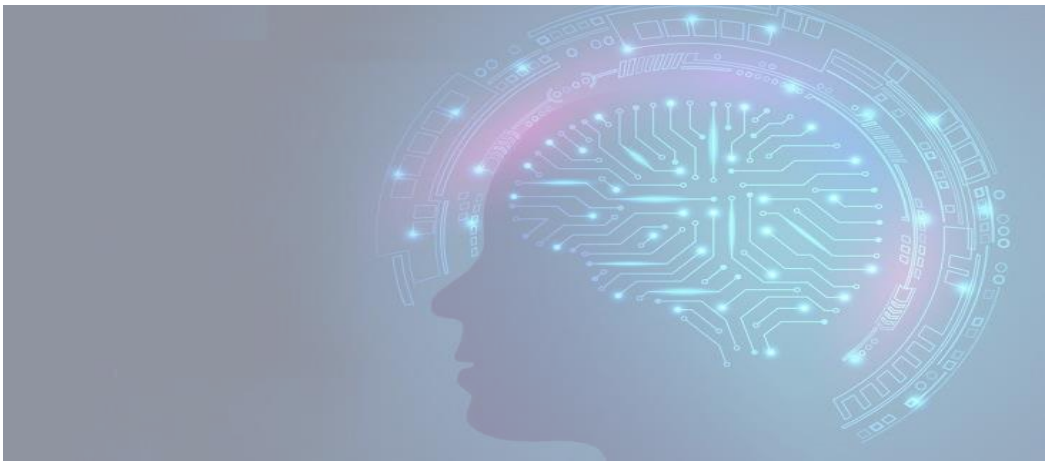

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Table of Contents

Introduction 3

I. International seminars of the JoInME program 4

A. The general approach to the training within JoInME program 4

B. Designing the practical training seminars 5

Preparing the infrastructure for the program 5

Defining the content of the program 9

Launching international seminars 11

II. JoInME Skills Retention Service Platform 20

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Introduction

Welcome to the Manual on Organizing International Seminars for training students in entrepreneurial skills prepared by the team of the JoInME project (short for JoInt Multidisciplinary training program on Entrepreneurship in the field of artificial intelligence for industry 5.0) co-funded by the European Union.

In this manual, you will find a wealth of information and practical guidance to successfully organize entrepreneurial students' program in form of international seminars that bring together students, teachers, experts, and professionals from diverse cultural backgrounds and disciplines, fostering a global perspective and collaboration, thus, offering a unique and enriching learning experience.

This guide is designed to assist educators, students program coordinators, and other stakeholders in planning and executing effective international seminars that empower students to excel in the dynamic and transformative business world.

The seminars that are held within the training program developed by the JoInME project are focused on high-tech innovative entrepreneurship in AI and Industry 4.0/5.0. However, this guide is created more universal and applicable to any business domain, moreover, ideas from it can be used far beyond the entrepreneurial agenda. We tried to cover a wide range of topics, including international program design, curriculum development, logistical considerations, participant engagement, and evaluation methods.

Let's embark on this transformative educational journey together!

Short Glossary

JoInME project – an international project funded by ERASMUS+ Programme (No:2021-1-FR01-KA220-HED-000032254) being implemented by 6 partners from 6 countries (France, Ukraine, Greece, The Netherlands, Cyprus, Lithuania) to support higher education teachers in delivering quality education and training to higher education students on the topic of entrepreneurship.

JoInME program – a training program on Entrepreneurship in the field of artificial intelligence for industry 5.0 developed within ERASMUS+ JoInME project for higher education students. It is implemented as a series of international seminars.

International seminar – an educational format that brings together participants, experts, and stakeholders from diverse countries and cultural backgrounds to engage in collaborative learning, knowledge sharing, and discussions on specific topics, issues, or themes of global relevance. International seminars serve as platforms for cross-cultural exchange, networking, and the exploration of innovative ideas, often with the goal of addressing global challenges, fostering international cooperation, and advancing knowledge and expertise in various fields. These seminars can be organized by academic institutions, international organizations, government agencies, or private entities and may vary in duration, format, and objectives based on their focus and target audience.

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Training session – a structured and organized event designed to impart knowledge, develop skills, or provide practical experience to individuals or a group of participants. In our program training sessions are held in the form of international seminars.

Innovative entrepreneurship – the practice of creating, developing, and managing businesses or startups that emphasize the application of novel, creative, and disruptive approaches, ideas, business models, or technologies to address market needs, solve problems, and seize new opportunities.

I. International seminars of the JoInME program

A. The general approach to the training within JoInME program

Description of the principles of the international, multidisciplinary multicultural and hybrid program for training students to obtain the entrepreneurial skills in the field of AI for Industry 4.0 / 5.0 (to reveal each definition)

The JoInME program is a training initiative designed to equip students with the entrepreneurial skills needed to excel in the field of Artificial Intelligence (AI) for Industry 4.0 and the emerging Industry 5.0. This program aims to foster a new generation of AI entrepreneurs who can leverage cutting-edge technologies to drive digital transformation and create sustainable businesses in an AI-driven world.

The key component of the program is the provision of an *international multidisciplinary, multicultural and hybrid* training environment, where students can transform their AI-driven business ideas into viable business projects. Experienced teachers, entrepreneurs, AI professionals and industry experts guide and support students throughout the training process, offering valuable advice, and networking opportunities. Through lectures, workshops, and industry visits, students gain real-world insights into AI applications across various sectors, establishing valuable connections within the AI ecosystem.

The international aspect of the program refers to the participation of students, teachers and industrial experts from several different countries. It allows for the implementation of innovative ideas beyond the country's borders and facilitates access to international markets to revitalize the EU economy after local and global challenges (epidemics, wars, etc.).

The multicultural aspect is addressed with an inclusive learning environment that celebrates and values the unique perspectives, experiences, and contributions of individuals from various cultures.

The multidisciplinary aspect refers to fostering collaboration and interdisciplinary teamwork, bringing together students from diverse backgrounds, such as computer science, engineering, business, design, etc. Through group projects and interdisciplinary activities, students learn to work effectively in cross-functional teams, fostering a holistic approach to AI entrepreneurship.

The program is implemented in **hybrid** format, i.e., combining in-person and virtual elements. It allows participants to engage and interact both physically and remotely, offering the flexibility to accommodate different preferences, circumstances, and geographical locations.

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B. Designing the practical training seminars

Preparing the infrastructure for the seminars

Finding partners for the seminars` delivery

The first important step is to find appropriate partners for the seminars` delivery. The main condition of the program`s success is the smooth collaboration of several educational institutions that have:

- Strong academic expertise in the chosen fields of study (in case of JoInME, they are AI, entrepreneurship, and Industry 4.0/5.0 applications). The best-case scenario is when partners can equally divide domains and topics between themselves and complement each other with additional expertise, instructional materials, industry connections, and technological infrastructure required for effective program delivery.
- Geographic and cultural diversity: partners from different regions and cultures bring diverse perspectives and insights to the program. This can enhance the learning experience and expose participants to a broader range of entrepreneurial approaches and market dynamics.
- A global reach and a diverse network of partners: partners should have connections to relevant stakeholders, industry experts, and entrepreneurial communities.
- A common vision and goals: alignment in values, commitment to excellence, and dedication to participant success are crucial for a productive partnership, as well as open communication, mutual respect, and a shared commitment to participant success.
- A collaborative mindset and a willingness to work together in designing, delivering, and improving the training program is important.
- Flexibility and adaptability to changing circumstances and emerging trends. The world is rapidly evolving, so it's important to collaborate with partners who can keep up with the latest developments and incorporate them into the training program.
- Ability to deal with legal and administrative aspects. Since contractual agreements, intellectual property rights, data protection, and compliance with local regulations should be considered during the delivery of the program.

Industrial partners (e.g., companies) are also important for the program. They may have expertise, resources, or industry connections that can enhance the program's quality and provide valuable support to participants. Collaborating with companies can offer access to guest speakers and mentors who can share real-world case studies, success stories, and practical examples from the AI and Industry 4.0/5.0 domains. Seeking the involvement of companies can also lend credibility and validation to the program: companies with a strong reputation in the AI or Industry 4.0/5.0 sector can endorse the program, increasing its appeal to potential participants and stakeholders. Their endorsement can also attract other industry players, leading to a broader network and enhanced program visibility. Moreover, participation of companies opens potential sponsorship and funding opportunities.

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Partnership with accelerators and incubators, chambers of commerce, industrial clusters and other entrepreneurial support organizations brings added value to the program. It allows creating a dynamic ecosystem that offers specialized support and opens doors to invaluable networks. Such partnership adds credibility to the program, enhances participants' learning experience, and significantly increases their chances of success in the AI entrepreneurship landscape.

Building the core team for the seminars` delivery (teachers / trainers)

Having started designing the program it`s important to define the specific roles and expertise required for the team delivering the program and to clearly outline the responsibilities for each role. The team may consist of various combinations of different professionals both academic and administrative ones, a.o., program coordinators, university teachers, field experts, trainers, facilitators, accelerators and incubators workers, curriculum developers, and other administrative support.

For example, the core team of the JoInME seminars includes:

- A program coordinator in each partner organization who oversees the overall planning, implementation, and management of the training program.Coordinators also communicate with team members, ensure program objectives are met, and manage logistics and administrative tasks.
- University teachers with strong academic expertise in AI, engineering for Industry 4.0/5.0, or entrepreneurship and trainers with practical hands-on experience who conduct training sessions, workshops, and interactive activities for students. They have strong presentation and facilitation skills to effectively deliver the program content, engage participants, and foster discussions and practical learning experiences.
- Administrative support who assists with administrative tasks such as participant registration, communication management, scheduling, documentation, and coordination with external partners or stakeholders. They play a crucial role in ensuring smooth program operations.

Additionally, the team may include:

- Subject matter experts (SME), industry professionals, incubators/accelerators and chambers of commerce employees who provide guidance on program content, curriculum development, and industry insights. They may also contribute to training seminars by delivering specialized content. Usually, they participate in final jury, helping evaluating students` results and giving their feedback.
- Facilitators. A facilitator guides and supports the participants throughout a training session, ensuring that the sessions run smoothly and effectively: moderates discussions, ensures that everyone gets an opportunity to contribute, helps delivering specific content, conducting workshops, or guiding practical exercises, assesses the students' learning outcomes and helps in the evaluation process. In a hybrid format, the facilitator bridges the online and offline aspects of the program, ensuring that all participants have a consistent and valuable learning experience.

Contacting companies

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When reaching out to companies and inviting them to the partnership it`s important to define mutual benefits and value for all the parties. There exist diverse scenarios in which companies can actively participate in an entrepreneurship program.

- *Scenario 1* (case study collaboration): companies develop and present real-world cases studies that participants can analyze and work on as part of their learning experience (see section Approaches to generation of innovative business ideas). This collaboration provides participants with hands-on exposure to the challenges and opportunities faced by companies in developing innovative AI solutions and integrating AI into their operations and strategies.
- *Scenario 2:* companies' employees are invited as SME to share their expertise, experiences, and insights by delivering guest lectures or workshops during the program. They can provide participants with real-world examples, case studies, and practical knowledge related to AI entrepreneurship and Industry 4.0/5.0. This scenario allows participants to learn directly from industry professionals and gain a deeper understanding of the application of AI technologies in a business context.
- *Scenario 3:* students work directly with companies, applying their newly acquired entrepreneurial skills and AI knowledge to solve specific industry problems or develop innovative AI solutions needed by companies. The company benefits from fresh perspectives and potential innovation, while participants gain practical experience and potential industry connections.
- *Scenario 4:* companies participate in networking events organized as part of the program, providing opportunities for participants to connect with industry professionals, entrepreneurs, and potential employers. Additionally, companies may use the program as a platform to identify talent for internships, job placements, or collaborations within the AI and Industry 4.0/5.0 sectors.
- *Scenario 5:* companies provide financial support to the program through sponsorships, grants, or scholarships. This support helps ensure the program's sustainability and may enable participants to receive financial assistance for further development of their entrepreneurial ideas.

Sponsorship opportunities

In some cases, a program implementation requires external sponsorship. It is an option for how to make the program more robust, impactful, and sustainable. There are several sponsorship opportunities that can be explored:

- Financial support to the program, helping to cover the costs associated with organizing and delivering the training sessions.
- Mentoring and coaching support from company employees to the students participating in the program.
- Guest speaking engagements of company employees.
- Organization of networking, promotional and other types of events by a sponsoring company.

Sponsors benefit since:

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- They gain brand visibility and recognition by being associated with the program. Their logos can be featured on promotional materials, program websites, event signage, and communication channels, ensuring their brand is showcased to a targeted audience of students, faculty, industry professionals, and potential entrepreneurs.
- They gain access to a pool of talented individuals who are passionate about entrepreneurship and AI. By sponsoring the program, sponsors can identify potential candidates for internships, employment, or collaborative projects.
- They get reliable organizations as partners for further research and development initiatives, international educational and entrepreneurship projects.
- They showcase their commitment to social impact, education, and the growth of the entrepreneurial ecosystem.

How to attract companies to join the cause

A good idea would be to search for sponsors amongst a list of organizations and companies that supported individual academic partners in the past.

Organizing an event to raise awareness of the program can be a very good opportunity for the academic partners to meet potential industrial partners. If you are planning a physical event, make sure to contact everyone on time. If the program has already started, students can also engage in the event to collaborate, connect with companies and express their start-up ideas. The main idea of the potential event and of the training program itself needs to be clarified and very well communicated to the potential sponsors. Communication material, ideas' framework and the event's agenda could be prepared beforehand for that purpose.

As long as the main idea is clear, the next step could be to define the target audience/ target group. Who and how could benefit from advertising amongst young students? Are any of the proposed start-up ideas related to specific fields, and maybe address problems of a specific domain?

It is important to highlight the educational aspect of the proposed action, how helpful sponsorship would be, and how it could serve a greater cause.

The seminars` format

JoInME program is an implementation of the so called "mobility at home" type of projects. That means that several partners from different countries participate in the international seminar staying at their home institutions and invite various experts (employees of relevant companies, incubators and other industrial partners) either to their premises. Such hybrid format also gives all participants an opportunity of remote interaction from home office or any place that has access to Internet services.

International seminars are developed to be as flexible as possible, ensuring a possibility of diverse collaborating formats: teachers can choose to teach offline and/or online, students can also attend the seminars in a way that is of most convenience for them.

Tools, platforms and web services for holding seminars

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Online platforms for holding sessions in a hybrid format play a crucial role in enabling seamless collaboration and interaction between students and instructors, regardless of their physical location. They include:

- Video conferencing tools: platforms like Zoom, Microsoft Teams, or Google Meet facilitate real-time video conferencing, allowing students and instructors to interact face-to-face, participate in discussions, and collaborate on group projects.
- Virtual classroom platforms, such as Adobe Connect or Blackboard Collaborate, that provide a dedicated space for online teaching, featuring interactive whiteboards, screen sharing, breakout rooms, and chat functionalities.
- Learning management systems (LMS) like Moodle, Canvas, or Schoology serve as centralized hubs for course materials, assignments, and communication, offering asynchronous learning opportunities and organizing resources effectively.
- Collaboration tools and messengers like Slack, Microsoft Teams, or Google Workspace promote seamless communication and collaboration among students and instructors, enabling file sharing, chat-based discussions, and project coordination.
- Online polling and quizzing tools like Mentimeter or Kahoot can be used to engage students during joint sessions by conducting live polls, quizzes, or interactive Q&A sessions.
- Video-sharing platforms, such as, YouTube or Vimeo, can be utilized to upload pre-recorded lectures, guest speaker sessions, or other relevant video content, allowing students to access materials at their own pace.
- Document sharing with Google Drive, Microsoft OneDrive, or Dropbox enable students to collaborate on shared documents, presentations, and spreadsheets in real-time.
- Virtual reality (VR) platforms can be used for more immersive and interactive experiences.
- JoInME skills retention service for transcription of learning content to skills retention scenarios materialised with interactive resources and facilitation of learner motivation and engagement with motivational workflows and configurable gamification mechanics.

Defining the content of the seminars

Setting the objective of the training program

Setting clear and transparent objectives brings focus, clarity, accountability, and measurement to a program. It ensures that efforts are aligned, and resources are allocated effectively. Objectives guide program planning, implementation, and evaluation, ultimately contributing to the program's success and the achievement of desired outcomes. By setting specific, measurable, achievable, relevant, and time-bound (SMART) objectives, organizers can track progress and assess whether the desired outcomes are being achieved.

The objectives of the program can vary depending on the vision shared by the partners. JoInME objectives are:

- fostering an entrepreneurial mindset among students, encouraging them to think creatively and identify opportunities in the context of AI and Industry 4.0/5.0.

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- Deepening students' understanding of AI technologies, their applications, and their potential impact on Industry 4.0/5.0.
- Equipping students with essential business and leadership skills necessary to launch and manage AI-based ventures in the Industry 4.0/5.0 context.
- Facilitating networking opportunities and fostering connections between students, teachers, trainers, industry professionals, and potential investors.
- Offering practical tools, frameworks, and resources that participants can utilize in developing and implementing AI-driven business strategies.
- Equipping students with effective presentation and pitching skills to communicate their AI-based ventures, attract stakeholders (e.g., investors), and secure necessary support and resources confidently and persuasively.
- Encouraging collaboration and knowledge sharing across different disciplines, such as AI, engineering, business, and social sciences.
- Providing students with information and connections to funding opportunities, grants, venture capital, and support programs specifically tailored for AI startups in the Industry 4.0/5.0 domain.

Defining learning outcomes for students

As a result of participating in JoInME, students will be able:

- To understand the fundamental concepts and applications of AI and Industry 4.0/5.0 in the entrepreneurial context.
- To apply critical thinking, design thinking and problem-solving skills to identify and evaluate business opportunities in the AI domain.
- To develop a comprehensive business plan for an AI-based venture, including market analysis, value proposition, and financial projections.
- To effectively communicate the value proposition of an AI venture through persuasive presentations and pitches.
- To demonstrate an understanding of ethical considerations and responsible practices in the use and implementation of AI technologies.

Defining the program results

The results of the program are the tangible and intangible outcomes or achievements that emerge as a result of students completing the program. These results can vary depending on the specific goals and focus of the program defined independently by each partnership.

Expected JoInME results are:

- A pool of innovative AI-based ideas in the field of Industry 4.0/5.0 generated by students in collaboration with companies.
- Business plans (developed according to international standards) for ventures based on innovative ideas in the field of Industry 4.0/5.0.
- Presentations for pitching based on the developed business plans.
- Well-trained future AI entrepreneurs who can leverage cutting-edge technologies to drive digital transformation and create sustainable businesses in an AI-driven world.

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Launching international seminars

The structure of the training program

The program consists of a set of seminars or training sessions (the number is usually, from 8 to 10, up to the particular partnership to define). The sessions are held in a hybrid mode i.e., combining face-to-face and virtual meetings allowing participants to engage and interact both physically and remotely.

The first session is introductory. It starts with an orientation to familiarize participants with the goals, objectives, and expectations of the program. An introduction to the key concepts, trends, and challenges in AI and Industry 4.0/5.0 sets the stage for the subsequent sessions (see Unit 1 “General introduction about the targeted industry” of the materials prepared for JoInME program).

Then students engage in ideation exercises to generate and explore potential business ideas, or in some cases to choose from a pool of ideas offered by industrial partners (see section Approaches to generation of innovative business ideas). By the end of the first training session several most attractive business ideas (usually, 4-5 ideas, depending on the overall number of the students), appropriate for innovative entrepreneurship, are defined and student teams shaped.

Next (intermediate) sessions are focused on developing key entrepreneurial skills. Students learn business planning for establishing their own entrepreneurial ventures and creating innovative products or services in the context of Industry 4.0/5.0. Students gain skills required to transform their innovative business ideas (defined during the first session) into viable and successful businesses.

The program can also organize networking sessions and pitching events, where participants have the opportunity to interact with investors, industry professionals, potential partners, and fellow entrepreneurs. These events can help participants refine their communication and presentation skills, gain exposure, and build valuable connections.

The culmination of this part is *the creation of a robust business plan and an illustrative presentation.*

The last session is Final Jury. The program concludes with students presenting their business plans to a panel of judges – university teachers, investors, and/or industry experts. Final evaluations are conducted to assess the participants' understanding of the concepts, their ability to apply their knowledge, and the viability of their business ideas.

The structure of one training session

Each training session is guided by one or several teachers and session facilitators (optional). It consists of the following components:

- (Optional) Short presentation of the assignment completed by the students, followed by feedback from the teachers or invited experts.

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- A short lecture on some aspects of entrepreneurship and guidance. Each partnership can tailor the content of the topics for its objectives and vision of the program. An example set by the JoInME program can be found in the section The training content of the JoInME program.
- Hands on practical interactive workshop explaining and showcasing the next practical assignment for students (usually, creation of a correspondent chapter of the business plan).
- The work of students in teams reinforced by teachers and experts.

Tangible outcome of the first session: selected business ideas and shaped student teams.

Tangible outcome of the intermediate sessions: one or several chapters of a business plan.

Additional tangible outcome of the pre-final session: a presentation for the Final Jury.

Duration of the whole training program and each of its units

The duration of the whole training program and its individual units can vary depending on the specific design and objectives, as well as the time constraints of all the partners whose availability plays a vital role in determining the overall duration and format of the program. The partners may have existing commitments, projects, or academic calendars that need to be taken into consideration. They might be willing to offer their expertise and resources, but their availability might be limited to certain timeframes.

The program can be organized as an intensive course delivered in a short period. The condensed schedule allows participants to immerse themselves fully in the learning process and promotes faster skill acquisition. In this case, it is essential to reschedule all other activities and fully immerse participants in the learning process. The concentrated nature of the program demands undivided attention and dedication from participants, necessitating the temporary adjustment of other commitments.

For example, in order to deliver the program in one month it is necessary to organize 2-3 training sessions per week.

The duration of one training session is usually 7-8 academic hours with breaks. Thus, it takes a whole day to organize one training session. That means that the fastest delivery that can be implemented is one training session per day, which makes it possible to deliver the program in 2 weeks starting with idea generation and completing it with one day dedicated to Final Jury.

The training content of the JoInME program

The program is structured to guide students through the process of writing a well-rounded business plan, chapter by chapter. Each session is strategically designed to address critical components of a successful business plan, ensuring that participants acquire the knowledge and skills necessary to create a compelling and investor-ready document.

The program commences with a focus on creativity and design thinking, encouraging students to think innovatively and explore novel business ideas. Following this, participants delve into defining their concept or idea, laying the groundwork for the subsequent chapters of the business plan.

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The subsequent modules encompass a range of crucial topics, including:

- Creativity and design thinking: coming up with the business idea;
- Business plan, its structure, international standards;
- Product/service and company description
- International project management, leadership and negotiation, legal analysis;
- Market and industry analysis;
- Team management;
- Sales and marketing strategy;
- International logistics;
- Financial analysis.

Each session provides in-depth insights and practical tools to address specific aspects of the business plan comprehensively. It is supported by the JoInME training materials.

By the end of the program, participants will have synthesized all the key elements covered in the various chapters, culminating in a robust and investor-ready business plan that capitalizes on the potential of an AI-based solution for Industry 4.0/5.0. This structured approach ensures that students gain a holistic understanding of the entrepreneurial process, while also building the essential skills to successfully navigate the AI-driven business landscape.

Approaches to generation of innovative business ideas

The program kickstarts with a dynamic and engaging phase focused on the collection of innovative business ideas. Students are encouraged to think creatively, challenge existing norms, and explore new business possibilities. The goal is to collect the most attractive business ideas that can develop into viable business projects.

There are three primary ways through which business ideas can be obtained for a training program focused on entrepreneurship:

Students generate ideas. They are encouraged to unleash their creativity and generate their own business ideas. This approach fosters an entrepreneurial mindset and empowers students to think critically about industry challenges and potential solutions. Students may draw inspiration from their own experiences, identify market gaps, or explore emerging trends in AI and Industry 4.0/5.0. Through brainstorming sessions, idea generation workshops, and guided exercises, students develop their unique business ideas, considering factors such as technological innovation, market potential, and social impact. This approach cultivates independent thinking, promotes individual entrepreneurship, and encourages students to take ownership of their ideas.

Teachers offer ideas for the students. The teachers, who possess extensive knowledge and experience in the field of AI and entrepreneurship, play a pivotal role in guiding and shaping the students' entrepreneurial journey. They have a deep understanding of industry trends, emerging technologies, and market demands, making them well-equipped to generate relevant and innovative business ideas for the students.

Through their expertise, teachers can identify untapped opportunities, potential niches, or areas where AI can be applied in the context of Industry 4.0/5.0. They can leverage their networks, stay

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updated with the latest advancements, and conduct market research to come up with business ideas that align with the program's objectives and the students' skill sets.

When teachers offer ideas for students, they ensure that the ideas are tailored to the students' capabilities, align with the program's curriculum, and offer valuable learning experiences.

Sourcing ideas from industrial partners. In addition to generating ideas internally, the training program can get in touch with companies, startups, research institutions, or other industrial partners and use them as external sources of innovative business ideas. This collaboration helps students to gain exposure to real-world challenges and industry-specific problems.

Industrial partners can share their business pain points, technological advancements, and market demands, providing students with a wealth of potential ideas to work on. Through industry briefings, hackathons, or open innovation challenges, students can engage directly with partners to understand their needs and co-create solutions.

One of the common approaches for idea generation is through case studies, which involve the examination of real-life scenarios, challenges, or success stories which students can analyze and get inspiration from. JoInME consortium prepared actual Case Study Workbook of the challenging issues faced by companies - professionals in digital, data-driven and interconnected industry and AI-based innovative products and services from all over the Europe that describes challenges or gaps within a specific industry or market. Students can examine these challenges and identify opportunities for entrepreneurial interventions. By critically analyzing the case studies, students can uncover unmet needs, untapped markets, or inefficient processes that could be addressed through innovative business ideas leveraging AI technologies.

Sourcing ideas from industrial partners is a mutually beneficial arrangement for both industrial partners and the program participants. It allows industrial partners to tap into fresh perspectives, identify talent, foster innovation, collaborate with academia, access entrepreneurial networks, and contribute to social impact. For students this format brings practical knowledge and deeper insights into specific industries, business models, or problem-solving approaches. For the program this type of collaboration opens various sponsorship opportunities (see section Sponsorship opportunities and on how to attract companies to join the cause).

By combining the student-generated ideas, teachers` experience and insights sourced from industrial partners, the training program creates dynamic and diverse ecosystem fostering students` entrepreneurial aspirations while also addressing real-world industry challenges.

Advice for evaluation and selection of innovative business ideas

When evaluating business ideas in order to select the most attractive ones for innovative entrepreneurship, here are some important features to consider:

- *Innovation and disruption potential*: what innovation, in other words unique value proposition, does this service/product bring to the market? Does it introduce new technologies, business models, or approaches that can create significant impact?

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- *Feasibility*: is the offered business solution feasible considering the resources and infrastructure required to bring the idea to life? Are there any obstacles - legal, financial, geographical, etc.?
- *Differentiation and competitive advantage*: does the idea offer unique features, a superior customer experience, cost advantages, proprietary technology, or strategic partnerships that give it an advantage over existing alternatives?
- *Market fit*: does the business idea seem to align with current market trends, consumer preferences, and industry dynamics? Is the timing right for the idea's introduction? Does it meet evolving market needs.
- *Financial attractiveness*: can the idea bring revenue? Who would pay for the business solution? Can it have a clear path to monetization and long-term profitability? Does it have the ability to attract investments?
- *Legal aspects*: is it aligned with the law regulations?
- *Alignment with students` passion and expertise* as this can contribute to their motivation, commitment, and long-term success.
- *Scalability potential*: can it be further developed or expanded beyond the initial market or customer segment?

Answering these questions and evaluating each of the criteria (e.g., from 1 to 5, where 1 is the poorest and 5 is the best) students guided by teachers can select ideas with the biggest entrepreneurial potential.

Unit 3 of the training materials prepared for the JoInME program describes the process of defining business ideas in more detail.

Creating teams of students

Dividing the students into teams is primarily done based on two main principles:

- self-selection and interest: students are encouraged to express their preferences and interests regarding the project or business idea they would like to work on. Students with similar interests are more likely to collaborate effectively and stay engaged throughout the program;
- international, cultural and multidisciplinary diversity: all students from each partner organization (university) are equally divided among all teams, that is there is a mix of students from diverse cultural backgrounds, nationalities, and academic disciplines in one team.

Individual work of students and work in teams

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Throughout the program, students are encouraged to engage in a variety of individual tasks, allowing them to delve deeper into specific areas of interest and build a strong foundation for their entrepreneurial journey.

However, the main idea is to foster student collaboration in international teams, where each team unites around a single business idea to collectively work on the creation of a comprehensive business plan. Each team engages collaboratively in workshops and hands-on exercises to apply the concepts learned directly to their business plans.

An essential part of the teamwork is done without intrusions from teachers or industrial experts: students learn to work on real-life case studies, conduct in-depth market research, and develop their unique business ideas. This self-paced exploration enables participants to harness their creativity and problem-solving abilities, enhancing their capacity to tackle complex challenges in the rapidly evolving AI landscape.

Facilitating good collaboration (teambuilding exercises)

To have a strong and well-organized team, some teambuilding exercises may be suggested. Exercises should be chosen by the lecturer or organizer of the seminar considering the number of members in a team, time limit, aim of the exercise (e.g., get to know each other or problem solving), and available online tools. There are plenty online exercises/games and ideas for teambuilding (e.g., https://teambuilding.com/blog/online-team-building-activities) that are free of charge. Below we present a few examples suitable also for virtual teambuilding.

- ***Icebreaker BINGO***

https://teambuilding.com/blog/icebreaker-bingo

Category: get to know/icebreaker/teambuilding.

Set-up: break-out room for each team; each team member solves the puzzle using their own screen, but they stay in the same virtual room for talking.

Rules of the game/exercise: the organizer prepares and hands out randomized cards full of personal prompts and questions (examples and ideas for questions can be found following the link provided above). Then members in each team are given some time to talk to each other and they must mark each square with the name of another team member who fits the description. The first team member with five squares in a row and shouts out Bingo! wins the round. Alternatively, Blackout Bingo can be played - instead of a straight line, team members must fill the board completely or do any kind of shape (e.g., diamond or x-shape).

- ***Jigsaw Puzzles (multiplayer)***

https://www.jigsawexplorer.com/multiplayer-jigsaw-puzzle-games/

Category: teambuilding/problem solving.

Set-up: break-out room for each team; each team member solves the puzzle using their own screen, but they cooperate by talking.

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Rules of the game/exercise: the organizer indicates (provides a link to) a chosen jigsaw puzzle picture (can be the same or different for each team). All members in each team collaborate simultaneously in a multiplayer mode by selecting and dragging puzzle pieces, and putting the picture together.

- ***Escape Rooms***

https://teambuilding.com/blog/free-online-escape-rooms (e.g., The Midnight Express - https://www.escape-the-crate.com/subscriber-exclusive-escape-the-midnight-express)

Category: teambuilding/problem solving.

Set-up: break-out room for each team; one team member (leader) shares their screen; all team members solve the puzzle together by looking at the same shared screen.

Rules of the game/exercise: the organizer indicates (provides a link to) a chosen virtual escape room adventure (preferably the same for each team), lets the teams to get acquainted with the setup and storyline, and sets the time (if a clock is not integrated in the game) for solving the riddles/puzzles. All members in each team collaborate by talking and trying to solve each riddle/puzzle together to "unlock" doors. Teams that manage to solve the riddles/puzzles and "escape the room" in given time, win; other teams do not finish the game after time is up.

Grading system

The grading system in the program is designed to assess students' performance and progress effectively. Given the comprehensive nature of the entrepreneurship training, a multi-faceted grading approach may be adopted to holistically evaluate students' achievements. Here are some potential components of the grading system:

- Business plan: the quality, feasibility, and innovation of the business plan is evaluated by teachers and industrial experts, it is the most significant factor in determining the final grades.
- Individual assignments: the quality of each assignment completed throughout the program.
- Teamwork and collaboration: as the program emphasizes international team collaboration, an evaluation of students' ability to work effectively in diverse teams can be included. Peer assessments and team feedback may be used to gauge students' teamwork and leadership skills.
- Participation and engagement: actively participating in class discussions, workshops, and group activities can demonstrate a student's level of engagement and interest in the subject matter.
- Final presentation: the quality of the presentation and students` pitching skills, ability to communicate business ideas effectively to the jury can be evaluated A final exam or a culminating project can be administered to test students' overall comprehension of the course materials and their ability to apply the knowledge gained.

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The number of ECTS credits could range from 2 to 6 ECTS credits, depending on the depth and scope of the content covered, the intensity of the coursework, and the expected workload for students. Generally, one ECTS credit is equivalent to 25-30 hours of student work, including lectures, self-study, assignments, and examinations.

Visits to companies

It would be beneficial for students to visit various types of companies at different stages of the program to gain practical insights and real-world exposure (for more information on this topic see Joint training program on Entrepreneurship in the field of AI for Industry 5.0). Visiting early-stage startups can provide students with an understanding of the challenges and opportunities faced by new ventures in the AI industry. They can learn about innovative business ideas and witness the process of building a startup from the ground up. A visit to AI-focused incubators that support and nurture early-stage startups can provide valuable insights into the incubation process and how these organizations help startups grow. Scale-up companies that have successfully grown beyond the startup phase can offer students insights into scaling AI businesses. Students can learn about the strategies and technologies employed by these companies to achieve rapid growth. Engaging with AI accelerators can expose students to intensive mentoring, networking opportunities, and potential funding sources that accelerate the growth of AI startups. Visiting established AI companies in various industries can give students a broader perspective on how AI is applied across different sectors. These visits can highlight real-world use cases and the impact of AI on Industry 4.0/5.0.Multinational corporations that have embraced AI technologies can provide students with insights into how large enterprises integrate AI solutions into their operations and decision-making processes. AI research labs, either within universities or industry-focused institutions, can expose students to cutting-edge AI research and emerging technologies. Students can also visit innovation centers that showcase the latest advancements in AI for Industry 4.0/5.0. These centers often host demonstrations and interactive exhibits.

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The visits to these companies can be strategically scheduled at different stages of the training program to align with the topics covered and to reinforce the theoretical knowledge with practical experiences. For example, early-stage visits can inspire students at the beginning of the program, while later-stage visits can demonstrate the application of AI concepts learned throughout the course. The visits can serve as opportunities for students to network with industry professionals and potential future employers.

Organizing Final Jury

Organizing the jury for the final presentation of the business plans is a crucial aspect of the training program. The jury plays a vital role in evaluating the students' business ideas and plans, providing feedback, and selecting winning projects.

It is important to ensure that the jury panel comprises experts with diverse backgrounds and expertise relevant to the fields covered in the program, including professionals from AI, entrepreneurship, business management, finance, marketing, legal, and industry-specific domains.

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Thus, representatives from partner organizations: companies, accelerators, or chambers of commerce can be invited to join the jury. Academics and researchers with expertise in AI and entrepreneurship can complement the practical expertise of industry professionals with deep understanding of the latest trends, research findings, and theoretical frameworks, as well as possibility and feasibility of the business solution`s technical implementation offered by the students.

The jury members should be provided with the necessary background information about the program, the topics covered, and the evaluation criteria beforehand.

Preparing presentations for the Final Jury

The presentation prepared by students should be clear, concise, and engaging. Visual aids, charts, and infographics can help make the presentation more impactful. The length of the presentation may vary based on the program's guidelines, but it is generally kept within a reasonable timeframe (usually around 20-25 minutes) to keep the audience's attention and facilitate a smooth flow of the event.

Business plan presentations are typically organized as a slide deck. PowerPoint or other presentation software is commonly used to create visually engaging and informative slides.

The presentation begins with an introduction of the student team members and a brief overview of their business idea. This sets the context and engages the audience from the start. Then the team identifies the problem or opportunity their business idea aims to address. They present the market gap or challenge they have identified and explain why it is relevant and significant. Then the team provides a detailed description of their AI product or service, including its features, functionalities, and benefits to customers. The value proposition highlights the unique selling points and advantages of the proposed solution. The team explains how their AI-based product or service stands out in the market. The next part is market analysis: the team presents market research, target customer segments, competitor analysis, and a go-to-market strategy.

The presentation should outline the business model, revenue streams, pricing strategies, and cost structures. It explains how the business intends to make money and achieve profitability. That`s why the financial projections are shown to the jury. They include revenue forecasts, projected expenses, profitability analysis, and any required funding for initial setup and growth.

The team should also explain their marketing and sales plans to attract customers and grow the business. This may include digital marketing, partnerships, and customer acquisition strategies. Details about the operational aspects, including team structure, technology requirements, and production processes, are also discussed.

In conclusion students can highlight the potential positive impact of their AI-based business idea on the target market, society, and the environment. Additionally, they can show how the business aims to be sustainable in the long term. The presentation can also conclude with a summary of the key points and a call to action, such as seeking funding, partners, or support.

After the presentation, there is typically a question-and-answer session where the jury and audience can seek clarifications and gather more information.

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Awarding the winners

After all presentations are completed, the jury should convene to deliberate and select the winning teams based on the evaluation criteria.

They should also provide constructive feedback to the participants after the presentations to help them understand their strengths and areas for improvement.

Awarding the winners can include recognition of the top-performing teams and also awarding prizes, certificates, or other incentives to motivate and acknowledge students` efforts.

Students feedback

Obtaining students' feedback after the completion of the program is crucial for a cyclical process of continuous improvement. By listening to students and acting on their feedback, the program can evolve and remain relevant to the needs of future cohorts. Students` feedback provides valuable insights into the strengths and weaknesses of the program. It helps identify areas that need improvement, allowing organizers to refine and enhance future iterations of the training program.

JoInME program collects students` feedback “on spot” – during the implementation of the program and in several months after its completion. The questionnaires are available in the annexes.

II. JoInME Skills Retention Service Platform

To be developed later (months 28-29 – Feb – March of 2024)

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