UHK BOOTCAMP

METHODOLOGY

UHK Bootcamp

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The project which is financed through **EEA Grants** (www.eeagrants.org), is institutional cooperation between **University of Hradec Králové** and Oslo Metropolitan University. The project aims at the transfer of technology, intellectual property protection and support of spin-off companies and connection between academia and bussines.

UHK started cooperation with OsloMet in 2018 and in 2020 the cooperation was deepened with the project "The technology and knowledge transfer based on Norway-Czech cooperation". This project is a follow-up and complementary to the above-mentioned project The UHK Bootcamp. As part of the previous cooperation, the management of UHK got acquainted with the Bootcamp concept, regularly organized by OsloMet and Simula Research Laboratory OsloMet and Simula Garage OsloMet, a technology and knowledge transfer incubator for early-stage technology-intensive start-ups and spin-offs, with the purpose of providing a working and breathing space for entrepreneurs to transform ideas into successful businesses. The content of the Bootcamp is focused on the development of spin-offs and effective technology transfer and transfer of knowledge. Thanks to the fruitful cooperation in the past years, mutual cooperation has proven to be very interesting for both universities, and thanks to the trust that both institutions have built, there was open a unique opportunity to bring from Norway this holistic support concept spin-off designed as a Bootcamp for the transfer of technology to the environment of Czech universities. The aim of this project is to enable UHK representatives to participate in the Bootcamp organized at OsloMet and subsequently share their experience with Norwegian partners with the aim of transferring this concept to the Czech university environment.

The main goal of the project is to strengthen human capital and knowledge in the Czech Republic and Norway. By implementing this project, the partners contribute to the overall objectives of reducing economic and social disparities within the European Economic Area and strengthening bilateral relations between Czech education and Norwegian education in the field of technology transfer and intellectual property protection and spin-off settings. Results at the bilateral level and cooperation will lead to improved mutual knowledge and understanding, and the partnership will have a significant impact on wider cooperation. Cooperation between UHK and OsloMet will definitely deepen with this project.

This publication was created as an output of the project solution and its aim is to set the methodological approach to the organization of innovation Bootcamp in academia enviroment.

Content

1 Introduction

This methodology was created as one of the outputs of the above-mentioned project, it is based on the experiences of both partners University of Hradec Kralove UHK and Oslo Metropolitan University OsloMet, and it is also based on their own experience with the organization of a Bootcamp focused on technology transfer, intellectuall property, enetepreneur minset and topic connecting with innovation in academia and bussines. which was running in frame of the project and took place in April 2024.

This methodology has two parts, the first part is focused on the organization of the Bootcamp in general, the second part is focused on specific content when planning the Bootcamp in Czech university environment.

This methodology provides advice to the organization or to the individuals who has been asked to establish or renew a Bootcamp. It is focused on various aspects of organisation with a number of practical examples to ensure its successful launch.

More experienced readers can compare their own approach against this methodology and suggestions. The methodology began with a general description of the event concept. We intoduced the background of the bootcamp and offer answers to the most important questions that a university (or educational organization) should ask itself when considering starting a boot camp. The methodology is focused also on the various possible organisational structures and ways in which to promote commitment to the a boot camp among the various stakeholders. There is also an important question about the finance issue and what budget is required and how will the course fees should be set.

Based on experience of Bootcamp which was running in frame of the above mentioned project we are bringing the ideas how to deal with various important logistical issues, aspects and deadlines, and offering a suggested logistic plan and how to attract potential students and considers the communication requirements before, during and after the Bootcamp.

Methodology offer a step-by-step approach to setting up a succesfull Bootcamp

Bootcamp focused on innovation is a set of activities and processes that lead to the costing of knowledge outcomes of universities and other research organizations on the market. These are mainly results of research and development (R&D); however, includes other outputs of universities that can be commercialized in the form of providing various professional services by selling intellectual outputs to industry. Generally speaking, innovation to bussines is for university very important and each researcher and also students; especially Ph.D. students

should know about the possibilities of bringing the intellectual outputs to the industry. With this topic coming various problems and tasks which must be effectively solved. The Norwegian partner has a long tradition and large experience in this field and is willing to share this knowledge with the Czech partner and together was created a unique Bootcamp concept which is focused on supporting enterpreneur mindset among academia.

1.1   Bootcamp definition

"Boot camp or Bootcamp" can refer to various intensive training programs, each with a different focus. Innovation Bootcam is a specialized course that is organized mostly by the universities themselves during the year, mostly during the academical year.

The term " bootcamp " originally comes from the military and has evolved over time to include various types of intensive training programs. Here's a brief history and origin of the concept.

The concept of a boot camp as an intensive training program started in the military. The term "boot" is thought to refer to new recruits, possibly derived from the colloquial term "boot" for someone who is inexperienced or a rookie. It might also relate to the boots worn by soldiers, symbolizing their entry into military service. During World War I and World War II, the need for quickly training large numbers of soldiers led to the establishment of concentrated training programs. These programs were characterized by rigorous physical training, discipline, and basic combat skills.

Evolution to Civilian Use

The concept was adapted in the late 20th century for civilian use and there are bootcamps in many various focus. For exaplme Corporate and Skill-Based Boot Camps. The term "boot camp" was further broadened to include intensive training programs in various fields. Coding Boot Camps: Starting in the early 2010s, coding boot camps emerged to meet the growing demand for software developers. These programs offer accelerated learning in programming and software development. Corporate Bootcamps: Businesses adopted the boot camp model to train employees quickly in new skills, leadership, or company-specific knowledge.

Bootcamps are the future of education

Bootcamps are the future of education and retraining. Recently, it has been inflected more and more often. It is a phenomenon abroad, but in the Czech Republic it is still in its infancy. But this type of education also has a great future here. This is one of the most effective forms of

retraining, during which you will acquire new skills and knowledge in an extremely short time. Bootcamp will help to launch student´s career.

Innovation Bootcamps are designed to be high-impact, providing participants with the tools and confidence to drive innovation and create meaningful change in their respective fields.

Of course, students' free time cannot be filled only with classes, so bootcamps are often combined with other activities, gaining practical experience in the particular field. Bootcamp are organized by both domestic and foreign institutions and usually focus on a certain area of interest, for example IT programming, computer science, engineering, bussines and many other topics. The concept of bootcamp can be offered by several different types of institutions, schools, research institution, very often by innovation centre or innovation incubator, or they can be provided on the comercial base by the educational comepanies or it can be held by firms for their employee or company´s trainee. Bootcam at university is directly linked to the content of the university's regular degree courses or some area of academic profile for which it is particularly well known. Alternatively, the programme may be more general, designed to allow the attending students to pursue their own personal development rather than formal qualifications.

1.2   Innovation Boot Camps

Special category are are bootcamps which are focused on special part of innovation. Drawing from the success of other boot camp formats, innovation boot camps were created to foster creativity, entrepreneurship, and innovative thinking.

These programs are designed to rapidly equip participants with the skills needed to generate and implement innovative ideas, often through hands-on, project-based learning.

Key Characteristics of Boot Camps

- Intensity: All bootcamps share a focus on intense, immersive training over a short period.
- Discipline: They often include elements of discipline and structure to maximize efficiency and results.
- Practical Skills: Emphasis on practical, hands-on learning and real-world application.

An "Innovation Bootcamp" is a specialized, intensive training program designed to foster creativity, entrepreneurship, and the ability to generate and implement innovative ideas.

Here are the key aspects of an innovation Bootcamp.

Purpose: To equip participants with the skills and mindset needed to innovate within their organizations or launch new ventures.

Participants: Often targeted at entrepreneurs, business professionals, corporate teams, and students interested in innovation and entrepreneurship.Duration: Typically ranges from a few days to several weeks.

Key Components are following.

Idea Generation and Creativity:

- Techniques for brainstorming and generating novel ideas.
- Encouraging creative thinking and breaking conventional patterns.

Design Thinking:

- Understanding user needs and problem-solving from a user-centric perspective.
- Emphasis on empathy, ideation, prototyping, and testing.

Lean Startup Methodology

- Principles of building startups efficiently by developing a Minimum Viable Product (MVP).
- Emphasizes iterative development, customer feedback, and pivoting when necessary.

Business Model Development:

- Creating and validating business models.
- Tools like the Business Model Canvas to map out value propositions, customer segments, revenue streams, and more.

Prototyping and Product Development:

- Turning ideas into tangible prototypes.
- Methods for rapid prototyping and product testing.

Pitching and Presentation Skills:

- Techniques for effectively presenting ideas and business plans to stakeholders, investors, or potential customers.

- Crafting compelling pitches and storytelling.

Collaboration and Teamwork:

- Working in teams to combine diverse skills and perspectives.
- Exercises to improve communication, collaboration, and problem-solving within teams.

Mentorship and Networking:

- Access to mentors with experience in innovation and entrepreneurship.
- Opportunities to network with industry professionals, investors, and fellow participants.

Outcomes of succesfull Bootcamps focused on innovation are skill development, enhanced ability to think creatively and innovatively, and apply these skills in real-world scenarios. Practical experience are hands-on experience in developing and pitching new ideas and products, networking, building connections with mentors, industry experts, and like-minded peers, business readiness: participants often leave with a validated business idea or a clear plan for implementing innovative solutions within their organizations.

Innovation Bootcamps are rather a short-term, lasting from about several days up to six weeks. We can come across also with Bootcamps lasting 4 days from Monday till Thursday or we can see Bootcamps as a prolonged weekend Thursday till Sunday. The program and price also depend on the duration, content and social activities. Due to the limited number of participants, it is important to apply for bootcamps in time, application deadlines can be from half year till one week before. In addition to personal data, the application may also include a CV (sometimes in a foreign language, usually in english because boot camps is very often international), a motivation letter, or a study certificate. Communication usually takes place electronically, and participants will receive detailed instructions a few days before departure. After arriving at the place, there will usually be an introduction to the other participants, lecturers and the place where the camp (course) will take place. The time schedule of the stay is also presented to the participants. Classes usually take place in the morning, after lunch there are practical exercises. The evening program is not restricted in any way, and participation in classes does not have to be strictly observed either. The basis is to spend free time fruitfully in an environment of similarly focused students (participants) and enjoy whole bootcamp as a complex event.

The history of innovation bootcamps began in 2011, when the very first one was opened in the USA. A huge boom came shortly after. The numbers also prove this. Six years later, there were over 95 organizers offering full-time retraining courses in the United States. The US Department of Education responded to this and announced that student loans can now also be used to cover

the bootcamp tuition. Previously, they were intended only for university education. The phenomenon spread quickly and reached Western Europe from across the ocean. The Czech Republic is resisting so far, but you can still find the first swallows there, even in the field of IT with a focus on programming.

The most effective way to learn in the case of this type of training, it's not just about speed. Its popularity lies mainly in practical teaching and its success. It is a well-known fact that if a person actively does something, he remembers 60 to 70% of the learned skill. On the contrary, the student will retain only 20 to 30% of the material in his head from the theoretical lecture. In the case of self-study and reading, it is a mere 10 to a maximum of 20% of the material. Therefore, the bootcamp effectively combines practical teaching with theory in order to achieve maximum effect and to best prepare its graduates for work in a new field.

Popular Innovation Boot Camps
Stanford d.school's Design Thinking Bootcamp: Focuses on design thinking and innovative problem-solving.
MIT Innovation Bootcamp: Offers immersive training in innovation and entrepreneurship, leveraging MIT's resources and expertise.
Google's Creative Skills for Innovation (CSI) Lab: Aimed at fostering creativity and innovative thinking within organizations.

2　Bootcamp at OsloMet

OsloMet is Norway's third-largest university with a student body of approximately 22,000 students, 2 200 employees, 48 Bachelor's programmes, 33 Master's programmes and 6 PhD programmes. OsloMet seeks to be an urban university with regional and national responsibilities and with a clear international character. Its mission is to deliver knowledge to solve the future challenges of the welfare society. The university consists of four faculties and nine research centers: Faculty of Health Sciences, Faculty of Education and International Studies, Faculty of Social Sciences and Faculty of Technology, Art and Design, as well as Norwegian Social Research (NOVA), Work Research Institute (AFI), Consumption Research Norway (SIFO), Norwegian Institute for Urban and Regional Research (NIBR), Centre for the Study of Professions (SPS), Centre for Welfare and Labour Research, Centre for Work Inclusion (KAI), School of Management and National Centre of Multicultural Education (NAFO). Through close interaction between research, education, society, business and industry, the university aims to be a leading provider of research based knowledge to a welfare society that is becoming increasingly more global. In collaboration with Simula Research Laboratory OsloMet hosts Simula Garage which is a technology and knowledge transfer incubator. The organization is an incubator for early-stage, technology intensive startups, with the purpose of providing a working and breathing space for entrepreneurs turning ideas into successful businesses. In this way, OsloMet has large experience with technology transfer and protection of intellectual property which is the main objective of the proposed project. And the experience of OsloMet will play a key role in the project. OsloMet is a natural place for those wanting to connect with the network of researchers, students and technology experts, as well as those who are doing business. University technology transfer offices (TTOs), or technology licensing offices (TLOs), are responsible for technology transfer and other aspects of the commercialization of research that takes place in a university. TTOs engage in a variety of commercial activities that are meant to facilitate the process of bringing research developments to market, often acting as a channel between academia and industry. The partner's involvement in the initiative consists mainly in the preparation of the OsloMet Bootcamp and the sharing of experience and materials for the design of the UHK Bootcamp.

Bootcamp at OsloMet Bootcamp is a program with the aim of teaching students, researchers and other employees at academia how to act and think like an entrepreneur. During the course, the participants received guidance from experienced entrepreneurs and experts from the innovation and technology environment. The main focus has been learning how to verify

a problem through creative entrepreneurial methods. The bootcamp is the result of collaboration between Gründergarasjen and Oslo Met's Business School, Department of Information Technology and Department for Research and Development. During four weeks, the participants work in various interdisciplinary teams, based on their interests and expertise. During the course, participants have taken a deep dive into current problems, with the aim of forming a thorough understanding of the problem. On the last day of the course, the participants are challenged to pitch their issues in front of an audience and an external panel. The aim of the presentations is for the participants to show off the work they have worked on, as well as get constructive feedback from outsiders from the business world.

OsloMet works with several stages of startup preparation: foundation, pre-startup, startup, grow.

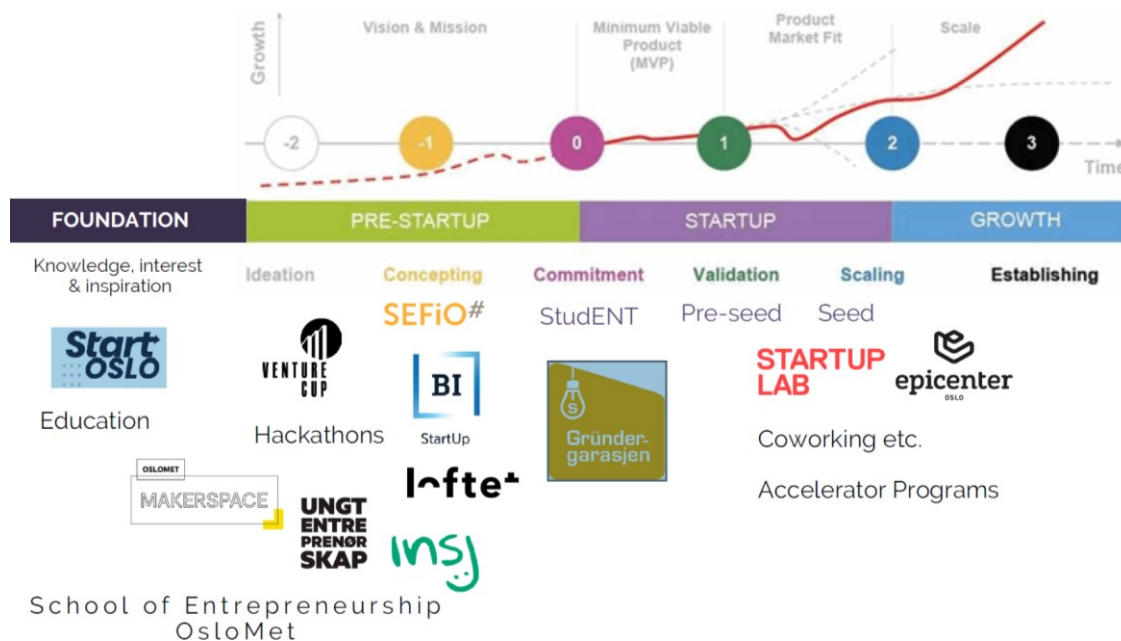*Fig. 1 OsloMet works with several stages of startup preparation: foundation, pre-startup, startup, grow.*

Special department focused on innovation and on connecting business with academia is department called Grunder garage. This is a place where universityś start up have space for grow. There are several departemens and activities: incubator, Bootcamp, innovation services, academci collaboration.
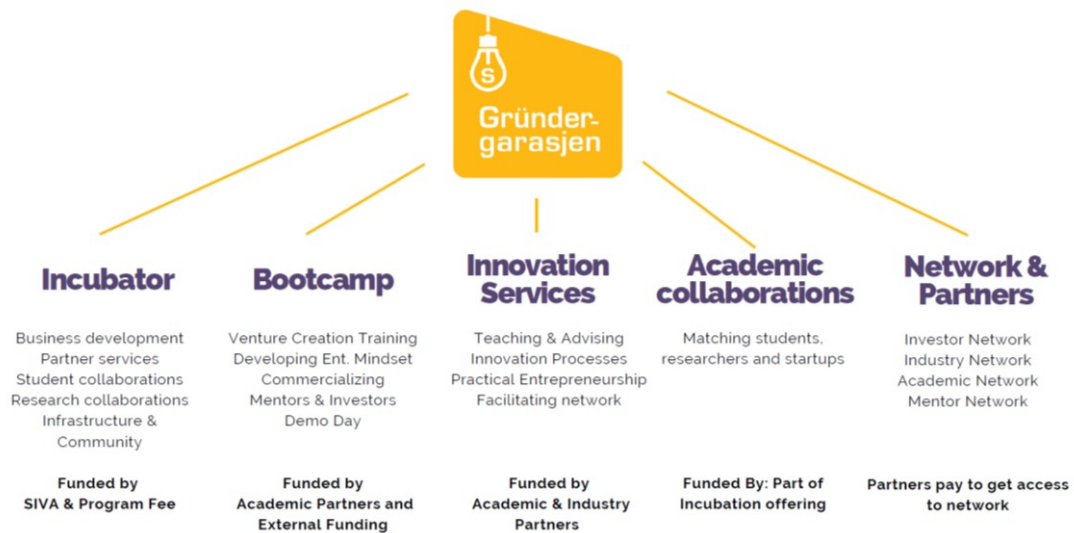
Fig. 2 The Grunder garage activities scheme

2.1   Phase of boot camp at OsloMet

Bootcamp at OsloMet has sever phases which ensure a holistic approach to the transfer of academia innovation to the successful business.

There are four main phases

- **Phase I. Start up track**
- **Phase II. Business model**
- **Phase III. Go to the Market Sales and Metric**
- **Phase IV. Fundraising**

Phase I. Start up track

The main focus is on match making, selection of project to work on and create the teams behind them. First training is focused on the mind set and team building. Large attention is focused on how to things like an entrepreneur. Starting a new business involves navigating a series of steps and milestones, often referred to as the "startup track." This path helps entrepreneurs structure their efforts, validate their ideas, and build a successful company. Main focus is on identification of the problem or need, recognize a gap in the market or a specific problem that needs solving.

In this phase participants generate multiple ideas and potential solutions to the identified problem. One part is conduction market research to validate the need for your solution and gather feedback from potential customers.

Participants clearly articulate how your product or service solves the problem and the benefits it provides to customers.
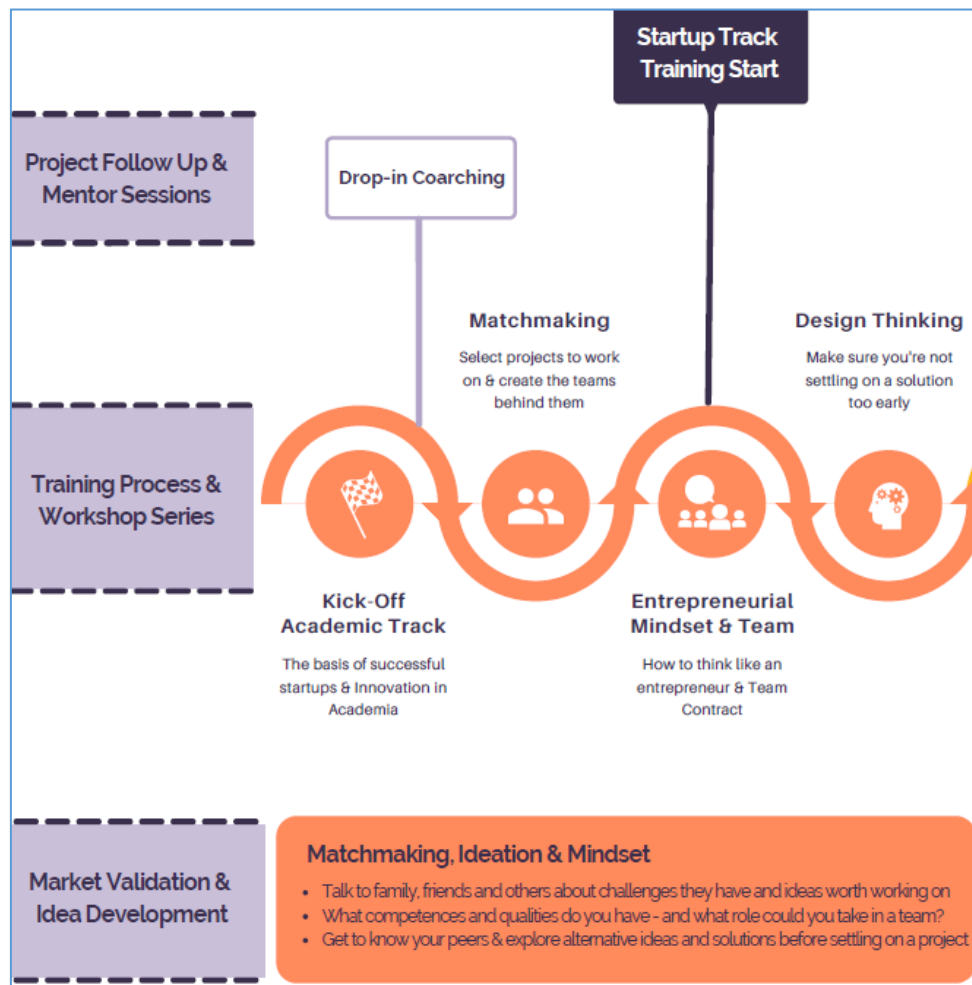
Fig. 3 OsloMet Boot camp Phase I. Start-up track

Phase II. Business model

The second phase is focused on value proposition, participants build their business model, the aim is to definite and determinate the target group on the market. The important part of phase II. Is the IPR issue and the explanation of IPR protection.

Phase III. Go to the Market Sales and Metric

This phase is focused on how to go from zero to product market fit and how to track it. Participants need to obtain the feedback from the market. The do desk research, validation at target group and collecting the feedback to the product.

Phase IV. Fundraising

In this phase participants must answer to the following questions: How much funding will you have to raise, at which valuation and what should the money be spent on? Which funding sources are relevant? Get ready to convince real investors. How much funding will you have to raise, at which valuation and what should the money be spent on? Which funding sources are relevant? Fundraising is the process of gathering voluntary contributions of money or other resources from individuals, businesses, charitable foundations, or governmental agencies. It is a critical activity for non-profit organizations, educational institutions, political campaigns, and other entities that require funding to operate and achieve their goals and **in the final steps participants learn get ready to convince real investors to invest into their proposal.** This is very important part. OsloMet Bootcamp Phases see annex 1.

2.2   Phase of planning Boot camp

Boot camp planning can be divided into several phases. Each phase of planning has its own specifics and tasks that must be fulfilled in the given schedule.

The organization can be divided into several phases which bring clarity and eliminates risks that could appear.

Organizing a boot camp is a very complex matter with many external and internal inputs and the interest of several stakeholders. In order for everything to proceed without problems, it is necessary to divide the preparations and implementation into several phases and to determine the exact milestones for the completion of each stage.

Based on experience in the frame of project there are set up following steps.

Phase of bootcamp - organization
Conception
Advance planning
Feasibility
External preparatory
Implementation
Feedback, evaluation

WEB site, announcement, dissemination

Very important part is announcement, advertisement and communication. The tools to advertise the boot camp are a poster, newsletter, a brochure and the most important is the event´s website.

To give a common identity to the bootcamp is recommended to use a specific format for boot camp to be easily recognizable (content, lay-out, logos) for application forms for students and teachers, a brochure, a flyer, a poster and an evaluation form. This material can be used with local adaptations. Most important is, though, to use the logo of boot camp wherever possible. The special website developed by the boot camp can be used to provide all necessary information to the teachers and students.

The brochure/website contains the following information:
- general description of the boot camp, the theme,
- date
- venue
- programme, structure and content
- the academic committee
- introduction of keynote speaker
- names of the teaching staff and their introduction (short extract from CV)
- day-to-day schedule
- general information on the target audience, language
- requirements for the participants
- criteria of participant selection
- participation costs
- application procedure
- deadlines for application
- type of accommodation
- travel information
- information about the host university
- information about the project, if the boot camp is taking place in the frame of particular wider project
- recognition of results – credits, certificate, euro pass, university confirmation of attendance etc.

2.3   Stakeholders

All activities in a university enviroment including a boot camp involves number of stakeholders, who is important to involved and obtain their support. But not only in university enviroment but also on local, regional or national level. Sometimes also comercial part as companies, firms are involved. The process of setting up and running a boot camp also demands a large crew, known collectively as the stakeholders.

The boot camp director has dealings with three main stakeholder groups:

1. The university authorities: the rector, vice rector, president of the institution

2. Deans

3. Heads of departments

4. Region representatives of bussines

Involving the university authorities is crucial in setting up a boot camp, but equally important once the programme is running. It is also important to involve stakeholders in the social activities that accompany the event.

ADDED VALUE FOR PARTICIPANTS OF BOOTCAMP

- A unique educational event for employees of research organizations and others interested in the given issue

- Participants from different kinds of organizations

- Top lecturers and guests for the given areas

- Limited number of participants, interactive way of lectures

- Discussion, group work

- Concrete examples, solutions to real situations

- Sharing good and bad practice

- Meeting people who are in a similar situation

- Making contacts, time for informal discussion

2.4 An overview of the content, method and structure of an innovation boot camp at OsloMet

1. Introduction to Innovation

   Definition and Importance: Understanding what innovation is and why it is crucial in today's fast-paced, competitive business environment. Types of Innovation: Exploring different kinds such as product, process, business model, and service innovation.

2. Innovation Frameworks and Methodologies

   Design Thinking: Learning about human-centered design, empathy mapping, ideation techniques, prototyping, and testing. Lean Startup: Concepts of building minimum viable products (MVPs), validated learning, and pivoting.

   Agile Methodology: Understanding how agile principles can be applied to innovation projects.

3. Ideation Techniques

   Brainstorming: Techniques for effective brainstorming sessions.

   SCAMPER: Using the SCAMPER technique (Substitute, Combine, Adapt, Modify, Put to another use, Eliminate, and Reverse) for idea generation.

   Mind Mapping: Visual tools for organizing thoughts and ideas.

4. Customer and Market Insights

   Market Research: Methods for gathering market data and customer insights.

   Customer Personas: Creating detailed profiles of target customers.

   Value Proposition Canvas: Identifying and articulating the value proposition of an innovation.

5. Prototyping and Testing

   Rapid Prototyping: Techniques for quickly building prototypes to test ideas.

   User Testing: Methods for testing prototypes with real users to gather feedback.

   Iteration: Using feedback to refine and improve prototypes. For this purpose

6. Business Model Innovation

   Business Model Canvas: Creating and analyzing business models using the Business Model Canvas framework.

Revenue Models: Exploring different ways to monetize innovations.

Go-to-Market Strategies: Planning how to launch and scale innovations in the market.

7. Leadership and Team Dynamics

Innovative Leadership: Developing leadership skills that foster a culture of innovation.

Team Collaboration: Techniques for building and managing high-performing innovation teams.

Conflict Resolution: Strategies for managing and resolving conflicts within teams.

8. Pitching and Presentation Skills

Pitch Development: Crafting compelling pitches for investors, stakeholders, or internal decision-makers.

Storytelling: Using storytelling techniques to make pitches more engaging and persuasive. Presentation Skills: Enhancing public speaking and presentation delivery skills.

9. Real-World Application

Case Studies: Analyzing successful and failed innovation case studies to learn best practices and common pitfalls.

Live Projects: Working on real or simulated innovation projects to apply learned concepts.

Mentorship and Feedback: Receiving guidance and feedback from experienced mentors and peers.

10. Reflection and Next Steps

Evaluation: Assessing what was learned and identifying areas for improvement.

Action Plan: Creating a personalized action plan to implement innovation strategies in participants' organizations or ventures.

Networking: Building connections with fellow participants, mentors, and industry experts.

3 Innovation Bootcamp and its content

OsloMet works with several stages of start-up preparation and adapts its boot camp concept accordingly. **Based on practical knowledge directly at the University of OsloMet, a conclusion was made regarding the boot camp concept at UHK.**

A concept of UHK innovation boot camp is immersive, hands-on, and collaborative, culminating in a final presentation or pitch session where participants highlight their projects and receive feedback from a panel of judges or mentors. These programs can vary in length from a few days to several weeks and are offered by various institutions, including universities, business schools, and professional training organizations.

The following blocks were chosen as the main ones:

• **Innovation in Academia, Matchmaking**
• **Bussines plan**
• **Intellectual property protection patent, utility model, trademark, IPR strategy for business**
• **Design Thinking & Value Proposition, SWOT & Pitch**
• **Entrepreneurial Mindset & Team Building**

The aim of this methodology is not to provide contents of individual lecture but to provide an outline and an overview of the most important topics which should be included in this type of boot camp. Considering that this is a boot camp to which interesting speakers and lecturers are invited, the topics will be tailored made according to their focus and field.

3.1 Profile of a lecturer of innovation bootcamp

Very important is the profile of speakers involved in boot camp. This methodology provides the description of profile of these representatives.

Lecturer in boot camp should ideally have a combination of academic qualifications, practical experience, and certain personal qualities.

Profile includes following aspect:

- Educational Qualifications
- Professional Experience
- Academic Experience
- Skills and Competencies
- Interpersonal Skills
- Personal Qualities
- Networking and Engagement

Based on research among successful boot camps here are a good practice of profile of an ideal candidate:

Educational Qualifications

- Advanced Degrees**:**
  - **Ph.D.**: A doctorate in Business Administration, Management, Economics, or a related field is often required for tenure-track positions.
  - **MBA**: A Master of Business Administration can also be valuable, especially if the lecturer has significant professional experience.
  - **Relevant Certifications**: Additional certifications such as CFA, CPA, PMP, etc., can enhance their expertise and teaching credentials.

Professional Experience

Industry Experience:

  - **Work Experience**: At least 5-10 years of experience in relevant industries or sectors. This could include roles in management, consulting, entrepreneurship, or specialized fields like finance, marketing, or operations.
  - **Leadership Roles**: Experience in leadership positions, such as CEO, CFO, VP, Director, etc., to provide practical insights and real-world applications of business theories.
  - **Entrepreneurship**: Experience in starting and running a business can be highly valuable, as it allows the lecturer to share first-hand entrepreneurial challenges and strategies.

Academic Experience:

- **Teaching Experience**: Prior teaching experience at the university level, preferably with demonstrated excellence in pedagogy and student engagement.
- **Research Publications**: A strong record of research and publications in reputable journals. This helps in staying updated with the latest developments in the field and contributing to academic discourse.
- **Curriculum Development**: Experience in designing and developing courses, including online and hybrid formats.

Skills and Competencies

Communication Skills:

- **Presentation Skills**: Ability to deliver engaging and clear lectures, facilitate discussions, and use multimedia tools effectively.
- **Writing Skills**: Proficiency in writing academic papers, case studies, and course materials.

Interpersonal Skills:

- **Mentorship**: Ability to mentor and guide students in their academic and professional development.
- **Collaboration**: Working well with colleagues, participating in faculty meetings, and contributing to the academic community.

Innovative Thinking:

- **Adaptability**: Ability to incorporate new teaching methods, technologies, and real-world developments into the curriculum.
- **Problem-Solving**: Strong analytical and problem-solving skills to help students understand complex business issues.

Personal Qualities

- **Passion for Teaching**: A genuine interest in educating and inspiring students.

- o **Lifelong Learning**: Commitment to continuous professional development and staying current with industry trends.
- o **Integrity and Ethics**: Upholding high ethical standards in both professional and academic settings.
- o **Cultural Awareness**: Understanding and respecting diverse cultural perspectives, especially important in a globalized business environment.

Networking and Engagement

- **Industry Connections**: A well-established network of industry contacts to facilitate guest lectures, internships, and collaborative projects.
- **Professional Affiliations**: Membership in professional organizations such as the Academy of Management (AOM), American Marketing Association (AMA), or similar bodies.

Example Profiles
Expert Profile I.
Education: Ph.D. in Business Administration from a top-tier univerzity, MBA from a leading business school.
Experience: 10 years as a management consultant at a major firm, 5 years as a lecturer and researcher.
Skills: Excellent communicator, published author, experienced in digital teaching methods.
Qualities: Passionate about teaching, ethical, lifelong learner.
Expert Profile II.
Education: MBA with a focus on entrepreneurship, various industry certifications.
Experience: Founder of a successful tech startup, 15 years in the tech industry, 5 years teaching entrepreneurship and innovation.

o **Skills**: Hands-on experience, strong mentorship skills, adept at integrating real-world cases into the curriculum.
o **Qualities**: Innovative thinker, culturally aware, committed to student success.

By combining academic excellence with practical experience, effective communication, and a passion for teaching, a business lecturer can provide students with the knowledge and skills they need to succeed in the business world.

Finding suitable lecturers for an innovation bootcamp is very difficult, given that specialists from practice have limited time options when they can devote themselves to teaching, it is necessary to set the timetable approximately half a year in advance.

3.2   Profile of participant

A profile of boot camp participants can vary widely depending on the program (undergraduate, MBA, executive education, etc.) and the institution. However, here is a general profile outlining key characteristics and backgrounds for participants in business academia:

Undergraduate Business Students

Educational Background: **High School Graduates:** Typically, recent high school graduates with a strong academic record, particularly in subjects like mathematics, economics, and social sciences. College Transfers: Some students may transfer from other colleges or programs, often bringing diverse academic backgrounds. Age: Typically, 18-22 years old.

Diversity: A mix of genders, ethnicities, and nationalities, reflecting the institution's inclusivity and outreach. Skills and Interests: Analytical Skills: Strong analytical and quantitative skills. Leadership Potential: Involvement in extracurricular activities, such as student government, clubs, or sports, indicating leadership and teamwork abilities. **Career Aspirations**: Interested in pursuing careers in various business fields, such as finance, marketing, management, entrepreneurship, or international business. Personal Qualities: Motivated and Ambitious: Driven to succeed academically and professionally. Curious and Open-Minded: Eager to learn and explore new concepts and ideas.

Educational Background: MBA Students Educational Background: Undergraduate Degrees: Holders **of bachelor's degrees** in business or related fields (economics, engineering, social sciences). Many programs also accept students from non-business backgrounds. Professional Certifications: Some may hold certifications like CFA, CPA, or PMP. Professional Experience: Work Experience: Typically, 3-7 years of professional experience. Many MBA programs require a minimum amount of work experience. Industry Backgrounds: Diverse industries, including finance, consulting, technology, healthcare, and non-profit sectors. Age: Usually, 25-35 years old. Diversity: High levels of diversity in terms of nationality, gender, and professional background. Skills and Interests: Leadership Skills: Demonstrated leadership experience in previous roles. Career Advancement: Looking to advance to higher management or pivot careers. Entrepreneurial Interests: Many have a strong interest in entrepreneurship and innovation. Personal Qualities: Goal-Oriented: Focused on achieving specific career goals. Networking Abilities: Keen on building a professional network. Strategic Thinking: Capable of high-level strategic thinking and decision-making.

Executive Education Participants Educational Background: Advanced Degrees: Often already hold advanced degrees, such as an MBA or a master's in a related field. Professional Experience: Extensive Work Experience: Typically, 10-20+ years of experience, often in senior management or executive roles. Industry Leaders: Senior professionals from various industries, including C-suite executives, directors, and senior managers. Demographic Profile Age: Generally, 35-55 years old. Diversity: Represents a wide range of nationalities and industries, emphasizing global business perspectives. Skills and Interests: Leadership Development: Focused on enhancing leadership and strategic skills. Innovative Solutions: Interested in learning about new business models, innovation, and advanced management practices. Networking: Eager to expand their professional network with other senior leaders. Personal Qualities: Experienced and Knowledgeable**.** Experienced and Knowledgeable: Deep industry knowledge and experience. Lifelong Learners: Commitment to continuous learning and professional development. Strategic Vision: Ability to think long-term and drive organizational change.

PhD Students Educational Background: Advanced Degrees: Typically hold a master's degree in business or related fields. Academic Excellence: Strong academic record and research background. Professional Experience: Research Experience: Prior research experience, often demonstrated through published papers or research projects. Teaching Experience: Some may have experience as teaching assistants or adjunct instructors. Age: Usually, 25-35 years old. Diversity: A mix of nationalities and academic backgrounds. Skills and Interests: Research Skills: Strong analytical and methodological skills. Academic Interests: Deep interest in a specific area of business research (e.g., finance, marketing, organizational behavior). Career in Academia:

Aiming for a career in academia, research institutions, or as a consultant. Personal Qualities: Curious and Inquisitive: Passionate about discovering new knowledge. Detail-Oriented: Attentive to details and rigorous in research methodology. Independent and Self-Motivated: Able to work independently and manage long-term projects.

This profile outline provides a comprehensive overview of the different types of participants boot camp, each bringing unique experiences and aspirations to their programs.

Boot camp should be housed within universities for several compelling reasons, leveraging the unique environment and resources universities provide to foster creativity, research, and practical application of innovative ideas.

3.3   The proposed lecture for Boot camp

Here is the table of the propossed lecture. It depends on the length of boot camp to make priority of the teaching topic.

Innovation in Academia, Matchmaking
Intellectual property protection patent, utility model, trademark, IPR strategy for business
Bussines plan
Design Thinking & Value Proposition, SWOT & Pitch
Entrepreneurial Mindset & Team Building

Table 1: An overview of the structure of individual designed course chapters

	Scope and depth in the given area	
Lesson	Time allocation per Module	Contents
Innovation in Academia, Matchmaking	4	Motivation for technology and knowledge transfer, key concepts, actors, role in the whole process at the university and beyond. Specification of the outputs of creative activity, the conditions determining whether it is an output of R&D, the method of their financing from public and private sources.
Bussines plan	8	Building a successful business plan requires careful consideration and detailed knowledge of various elements that can impact business. Lessons focused: Understand Target Market, Develop a Clear Value Proposition, Revenue

		Streams: Identify all potential sources of revenue for your business. Key Partners: Identify key partners and suppliers critical to your business operations. Value Chain: Map out the value chain of your business from production to delivery. Introduction to two valuation approaches: intrinsic and relative. In the case of intrinsic valuation, the intrinsic value of the asset (corporate share or IP) is determined by the cash flows that are expected. In a relative valuation, it will be based on how the market values other similar assets. Description of the development of a product, pricing, distribution and communication policies. Consideration of the differences between marketing for the period of market entry and market establishment and then marketing for the successful operation of an established business.
intellectual property protection patent, utility model, trademark, IPR strategy for business	5	Definition of the scope of copyright, specification of the duality of property rights, limitations and exceptions to copyright, combination of protection.
	5	Design Thinking is a powerful approach for tackling complex problems and creating innovative solutions. By focusing on empathy, ideation, prototyping, and iteration, businesses can develop products and services that truly meet the needs of their customers, driving better outcomes and fostering innovation. Understanding SWOT analysis is crucial for effective strategic planning and decision-making. By learning how to conduct

Design Thinking & Value Proposition, SWOT & Pitch		and apply SWOT analysis, you can gain valuable insights into your organization's internal and external environments, leading to more informed and strategic actions. Creating a compelling pitch is crucial for attracting investors, customers, or partners. A well-crafted pitch should be clear, concise, and persuasive, addressing the key aspects of your business or idea.
Entrepreneurial Mindset & Team Building	6	Approaches to developing a business plan, characteristics of the required input data, methods of market analysis, potential target groups and pricing. Description of the development of a product, pricing, distribution and communication policies. Consideration of the differences between marketing for the period of market entry and market establishment and then marketing for the successful operation of an established business. Presentation of financial indicators and procedures for the development of financial plans, determination of input data. Introduction of statistical and dynamic methods.

This is a solid structure for the creation of a bootcamp program, it is possible to discuss some topics more in details and others less. It is also advisable to include specific practical examples from practice.

4   Innovation in Academia, Matchmaking

In this block, it is important to explain to students the process of innovation in an academic environment, introduce them to the basic principles of applied research, cooperation with practice and industry, and then describe to them the possibilities of proof of concept. This block must include a clear explanation of technology transfer and its rules within the university.

It is advisable for this block to be led by someone who has experience with technology transfer at a university, or a member of the commercialization board, or an experienced researcher who has worked with industry, or has founded a spin-off himself.

Higher education is currently confronted by global forces that necessitate innovative research, innovative pedagogies, and innovative organizational structures. For these reasons, we suggest that a theoretical understanding of innovation is imperative for higher education's continued development in the twenty-first century. Grounded in the innovation literature from a variety of academic disciplines, this chapter outlines a conceptual framework in five sections. First, we delineate four imminent trends in higher education that may compel innovative responses. Afterwards, working definitions of creativity, innovation, and entrepreneurship are generated through the clarification of several terms that are related to innovation. Next, we discuss the concepts of sustainable and disruptive innovation by demonstrating how change and innovation has been a consistent fixture of higher education since its inception. Then, we can consider three dimensions of innovation – diversity, intrinsic motivation, and autonomy – that positively impact the ability of individuals working within higher education to be innovative. Finally, we address three additional concepts – time, efficiency, and trust – that are important for a thorough consideration of innovation within an institutional setting.

Innovation is the application of an idea/invention, technology or process to a product/service that will satisfy a specific need and can be replicated at economical cost. Innovation creates value, playing a vital role in growth and social well-being. Mounting economic pressure, environmental challenges, diminishing resources, the exponentially accelerating pace of science and knowledge development, open innovation proliferation call for a deep assessment of academia-industry relationships. Fundamental research as the sole thrust of academia is no longer a sustainable approach. Instead, innovation must focus on the integration of fundamental

and applied research, technology development, new business models and processes, and enhanced social responsibility. Innovation novel blueprint mandates paradigm shifts in mindsets, strategy, research focus, academia-industry relationships, IP policies and government involvement. Key elements include: academia's participation in industrial development teams and technology networks, enhanced support for fundamental and applied research, advanced thesis research conducted in the industry, creation of joint-value programs and resource-sharing, new business models, and enhanced societal responsibility. Academia should also promote the participation of industry representatives in their teaching staff and advisory boards. Special emphasis should be placed on institutionalizing innovation and on the role of small and medium enterprises, promoting their transformation into effective catalysts of change. EU authorities, academia and the food industry should collectively develop a mutual vision for reforming the "old push" curriculum into a "pull" ecosystem that attracts all stakeholders, enabling academia and industry to build trust-based relationships, promoting performance improvements in teaching, learning and entrepreneurship, and increasing social responsibility. Attracting venture capital to drive innovation, incubators and start-ups is also vital. Without compromising on the highest standards, adaptation and taking up these challenges is a necessity. Timeis precious and it is our utmost responsibility to provide leadership, instil confidence, encourage and embark upon this journey to galvanize efforts and institutionalize innovation.

Innovation in academia refers to the introduction and implementation of new ideas, methods, practices, or products within academic institutions that enhance learning, teaching, research, administration, and community engagement. This innovation can involve technological advancements, pedagogical strategies, administrative processes, and collaborations that aim to improve the overall educational experience and outcomes.

A research project is **a scientific endeavor to answer a research question**. Research projects may include:

- Case series
- Case control study
- Cohort study
- Randomized, controlled trial
- Survey
- Secondary data analysis such as decision analysis, cost effectiveness analysis or meta-analysis.

From a feasibility study perspective, the goal of risk management is to increase the project's chance of success. It is important to eliminate those risks that threaten the success of the project and can lead to the financial instability of the company. Risk analysis should not be taken as just another section of feasibility study. It should consider the risks in all parts of this study, from the beginning of project preparation until the final decision on its acceptance or rejection. Identification of risk factors is demanding and mostly takes place on the basis of knowledge, experience, and intuition of workers participating in the project. Workers' experiences with other projects implemented in the past are of great importance. For long-term investment projects that are financially demanding, the risk area is particularly important.

The 3 parts of feasibility study:

- Technology Considerations
- Product or Service Marketplace
- Identification of Specific Market.

Types of feasibility studies:

- Technical feasibility
- Economic feasibility
- Operational feasibility
- Legal feasibility
- Schedule feasibility
- Project scope
- Current analysis
- Requirements.

Proof of concept (POC or PoC), also known as proof of principle, is a realization of a certain idea, method or principle in order to demonstrate its feasibility, or viability, or a demonstration in principle with the aim of verifying that some concept or theory has practical potential. A proof of concept is usually small and may or may not be complete.

These collaborative trials aim to test feasibility of business concepts and proposals to solve business problems and accelerate business innovation goals. Purpose of a Proof of Concept Feasibility Testing: Assess whether an idea or solution is practical and workable. Identify potential issues and challenges early in the development process.

Validation: Confirm that the concept meets the necessary requirements and expectations. Stakeholder Confidence: Provide evidence to stakeholders, investors, or decision-makers that the concept is viable.

Steps to Create a Proof of Concept

Define Objectives
Clearly outline what you aim to achieve with the PoC.
Set specific, measurable goals to evaluate the success of the PoC.
Research and Planning
Conduct thorough research to understand the problem, market needs, and existing solutions.
Develop a detailed plan that includes the scope, timeline, resources, and budget for the PoC.
Design and Development
Create a simple, functional version of the product or solution that addresses the core objectives. Focus on essential features and avoid unnecessary complexity.
Testing and Evaluation
Test the PoC in a controlled environment to gather data and insights.
Evaluate the performance against predefined criteria and objectives.
Gather Feedback
Collect feedback from stakeholders, potential users, and experts.
Use this feedback to identify strengths, weaknesses, and areas for improvement.
Document Results
Compile a detailed report of the PoC process, findings, and outcomes.
Highlight key achievements, challenges encountered, and lessons learned.
Decision Making
Based on the results, decide whether to proceed with full-scale development, refine the concept, or abandon the project.
Present the findings to stakeholders to secure further support or investment.

Benefits of a Proof of Concept

By identifying potential issues early, a PoC can save time and money that might be wasted on unfeasible projects. Testing the concept in a limited scope helps mitigate risks associated with full-scale implementation. Demonstrating a successful PoC can build confidence among

stakeholders and investors, making it easier to secure funding and support. Provides concrete data and insights that inform strategic decisions regarding the project's future.

It is recomended to explain the PoC cycle during the boot camp (see fig. below)
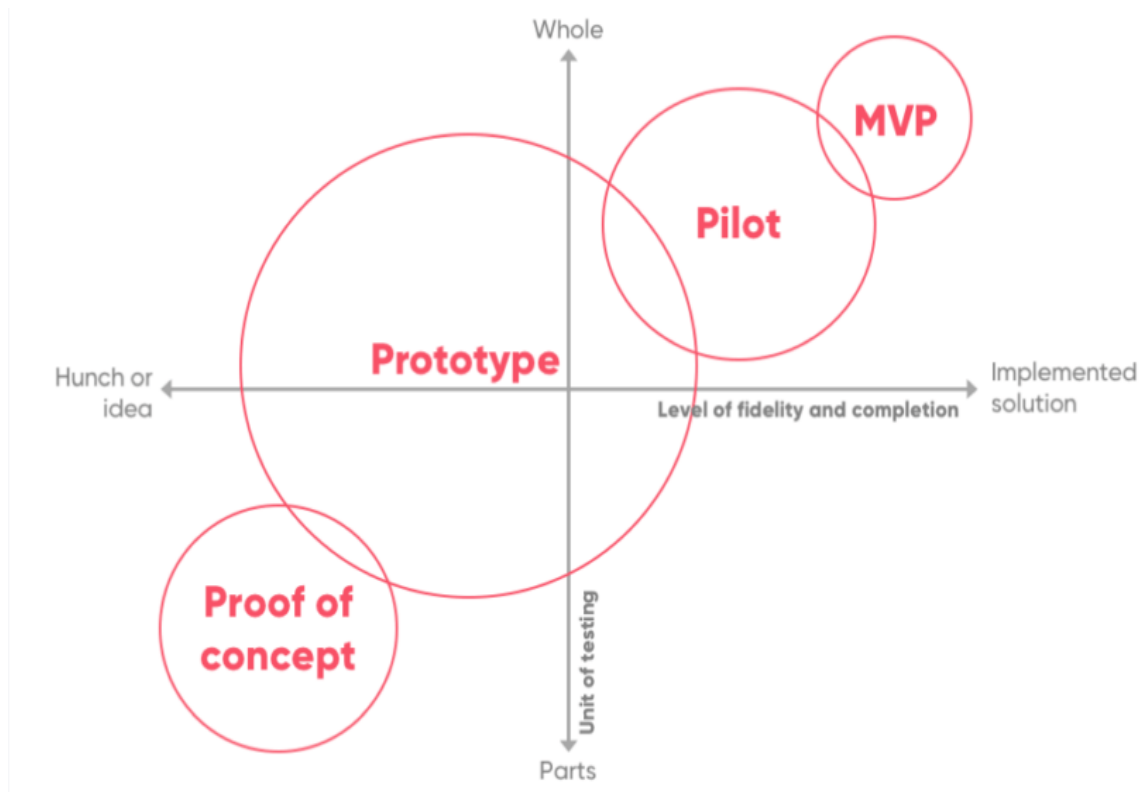
Figure 5: State of change from proof of concept stage to implementation

Source: https://states-of-change.org/stories/proof-of-concept-prototype-pilot-mvp-whats-in-a-name

Matchmaking

Innovation in academia and matchmaking can be thought of as initiatives and platforms designed to connect academic researchers, institutions, and industry partners to foster collaboration, drive research, and accelerate the commercialization of innovations. Here's an overview of how this process typically works and the benefits it brings:

Research and Development (R&D)

Academic Research: Universities and research institutions conduct fundamental and applied research across various disciplines. Interdisciplinary Collaboration: Encouraging collaboration across different academic fields to solve complex problems.

Technology Transfer Offices (TTOs)

Role of TTOs: These offices facilitate the transfer of technology from academic institutions to the marketplace. They manage intellectual property (IP), patent applications, and licensing agreements. Commercialization Support: TTOs provide support to researchers in developing business plans, securing funding, and navigating the commercialization process.

Incubators and Accelerators

Support Structures: Many universities host incubators and accelerators that provide startups with resources such as mentoring, office space, and funding opportunities. Entrepreneurship Programs: Educational programs and workshops aimed at teaching students and faculty about entrepreneurship and innovation.

Industry-Academia Partnerships

Collaborative Projects: Joint research projects where academia and industry work together on solving industry-specific challenges. Sponsored Research: Companies sponsor research projects that align with their strategic interests, providing funding and resources.

Innovation Hubs and Networks

Innovation Hubs: Physical or virtual spaces where academia, industry, and government entities collaborate on innovation initiatives.

Research Networks: Networks and consortia that bring together researchers from different institutions and disciplines to collaborate on large-scale projects.

Matchmaking Platforms

Digital Platforms: Online platforms that facilitate connections between researchers and industry partners. Examples include InnoCentive, Innovate UK, and academic-industry matchmaking portals. Events and Conferences: Innovation fairs, conferences, and networking events where researchers can meet potential industry partners.

Internships and Fellowships

Industry Placements: Opportunities for students and researchers to work in industry settings, gaining practical experience and fostering relationships with potential collaborators.

Exchange Programs: Programs that allow industry professionals to work in academic settings and vice versa, promoting knowledge exchange and collaboration.

Accelerated Innovation

Collaboration between academia and industry can speed up the process of bringing new technologies and solutions to market. Industry partnerships can help focus academic research

on real-world problems, increasing its impact and relevance. By fostering a collaborative environment and creating effective matchmaking mechanisms, academia can play a pivotal role in driving innovation, solving societal challenges, and contributing to economic growth. Generally speaking, innovation in academia is of the most importance for the university, for students and especially for researchers including early stage researchers such as Ph.D. fellows that should know about the possibilities of bringing the intellectual outputs to the industry. However, there are various problems associated with this topic which must be effectively solved in order to achieve its full potential since this topic is less mature and developed at universities compared to R&D. The methodology provides an insight into an effective scheme of development and start-ups setting in a growing and rapidly developing university environment in Norway. Experts in management and economics agree about the importance of innovation and the ability to transfer technological innovation originated not only in science, research and development, but also innovation arising from practice or innovation which arose from thinking about things "in a different way" to the business sphere. Technology and knowledge transfer represents a key capability that has a major impact on overall economic growth, GDP growth, value-added employment growth and the overall rise in society. There is a consensus among experts that knowledge is growing in importance for economic growth and that the role of innovation and the ability to use new knowledge and innovate will play an increasingly important role in the economic development of countries and regions in the future.

Changes in labor market requirements are a natural part of a company's development. Some jobs will naturally disappear and will be replaced by new ones. The technological revolution is stimulated by the sense of improving human lives and it requires strategic management not only at the system level but also for each individual. The boundaries between the work performed by humans and those left to machines or algorithms are rapidly shifting. Based on production trends and monitoring the growth of the economy, the global labor market is likely to undergo a major transformation in the next few years. If this transformation is well managed, it can lead to economic growth, job creation, and an overall improvement in the quality of life for society as a whole. As already mentioned, in order to increase the added value of products and services, a transformation into a manufacturing sector is necessary, in which it is possible to produce products or services with high added value.

5 Intellectual Property Support

> **Within this block, participants must acquire knowledge on how to protect their ideas and their know how. The aim of the block is to familiarize participants with individual types of IPR, to state the advantages of individual tools and also to introduce participants to the creation of an IPR strategy.**

Universities often have dedicated offices for technology transfer and intellectual property (IP) management, helping innovators protect and commercialize their inventions. Access to legal expertise and resources for patenting and IP protection can be crucial for innovators looking to secure their ideas. Universities host numerous conferences, seminars, and workshops that provide platforms for networking and sharing innovative ideas with a broader academic and professional community.

Types of Intellectual Property Protection - Overvew

Patents

Purpose: Protects new inventions by granting exclusive rights to the inventor to make, use, sell, and import the invention for a certain period. Cover new and useful processes, machines, compositions of matter, or improvements. Generally last for 20 years from the filing date.

Design Patents

Protect new, original, and ornamental designs for an article of manufacture. Usually last for 15 years from the grant date. Requirements: Must be novel, non-obvious, and useful. Application Process: Includes detailed specifications and claims defining the scope of the invention. Typically involves examination by a patent office.

Utility Models

Purpose: Similar to patents but generally for inventions that are less complex and have a shorter commercial lifespan. Duration: Typically lasts 7 to 10 years, depending on the jurisdiction. Requirements: Generally requires novelty and industrial applicability, but the threshold for inventive step is lower than for patents. Application Process: Usually simpler and faster than for patents, making them cost-effective for smaller innovations.

Trademarks

Purpose: Protects brand names, logos, slogans, and other identifiers that distinguish goods or services Duration: Can last indefinitely as long as the trademark is in use and renewals are filed periodically (e.g., every 10 years) Requirements: Must be distinctive and not confusingly similar to existing trademarks. Application Process: Involves a search to ensure uniqueness, followed by filing an application with relevant authorities. May include opposition from third parties.

IPR Strategy for Business

Audit and Identify IP Assets

Conduct an IP Audit: Identify and evaluate all potential IP assets, including inventions, designs, brand elements, trade secrets, and copyrightable works.

Assess Value and Relevance: Determine the commercial value and strategic importance of each IP asset.

Develop a Protection Strategy

Patents and Utility Models: Decide which innovations warrant patent protection based on their novelty, potential market impact, and strategic importance. For less complex inventions, consider utility models where applicable.

Trademarks: Register trademarks for brand names, logos, and other identifiers. Consider international registration if the business operates globally.

Other IP: Protect trade secrets through non-disclosure agreements (NDAs) and secure data management. Register copyrights for original works.

Global Considerations

International Protection: Use treaties like the Patent Cooperation Treaty (PCT) for patents and the Madrid Protocol for trademarks to streamline international applications.

Jurisdictional Differences: Understand the differences in IP laws and enforcement in key markets.

Monitor IP Infringement: Regularly monitor the market for potential infringements. Use watch services for trademarks and patent monitoring tools.

IP Management and Exploitation

Licensing and Partnerships: Consider licensing IP to third parties for additional revenue streams. Form strategic partnerships to leverage IP assets.

IP Portfolio Management: Regularly review and manage the IP portfolio to ensure it aligns with business objectives. Abandon IP that is no longer valuable to save costs.

5.1   IPR Strategy

An Intellectual Property Rights (IPR) strategy is a comprehensive plan that outlines how an organization will identify, protect, manage, and leverage its intellectual property assets to achieve its business objectives. This strategy involves the systematic approach to securing legal rights, such as patents, trademarks, copyrights, and trade secrets, and utilizing these assets to enhance competitive advantage, drive innovation, and generate revenue. By developing a comprehensive IP strategy, businesses can protect their innovations, strengthen their market position, and derive maximum value from their intellectual property assets.

Key Components of an IPR Strategy

- **Identification of IP Assets**
- **Protection of IP**
- **Management of IP**
- **Enforcement of IP Rights**
- **Enforcement of IP Rights**
- **IP Strategy Integration**

Types of IP: Identifying all forms of intellectual property the organization possesses or intends to develop, such as patents, trademarks, copyrights, and trade secrets. Creating an inventory of existing IP assets, including detailed descriptions and status of protection. Filing for Patents: Applying for patents to protect inventions and technological innovations. Trademark Registration: Registering trademarks to protect brand names, logos, and slogans. Copyright Protection: Securing copyrights for creative works such as software, literary works, and artistic creations. Trade Secrets: Implementing measures to protect confidential business information, such as formulas, processes, and customer lists.

Management of IP: Regularly reviewing and managing the IP portfolio to ensure alignment with business goals. IP Audits: Conducting periodic audits to assess the value and relevance of IP assets. IP Policies and Procedures: Establishing internal policies for IP creation, disclosure, and protection.

Leveraging IP: Commercialization: Exploiting IP assets through licensing, joint ventures, or partnerships to generate revenue. Monetization: Selling or licensing IP to other entities to create

income streams. Strategic Alliances: Forming alliances and collaborations that leverage IP to enhance product offerings and market reach.

IP Strategy Integration

Business Strategy Alignment: Ensuring that the IP strategy aligns with the overall business strategy and supports long-term objectives. R&D Coordination: Integrating IP strategy with research and development (R&D) activities to foster innovation and protect new inventions.

5.2 Developing an IPR Strategy

Step-by-Step Guide

Assess Current IP Position: Conduct an IP audit to identify existing IP assets.

Evaluate the current IP portfolio's strengths, weaknesses, opportunities, and threats (SWOT analysis). Define IP Objectives: Set clear, measurable goals for IP management, such as increasing the number of patents, enhancing brand protection, or generating revenue through licensing.

I. Identify Key IP Areas:

Focus on critical areas where IP can provide a competitive advantage, such as core technologies, branding elements, and proprietary processes.

II. Develop Protection Plans:

Create detailed plans for protecting each type of IP asset, including timelines for filing patents, registering trademarks, and securing copyrights.

III. Implement Management Systems:

Establish systems for ongoing IP management, including regular reviews, audits, and updates to the IP portfolio.

IV. Formulate Commercialization Strategies:

Develop strategies for monetizing IP through licensing, partnerships, and other commercialization avenues.

V. Enforcement and Compliance:

Set up monitoring systems to detect IP infringements and plan for enforcement actions. Ensure compliance with relevant IP laws and regulations.

VI.   Train and Educate Employees:

Provide training on IP policies and procedures to all employees. Foster a culture of innovation and respect for IP within the organization.

VII.   Review and Adapt:

Regularly review the IP strategy to ensure it remains aligned with business goals and market conditions. Adapt the strategy as needed to address emerging trends and challenges.

> An effective IPR strategy is essential for protecting and maximizing the value of intellectual property assets. By systematically identifying, protecting, managing, leveraging, and enforcing IP rights, organizations can enhance their competitive position, drive innovation, and create new revenue streams. Regular reviews and adaptations ensure the strategy remains aligned with evolving business objectives and market conditions.

5.3   IPR Quiz

Multiple Choice Questions

Which of the following is protected by a patent?

     a) Brand name

     b) Invention

     c) Logo

     d) Slogan

A utility model is often referred to as:

     a) A mini-patent

     b) A copyright

     c) A trade secret

     d) A design patent

Which of the following can be registered as a trademark?

     a) A new chemical compound

     b) A company's logo

     c) The functional design of a product

d) A secret recipe

The duration of a standard utility patent is:

a) 10 years

b) 15 years

c) 20 years

d) 25 years

Which international treaty simplifies the process of applying for patents in multiple countries?

a) Paris Convention

b) Madrid Protocol

c) Patent Cooperation Treaty (PCT)

d) Berne Convention

Which type of intellectual property protection is granted automatically upon creation and does not require registration?

a) Patent

b) Utility model

c) Trademark

d) Copyright

True/False Questions

A trademark must be renewed periodically to remain in force.

a) True

b) False

Trade secrets are protected by patents.

a) True

b) False

Design patents protect the functional aspects of an invention.

a) True

b) False

Utility models are generally easier and quicker to obtain than utility patents.

a) True

b) False

Short Answer Questions

What is the primary purpose of intellectual property rights?

Name two advantages of registering a trademark.

Explain the difference between a patent and a utility model.

What is the role of the World Intellectual Property Organization (WIPO)?

Why is it important for businesses to conduct an IP audit?

Answers

Multiple Choice

b) Invention

a) A mini-patent

b) A company's logo

c) 20 years

c) Patent Cooperation Treaty (PCT)

d) Copyright

True/False

a) True

b) False

b) False

a) True

Short Answer

Primary Purpose of Intellectual Property Rights: To provide legal protection for creations of the mind, thereby encouraging innovation and creativity by granting exclusive rights to creators and inventors for a certain period.

Two Advantages of Registering a Trademark:

Provides exclusive rights to use the trademark in connection with the goods or services listed in the registration.

Helps prevent unauthorized use of the trademark, thereby protecting brand identity and reducing the risk of consumer confusion.

Difference Between a Patent and a Utility Model:

 A patent offers protection for new and inventive technical solutions or inventions, typically lasting 20 years, with a high threshold for novelty and non-obviousness.

A utility model, often referred to as a "mini-patent," has a shorter protection term (7-10 years), with a lower threshold for inventiveness, making it easier and quicker to obtain for simpler inventions.

Role of the World Intellectual Property Organization (WIPO): WIPO is a global forum for IP services, policy, information, and cooperation. It helps to harmonize IP laws, provides international registration systems for patents, trademarks, and designs, and promotes the protection and enforcement of intellectual property worldwide.

Importance of Conducting an IP Audit: An IP audit helps businesses identify and evaluate their IP assets, ensuring they are adequately protected, properly managed, and fully utilized. It also helps in identifying potential IP risks and opportunities, aligning IP strategy with business goals, and maintaining competitive advantage.

5.4 Practical task

It is highly recommended to involved key note speaker on the theme of transfer technology to giving introduction in the topic in very attractive way.
Students should be informed about the different types of IP

There should be included practical part where students have to work in groups or as individuals.

Here we bring some good examples of practical training and task.

Task 1

Divide yourselves up into groups of 4-5 people and read the exercise you have been given.

The exercise is about a new medicinal product which has been developed by a university research team. The product is very effective in treating certain allergies. The team has also designed a

nebuliser with a special <u>nozzle design</u> for nasal application that permits more effective delivery, and an improved <u>pumping system</u> which delivers a fixed, precise dose of the product.

In collaboration with an engineering company from the university's technology park, they have also developed an attractive <u>design for the sprayer can</u>.

Together with an advertising agency they have come up with a <u>brand name</u>, NEBU-ALLERG, an attractive <u>logo</u> and a <u>slogan</u> which reads "Press green for go!" The agency also plans to design a <u>website</u> and <u>other material</u> to support the promotional campaign.

In the next ten minutes I would like you to:

- Identify the various IP elements in this project,

- Suggest ways in which they can be protected, and

- Identify the potential contractual issues that might arise.

Student should be familier with patent database Espacenet – here is space for practical searching *task 1*

How would you find patent number EP1000000 in Espacenet?

What is the title of this patent?

How many simple family members does it have?

Answer: Type "Farnsworth cathode ray tube 1950" in the search box of the smart search option.

Task 2

In today's cars, the connection between the throttle pedal and the engine is made by electrical signals travelling through wires.

The pedal sensor gauges how far the driver is pressing the throttle pedal and sends signals to the engine's control computer, which determines how much to open the throttle based on input from a variety of sensors, choosing a setting that will achieve the lowest exhaust emissions, the best fuel efficiency and good engine response. In 2010, Toyota had to recall many of its products because of a failure of the on-board drive-by-wire system.

How would you find the relevant Toyota patents?

Answer: Search the CPC with "drive by wire throttle", find F02D11/00, expand and find F02D11/105. Copy to advanced search and add "Toyota" as applicant.

Intellectual Property Quiz 2

How much do you know about the basics of intellectual property? Complete our short quiz to find out!

1.   What protects the intellectual property created by artists?

2.   Copyright

3.   Geographical indications

4.   Patents

5.   Registered designs

6.   Trademarks

2. What protects the intellectual property created by designers?

- *Copyright*

- *Geographical indications*

- *Patents*

- *Registered designs*

- *Trademarks*

3. What protects the intellectual property created by inventors?

- *Copyright*

- *Geographical indications*

- *Patents*

- *Registered designs*

- *Trademarks*

4. Which of these is a geographical indication?

- *BMW*

- *Champagne*

- *Hogwarts*

- *PlayStation*

- *World Wide Web*

5. What does a trademark protect?

- *An invention*

- *A work of art*

- *Logos, names and brands*

- *The look, shape and feel of a product*

- *A secret formula*

6. In most countries, how long does copyright last for?

- *10 years after the creation of the work*

- *50 years after the creation of the work*

- *10 years after the death of the person who created that work*

- *50 years after the death of the person who created that work*

7. How long do patents usually last for?

- *10 years*

- *20 years*

- *40 years*

- *60 years*

8. If you write an original story, what type of intellectual property gives you the right to decide who can make and sell copies of your work?

- *Copyright*

- *Geographical indications*

- *Patents*

- *Registered designs*

- *Trademarks*

9. Imagine a sports team sets up a company to sell its own range of clothes. What type of intellectual property can the team use to show that the clothes are made by them?

- *Copyright*

- *Geographical indications*

- *PatentsRegistered designs*

- *Trademarks*

10. If a company develops a new technology that improves its main product, what type of intellectual property can they use to stop others from copying their invention?

- *Copyright*

- *Geographical indications*

- *Patents*

- *Registered designs*

- *Trademarks*

6   Bussines plan

Within this block, participants must acquire knowledge of how to draw up a business plan. Determine the breaking point. They learn what aspects to watch out for, how to overcome death valley. How to use marketing as part of your business plan, who is the target group and what are the barriers to market entry.

A business plan is a detailed document that outlines the objectives, strategies, market research, financial forecasts, and operational plans for a business. It serves as a roadmap for how a business intends to achieve its goals and is crucial for securing funding, guiding growth, and managing operations.

The participants should obtain following components of a business plan:

1. **Executive Summary**

Overview: A brief summary of the business, its mission, and its objectives. Key Points: Includes the business name, location, product/service offerings, and the purpose of the plan (e.g., to secure funding).

2. **Business Description**

Company Information: Details about the business, including its history, structure, and ownership. Industry Overview: Analysis of the industry in which the business operates, including trends and key players.

3**. Market Analysis**

 Target Market: Identification and description of the target customer segment. Market Need: Explanation of the market need the business will address. Competitive Analysis: Evaluation of competitors, their strengths and weaknesses, and the business's competitive advantage.

4. **Organization and Management**

 Business Structure: Description of the business's organizational structure. Management Team: Information about the founders, board of directors, advisors, and key management personnel, including their roles, experience, and qualifications.

5. **Products or Services** Description: Detailed information about the products or services offered. Unique Selling Proposition (USP): What makes the product or service unique and how it stands out in the market.

6. **Marketing and Sales Strategy**

Marketing Plan: Strategies for reaching the target market, including advertising, promotions, and public relations. Sales Strategy: Sales tactics, sales cycle, and the sales process. Pricing Strategy: Pricing model and rationale.

7. **Operations Plan**

Operational Workflow: Day-to-day operations, including production, inventory, and supply chain management. Facilities and Equipment: Description of physical locations, facilities, and equipment needed. Technology: Any technology or software used in operations.

8. **Financial Plan**

Funding Requirements: Amount of funding needed and how it will be used. Financial Projections: Detailed forecasts, including income statements, cash flow statements, and balance sheets for at least three to five years. Break-even Analysis: The point at which the business will be able to cover its costs and begin making a profit.

Supporting Documents: Any additional documents that support the business plan, such as resumes, legal agreements, detailed market research data, and product photos.

Purpose of a Business Plan

Securing Funding: Essential for attracting investors and securing loans, as it demonstrates the viability and profitability of the business. Strategic Planning: Helps business owners set clear goals and strategies for achieving them. Provides a framework for managing business growth and scaling operations.

Performance Tracking: Serves as a benchmark for measuring progress and making informed decisions.

A well-crafted business plan not only helps in understanding and planning the business but also communicates the vision and potential of the business to stakeholders and investors.

6.1 The "Valley of Death"

The "Death Valley" concept in the context of startups refers to a critical phase in a startup's lifecycle, often known as the "Valley of Death." This period is characterized by significant challenges that startups face between the initial stages of funding and achieving a steady stream of revenue.

> **In this block, it is important to explain to the students the pitfalls of starting a business, the lecturer should explain the concept of death valley to the students, and at the same time show the possibilities and strategies for successfully overcoming it.**

What is the "Valley of Death"?

The "Valley of Death" is a metaphor for the difficult period during which a startup has launched but has not yet started generating sufficient revenue to sustain its operations. This phase can last anywhere from a few months to several years, depending on the industry, market conditions, and the startup's specific circumstances.

Challenges in the "Valley of Death"

Cash Flow Issues: The startup is burning through initial funds without sufficient incoming revenue, leading to cash flow problems. Difficulty in securing additional funding as investors may be hesitant to invest in a company that hasn't yet proven its viability. Pressure on the founders and the team to perform and deliver results quickly, which can lead to burnout and operational inefficiencies. Struggles with achieving product-market fit, refining the business model, and validating the market need for the product or service.

Strategies to Survive the "Valley of Death"

1. Efficient Use of Resources

Cost Management: Keep overheads low by minimizing expenses and managing resources efficiently. Lean Operations: Adopt lean startup principles, focusing on creating a Minimum Viable Product (MVP) to test ideas quickly and with minimal costs.

2. Securing Funding

Diversified Funding Sources: Look beyond traditional venture capital for funding. Consider grants, angel investors, crowdfunding, and strategic partnerships. Milestone-Based Funding: Seek funding in stages based on achieving specific milestones to build investor confidence.

3. Revenue Generation

Early Revenue Models: Implement early revenue models, such as pre-orders, pilot programs, or consulting services, to bring in cash flow. Monetization Strategy: Develop a clear monetization strategy and refine it based on customer feedback and market conditions.

4. Building a Strong Team

Core Team: Assemble a committed and capable core team that can operate efficiently and adapt to challenges. Advisors and Mentors: Engage advisors and mentors who have experience in navigating the "Valley of Death" and can provide valuable insights and guidance.

5. Market Validation and Customer Focus

Customer Feedback: Actively seek and incorporate customer feedback to refine the product or service. Target Market: Focus on a specific target market to build a strong initial customer base and gain market traction.

Successful Examples

Dropbox

Approach: Used a simple MVP (a demo video) to validate demand and secure initial users.

Outcome: Successfully attracted investor interest and grew rapidly after proving market demand.

Airbnb

Approach: Focused on a niche market initially (conference attendees) and iterated based on user feedback. Outcome: Gradually expanded and refined their platform to become a dominant player in the travel industry.

The "Valley of Death" is a daunting phase for any startup, but with strategic planning, efficient resource management, and a strong focus on market validation and customer needs, startups can navigate this challenging period successfully. By learning from examples of companies that have emerged from this phase stronger, entrepreneurs can apply these lessons to their own ventures and increase their chances of survival and success.

7 Design Thinking & Value Proposition, SWOT & Pitch

Within this block, participants must acquire knowledge how to understand to the design thinking, both an ideology and a process that deals with solving complex problems in a way that is primarily focused on the user. In this block, lecturer will describe exactly what the process involves and highlight why this approach is important: What is the value of design thinking and in what context is it particularly useful. Participants will also look at how Design Thinking can be applied in everyday work and what are the benefits of using Design Thinking.

7.1 Design Thinking

Design Thinking is an approach for practical and creative problem solving. It is based heavily on the methods and processes used by designers (hence the name itself), but has actually evolved from a variety of fields – including architecture, engineering and business. Design Thinking can be applied to any area, not necessarily design. One of the first people to write about Design Thinking was John E. Arnold, a professor at Stanford University. In 1959 he wrote "Creative Engineering", a text that established the four areas of Design Thinking. Design Thinking is primarily focused on users, on people, it tries to understand people's needs and come up with effective solutions to satisfy these needs. We call it a solution-based approach to problem-solving. Design Thinking therefore focuses on achieving practical solution results: technically provable: can be developed into functional products or processes; economically viable: the business can afford to implement; desirable for users: a real human need. First, let's look at the four principles of Design Thinking as proposed by Christoph Meinel and Harry Leifer of the Hasso-Plattner-Institute of Design at Stanford University. The four principles of Design Thinking The human rule: no matter the context, all design activity is social in nature, and every social innovation brings us back to the "human-centered viewpoint". The rule of ambiguity: ambiguity is necessary and cannot be eliminated or oversimplified. Experimenting at the limits of your knowledge and abilities is good if you want to see things differently. Rule of redesign: all design is redesign. While technology and social circumstances may change and evolve, basic human needs remain unchanged. Basically, we are just redesigning the means to meet those needs or achieve the desired results. The rule of tangibility: realizing ideas in the form of prototypes allows designers to communicate more effectively. Based on these four principles, the Design Thinking process can be divided into five steps or phases: empathy, definition, ideation, prototype and test. Let's explore each of them in more detail.

7.2 SWOT analysis

> **SWOT** analysis is mostly known to all participants, the aim of this block is to remind participants of this method and especially to give examples from practice. It is also advisable for each participant to create their own swot analysis based on a model example. A swot analysis can also be done on your profile.

WHY a SWOT analysis? WHY a good PITCH?

It is an important analytic tool, business we use it to help to make essential decisions. In this workshop, we'll expand on how to use a SWOT analysis and give valuable tips to consider.

The SWOT analysis consists of a plan you create before moving forward with business decisions. It's one with which you can evaluate both negative and positive factors that are interacting with your business.

The workshop aims not only to provide a basic theoretical basis for SWOT analysis but also to look at examples of how this tool can help in the development of one's own business.

According to START UP, a good pitch increases your chance with investors a lot! You'll need to do three things: grab the attention of your audience. Take them on a clear and logical journey. Leave them with a compelling call to action. Also, these topics will be part of the workshop.

SWOT analysis is a strategic planning and strategic management technique used to help a person or organization identify Strengths, Weaknesses, Opportunities, and Threats related to business competition or project planning. It is sometimes called situational assessment or situational analysis.

This technique is designed for use in the preliminary stages of decision-making processes and can be used as a tool for evaluation of the strategic position of organizations of many kinds (for-profit enterprises, local and national governments, NGOs, etc.). It is intended to identify the internal and external factors that are favorable and unfavorable to achieving the objectives of the venture or project. Users of a SWOT analysis often ask and answer questions to generate meaningful information for each category to make the tool useful and identify their competitive advantage. SWOT has been described as a tried-and-true tool of strategic analysis, but has also been criticized for its limitations, and alternatives have been developed.

Below is an example SWOT analysis of a market position of a small management consultancy with a specialism in human resource management (HRM).			
Strengths	**Weaknesses**	**Opportunities**	**Threats**
Reputation in marketplace	Shortage of consultants at operating level rather than partner level	Well established position with a well-defined market niche	Large consultancies operating at a minor level
Expertise at partner level in HRM consultancy	Unable to deal with multidisciplinary assignments because of size or lack of ability	Identified market for consultancy in areas other than HRM	Other small consultancies looking to invade the marketplace

Practical task: Make SWOT for Starbuck, Cocacola, green energy.

7.3   Pitch

In the end of the block all participants will try their own pitch for their imaginary (or real) business plan. The lecturer will draw students' attention to the pitfalls of effective drinking and will also show examples of good practice. It is recommended that participants try the pitch in 5 minutes.

Picth should include the idea of the bussiens, team, financial issue, prediction of break point, revenue, market research, cempetititors.

Creating an effective startup pitch involves clearly communicating your business idea, its potential, and your strategy to achieve success.

Practical task – prepare structured outline for a compelling pitch, along with a sample pitch for a hypothetical startup called "EcoClean Solutions," a company offering sustainable cleaning products.

Solution example

Pitch Structure

  Introduction

    Start Strong: Capture attention with a compelling opening.

    Introduce Yourself: State your name and role.

  Problem Statement

    Identify the Problem: Clearly articulate the problem your startup addresses.

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Relate to the Audience: Make the problem relatable to the audience.

Solution

Present Your Solution: Describe your product or service.

Unique Value Proposition: Explain what makes your solution unique.

Market Opportunity

Market Size and Growth: Provide data on the market size and growth potential.

Target Market: Identify your specific target market.

Business Model

Revenue Streams: Explain how you plan to make money.

Pricing Strategy: Outline your pricing model.

Traction and Milestones

Progress to Date: Share key achievements and milestones.

Future Plans: Highlight your roadmap and future goals.

Marketing and Sales Strategy

Go-to-Market Plan: Describe how you will reach and acquire customers.

Sales Strategy: Explain your sales approach.

Team

Introduce the Team: Highlight the expertise and experience of your team members.

Advisors and Mentors: Mention any notable advisors.

Financial Projections

Forecasts: Provide financial projections for the next few years.

Funding Needs: State how much funding you are seeking and how it will be used.

Closing

Recap: Summarize the key points.

Call to Action: Clearly state what you want from the audience (e.g., investment, partnerships).

Thank You: End with a thank you and open the floor for questions.

Sample Pitch for EcoClean Solutions

[1. Introduction]

"Good afternoon, everyone. My name is Alex Johnson, and I'm the CEO of EcoClean Solutions. Thank you for the opportunity to present today."

[2. Problem Statement]

"Every year, millions of households and businesses contribute to environmental pollution through the use of harmful cleaning products. These products not only degrade our ecosystem but also pose health risks to users."

[3. Solution]

"EcoClean Solutions offers a range of sustainable, non-toxic cleaning products that are safe for both people and the planet. Our products are made from biodegradable ingredients and come in recyclable packaging, ensuring a minimal environmental footprint."

[4. Market Opportunity]

"The global market for green cleaning products is expected to reach $36 billion by 2026, growing at a CAGR of 7.5%. Our target market includes environmentally conscious consumers and businesses looking to reduce their ecological impact."

[5. Business Model]

"We generate revenue through direct sales on our e-commerce platform, subscriptions for regular deliveries, and partnerships with eco-friendly retailers. Our pricing strategy is competitive, ensuring affordability without compromising quality."

[6. Traction and Milestones]

"Since our launch six months ago, we have secured 5,000 customers, received positive reviews, and partnered with three major eco-friendly retail chains. We aim to expand our product line and increase our market presence over the next year."

[7. Marketing and Sales Strategy]

"Our go-to-market strategy includes digital marketing campaigns, social media engagement, and collaborations with eco-influencers. Our sales strategy focuses on online sales and retail partnerships, complemented by strong customer service."

[8. Team]

"Our team consists of experts in environmental science, marketing, and business development. Our CTO, Dr. Sarah Green, has over 15 years of experience in developing sustainable products. We are also advised by industry veterans who have successfully scaled green businesses."

[9. Financial Projections]

"We project revenues of $1 million in the first year, growing to $5 million by year three. We are seeking $500,000 in funding to scale our operations, enhance our marketing efforts, and expand our product line."

[10. Closing]

"In summary, EcoClean Solutions is addressing a critical need for sustainable cleaning options in a rapidly growing market. We invite you to join us in making a positive impact on our environment while building a profitable business. Thank you for your time, and I'm happy to answer any questions you may have."

By following this structure, participants can create a comprehensive and compelling pitch that clearly communicates your business idea, its potential, and your strategy to achieve success.

8 Entrepreneurial Mindset & Team Building

Fostering an entrepreneurial mindset and building an effective team are essential for the success of any startup. This block is the most difficult for students, it is not about simple knowledge or skills, but essentially about attitudes to work, willingness to take responsibility and build a private business. The lecturer of this block should be an experienced entrepreneur who can pass on his experience, but the students will also be able to see attitudes and decision making.

In this block, students will get practical examples of entrepreneurial thinking.

Can we learn an Entrepreneurial Mindset? Are there any common issues and what is exactly Entrepreneurial Mindset?

These questions and more will be discussed during theboot camp.

An entrepreneurial mindset is resilient, resourceful, and solutions-oriented — even when the conditions say otherwise. People with these mindsets are lifelong knowledge-seekers who are curious and creative, and they are critical thinkers. An entrepreneurial mindset is a set of skills that enable people to identify and make the most of opportunities, overcome and learn from setbacks, and succeed in a variety of settings. Research shows that an entrepreneurial mindset is valued by employers, boosts educational attainment and performance, and is crucial for creating new businesses.

The main goals of the boot camp will be to introduce the best practice of entrepreneurial mindset by successful start-ups from OsloMet and UHK. Lecturer provides key traits of an entrepreneurial mindset

1. Innovative Thinking:

Creativity: Continuously seek new and improved ways to solve problems.

Opportunity Recognition: Identify and capitalize on market gaps and emerging trends.

2. Risk Tolerance:

Calculated Risks: Evaluate potential rewards against possible downsides before making decisions.

Resilience: Recover from failures and learn from mistakes.

3. Proactiveness:

Initiative: Take action without waiting for external prompts.

Problem-Solving: Approach challenges with a solutions-oriented mindset.

4. Adaptability:

Flexibility: Be open to change and pivot strategies as necessary.

Continuous Learning: Pursue new knowledge and skills to remain relevant.

5. Vision and Goal Orientation:

Clear Vision: Maintain a compelling long-term vision for the business.

Goal Setting: Set specific, measurable, attainable, relevant, and time-bound (SMART) goals.

Cultivating an Entrepreneurial Mindset

Continuous Learning:

Education: Engage in courses on business, leadership, and industry-specific topics.

Reading: Regularly read books, articles, and research papers on entrepreneurship.

Networking: Mentorship: Seek mentors who can provide guidance and share their experiences.

Peer Networks: Join entrepreneurial communities and attend industry events.

Experimentation: Experiment with new ideas and learn from both successes and failures.

Feedback: Actively seek feedback from customers, mentors, and peers to refine ideas.

Mindfulness and Reflection:

Self-Awareness: Reflect on your strengths and weaknesses.

Mindfulness Practices: Engage in activities like meditation to improve focus and stress management.

Team Building

Key Elements of a Strong Team

Skill Sets: Ensure the team has a balanced mix of technical, managerial, and creative skills.

Diversity: Include team members with diverse backgrounds and perspectives to foster innovation.

Shared Vision and Values: Alignment: Ensure all team members are aligned with the company's vision and values. Culture: Build a positive and inclusive company culture that promotes collaboration and respect.

Effective Communication:

Clarity: Maintain clear and open communication channels within the team.

Feedback: Encourage regular feedback and constructive criticism.

Roles and Responsibilities:

Clear Roles: Define each team member's role and responsibilities to avoid confusion.

Accountability: Hold team members accountable for their tasks and contributions.

Trust and Collaboration: Trust-Building: Foster trust through transparency, reliability, and support. Teamwork: Encourage collaboration and collective problem-solving.

9 Case study Boot camp UHK 2024

The UHK Boot Camp provides a comprehensive and immersive experience for aspiring entrepreneurs, covering essential topics from mindset development and team building to business planning and pitching. By the end of the program, participants will be well-equipped with the knowledge, skills, and networks needed to launch and grow successful startups.

Here is the schedule

UHK Bootcamp 10.–12.04.2024

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Programme

UHK Bootcamp 10.–12.04.2024

10.04.2024	WEDNESDAY (Rectorate)
13:00-15:00	Innovation in Academia, Matchmaking
	Pedro Lind, Ondřej Krejcar
15:30-17:30	Intellectual property protection patent, utility model, trademark, IPR strategy for business
	Pavla Matulová
11.04.2024	**THURSDAY (FIM)**
9:30-11:30	HED
12:00- 13:00	Lunch
13:00-14:00	Design Thinking & Value Proposition, SWOT & Pitch
	Petra Marešová, Pavla Matulová
14:00-15:00	Shareholder value and value creation
	Josef Diblík
12.04.2024	**FRIDAY (Rectorate)**
10:00-12:00	Entrepreneurial Mindset & Team Building Turning Classroom Lessons Into Business Success with Oslo Analytic
	Magnus Svendsen, Jørgen Sjåvik
12:00-13:00	Lunch
13:00-15:00	Individual consultation
	Magnus Svendsen, Jørgen Sjåvik, Ondřej Krejcar, Pavla Matulová

Sumary of the Best practice based on case study – feed back from all three partners

- ✓ The organizers decided to organize a bootcamp at the time of the prestigious conference, which was taking place simultaneously at the university. Participants thus had a unique opportunity to attend interesting lectures in frame of bootcamp. Considering that the conference was focused on the field of economics, management and technology transfer, it met thematically with the boot camp and the program was for participants thus very attractive. This connection proved to be an example of good practice and can be recommended. The participants of bootcamp had a unique opportunity to participate in a large conference and during the social program to connect with experts who came to the conference. The participants themselves greatly appreciated this opportunity.

- ✓ The selection of suitable key note speakers is essential, as it draws participants into the topic, the key note speaker at the boot camp must not only be a very good expert in his field but also to have master presentation skills. Keynote speakers play a vital role in capturing the audience's attention, setting the tone for an event, and delivering a memorable and impactful message. Inspiring and Motivational: Keynote speakers have the ability to inspire and motivate their audience. They share personal anecdotes, lessons learned, and examples of success to inspire individuals to take action or embrace new ideas. They provide practical insights and strategies that empower the audience to overcome challenges and achieve their goals.

- ✓ Presentation of Proof of Concept was very usefull

- ✓ Presentation of IPR must include the practical task – to sho concrete specific solution of IPR – connecting it with real company/ product.

- ✓ Enterpreneurial minnd set must be presented by succesful enterpreneur or start up. For this lecture was involved **Magnus Svendsen**. Magnus holds a Bachelor's degree in Physical Education and Didactics, complemented by a year-long study in Organizational Theory and Leadership, and culminating in a Master's in Entrepreneurship. His entrepreneurial spirit has led to the creation of three successful companies, including Oslo Analytic. A competitor at heart and Norwegian Champion in three sports - Magnus proclaims that being successful in entrepreneurship is similar to elite sports. The chance of success is slim, but give it your all and you just might make it.

- ✓ An example of good practice is the connection of three strong universities that were able to provide a program of the required quality.

- ✓ Involvement of top management of university rector directly to the program of boot camp. One of the presentation was held by vice rector of UHK prof. Ing. Ondřej Krejcar, Ph.D. A full professor in systems engineering and informatics at the University of Hradec Kralove, Faculty of Informatics and Management, Center for Basic and Applied Research, Czech Republic; and Research Fellow at Malaysia-Japan International Institute of Technology, University Technology Malaysia, Kuala Lumpur, Malaysia. In 2008 he received his Ph.D. title in technical cybernetics at the Technical University of Ostrava, Czech Republic. He is currently a Vice-Rector for science and creative activities at the University of Hradec Kralove since June 2020. At present, he is also a director of the Center for Basic and Applied Research at the University of Hradec Kralove. At the University of Hradec Kralove, he is a guarantor of the doctoral study program in Applied Informatics, where he is focusing on lecturing on Smart Approaches to the Development of Information Systems and Applications in Ubiquitous Computing Environments.

- ✓ Another positive point was that the bootcamp was held within the framework of an ongoing project and thus funding was secured as part of a grant in addition.

- ✓ It is important to think about the possibility of virtual involvement of both participants and speakers. It is necessary to have good technology and IT support ready.

- ✓ Present certificates or acknowledgments to the participants, recognizing their successful completion of the program.

- ✓ Discuss the strengths and areas for improvement identified through the evaluation process.

- ✓ Emphasize how participant feedback will be used to enhance future iterations of the program.

- ✓ Thank the participants for their active participation, dedication, and contributions to the program.

- ✓ Involve succesful start up, into the UHK Boot camp was involved the OSLO ANALYTIC Oslo Analytic is an award-winning startup acclaimed for its pioneering work in analyzing, compressing, and certifying websites. The company is dedicated to reducing the carbon footprint of websites - while elevating performance and reducing load time - targeting the worlds biggest coal machine: THE INTERNET. Founded at the venture based "masters in Entrepreneurship" at Oslo Metropolitan University one year ago - now working with some of the biggest names in their industry. Read more about their project and analyze any website for free on their website: Osloanalytic.com

- ✓ **Acknowledge the efforts and support of the stakeholders, staff, instructors, the university administration, sponsors, or partners who provided resources and support and volunteers involved in the program.**

10 Boot Camp manual – practical issue

Creating a comprehensive boot camp manual involves outlining the program's structure, objectives, activities, rules, and expectations. This manual will serve as a guide for participants, instructors, and organizers to ensure a smooth and effective training experience.

 Here's a outline for a boot camp manual:

1. Introduction

- Welcome Message: A brief welcome note from the organizers or instructors.
- Program Overview: A summary of the boot camp's purpose, goals, and what participants can expect to gain.

2. Objectives and Outcomes

- Learning Objectives: Clear, measurable goals that participants should achieve by the end of the boot camp.
- Expected Outcomes: Skills, knowledge, and competencies participants will develop.

3. Schedule and Curriculum

- Daily Schedule: Detailed timetable of daily activities, sessions, breaks, and meals.
- Curriculum Outline: Overview of topics covered each day, including lectures, practical sessions, and group activities.
- Session Details: Brief descriptions of each session, including objectives, key topics, and activities.

4. Rules and Expectations

- Code of Conduct: Expected behavior, respect, and professionalism standards.
- Attendance: Policies on attendance, punctuality, and participation.
- Disciplinary Actions: Consequences for violating rules and guidelines.

5. Instructors and Staff

- Instructor Profiles: Brief bios and contact information for instructors and key staff members.

- Roles and Responsibilities: Description of the roles and duties of instructors, assistants, and support staff.

6. Materials and Resources

- Required Materials: List of items participants need to bring (e.g., laptops, notebooks, specific clothing).
- Provided Resources: Materials provided by the boot camp, such as textbooks, software, and equipment.
- Reading List: Recommended books, articles, and online resources for additional learning.

7. Facilities and Logistics

- Location Details: Address, map, and directions to the boot camp venue.
- Accommodation and Meals: Information on housing options, meal plans, and nearby amenities.
- Health and Safety: Safety procedures, emergency contacts, and first aid information.

8. Evaluation and Feedback

- Assessment Methods: How participants will be evaluated (e.g., tests, projects, presentations).
- Feedback Mechanisms: How participants can provide feedback on the program and sessions.
- Certificates and Recognition: Criteria for receiving completion certificates or awards.

9. Additional Information

- FAQs: Answers to frequently asked questions about the boot camp.
- Contact Information: Phone numbers, email addresses, and office hours for support.

10.1.1 Manual - Sample Sections for a Boot Camp

10.1.1.1 Welcome Message

Welcome to our Innovation Boot Camp. We are excited to have you join us for an immersive experience in creativity, problem-solving, and entrepreneurship. Over the next few weeks, you will engage in hands-on projects, learn from industry experts, and collaborate with peers to bring your innovative ideas to life. We look forward to your active participation and enthusiasm.

10.1.1.2 Program Overview

Our Innovation Boot Camp is designed to equip you with the skills and mindset needed to develop and implement innovative solutions. Whether you're an aspiring entrepreneur, a business professional, or a student, this boot camp will provide you with the tools to transform your ideas into reality.

10.1.1.3 Daily Schedule - example

Time	Activity
08:00 - 08:30	Breakfast and Registration
08:30 - 09:30	Morning Lecture: Design Thinking
09:30 - 10:30	Workshop: Ideation Techniques
10:30 - 10:45	Break
10:45 - 12:00	Group Activity: Brainstorming
12:00 - 13:00	Lunch
13:00 - 14:30	Afternoon Session: Prototyping
14:30 - 15:30	Case Study Discussion
15:30 - 15:45	Break
15:45 - 17:00	Project Work and Mentoring
17:00 - 18:00	Evening Wrap-Up and Q&A

10.1.1.4 Code of Conduct

It is important to providing a respectful, inclusive, and safe environment for everyone. All participants are expected to:

- Treat others with respect and courtesy.
- Participate actively and engage with the content.
- Follow all safety and facility guidelines.
- Refrain from disruptive behavior.

10.1.1.5 Assessment Methods

Participants will be evaluated based on:

- Participation and engagement in sessions and activities.
- Quality of project work and presentations.
- Collaboration and teamwork.

A well-structured boot camp manual ensures that all participants, instructors, and organizers are aligned and informed, contributing to a successful and productive boot camp experience.

10.1.1.6 Conceptual model of successful Boot Camp

Creating a conceptual model for a successful boot camp involves defining its core components and their interactions to achieve desired outcomes. A successful boot camp, particularly in the context of innovation or entrepreneurship, should focus on key elements that drive learning, application, and results.

Phases of the Boot Camp are structured to prepare participants, engage them actively during the program, implement what they have learned through projects, and provide support after the boot camp to ensure ongoing success and application of knowledge.

This model creates a dynamic and interactive learning environment that not only imparts knowledge but also encourages practical application, feedback-driven improvement, and long-term support.

Conceptual model of successful Boot Camp

Succesfull boot camp

Curriculum design

Lecturer selection	Participant selection

Moduls and topic	Learning objective

Mentorship	Engagement

Materials and tools	Workplace

Teams bulding

Project work

Need assesment

Feedback mechanisms

Assesment of experts

Project pitch

Final evaluation
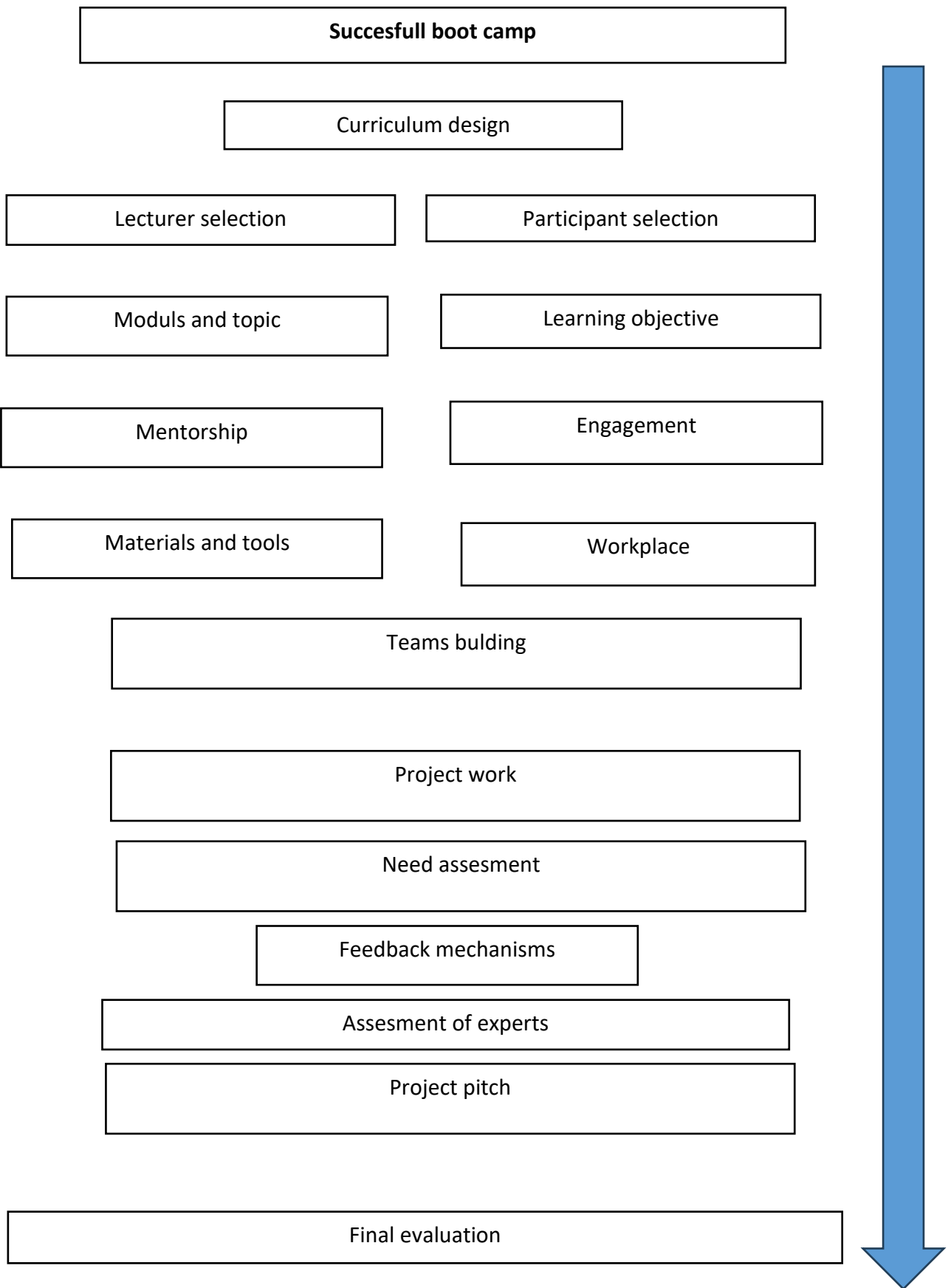
11 Conclusion

The aim of this methodology was to present the main aspects of the organization of the boot camp focused on the innovation and start up. The methodology is focused on theoretical aspects but also brings practical knowledge. The methodology is designed as a precise guide for successfully organizing a the boot camp. An innovative element is the checklists, which will help in orientation with the tasks for both advanced and beginners. The methodology provides many tips and examples of good practice.

One of the initial questions asked at the beginning of this work was how to launch the successful the boot camp which helps to students and academicians to lunch their own business based on research outputs. All information provided in the document is based on mutual cooperation and on sharing the experience between Czech and Norwegian partner. The Boot Camp which is held on Oslomet was a great inspiration for the preseted scheme and for the pilot boot camp at UHK as well.

This short-term activity for students, academics and researchers - learners was designed and all best practice was monitored and documented. The topic was concentrate on a one-week as an educational course. Special methodology for working in an international group was designed.

This methodology could be implemented in other university and also this methodology offers to relevant transfer technology center the know how about this kind of event.

The organization of the bootcamp is a complex matter. In order to successfully organize a boot camp, it is necessary to start a dialogue between stakeholders, rector, vice rectors, deans and clearly argue the benefits for the organization. Based on the pilot course, several points are formulated as examples of good practice, which is presented in text.

The goal of the methodology is to provide an overall overview of the individual steps leading to a successful organization. The methodology points out risks and their prevention. As part of the methodology, an example of good practice in organizing a boot camp is provided.

A boot camp program should leave participants with a sense of accomplishment, motivation, and inspiration. It should reinforce the value of their participation and create a lasting positive impression.

A very valuable contribution of the methodology is the experience from own implementation, the description of good practice which will allow a high-qaulity follow-up in the coming years. The methodology is an excellent tool for any professional organization that decides to include

this non-traditional educational format in its portfolio. The goal of the methodology was successfully achieved according to its specification.

The aim of this methodology is not to provide detailed contents of individual lecture but to provide an outline and an overview of the most important topics which should be included in this type of boot camp. Considering that this is a boot camp to which interesting speakers and lecturers are invited, the topics will be tailored made according to their focus and field.

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ANNEX 1 BOOT CAMP OSLOMET

Gründergarasjen Bootcamp

Kickoff & Matchmaking (01.11)

Introduction, speeddating, workshops in various teams to explore opportunities and matchmaking

Entrepreneurial Mindset & Team (08.11)

Newly formed teams kick-start their team work and we learn about the entrepreneurial mindset

Design Thinking & Value Proposition (15.11)

You will learn about how to make sure that you're solving an actual problem, and start forming your innovation project

Define & Pitch (22.11)

Define your project, how it could be developed further and get ready for a live pitch

Optional follow up (06.12)

Follow-up session with a mentor and Gründergarasjen, to further assess the status and potential of your project

Through the program you get to:

- Go through a matchmaking process and be paired in a team with like-minded participants
- Listen to startup stories and get insights from seasoned entrepreneurs and experts. Every workshop will contain at least 1 such story, as well as getting to develop your own project
- Get access to a network of other founders, experts, actors in the startup ecosystem and get competencies and resources to help you get going with a startup project

Learn how to:

- Think and act like an entrepreneur, and understand how entrepreneurs are able to build scalable, investable companies and products people love without much resources
- Use your knowledge base, your experience and your network to identify, assess and exploit new opportunities, as well as building startup teams that are built to last
- Communicate ideas, concepts and opportunities clearly and convincingly

After Module 1 is done:

- You will get the chance to get follow-up with a mentor and with Gründergarasjen to help you assess the status of your project and help you move forward
- You will be offered to continue developing your project in Module 2 of the Bootcamp, where you get to develop the basis for an investable startup project through a 8-week program. As of October 2023, we are however not sure when we will be able to offer Module 2