

# APInno

# Trainers Handbook



This project was financed by the EU programme ERASMUS+. The information and views set out in this publication are those of the authors and do not necessarily reflect the official opinion of the European Union.

## 1 Preface

The purpose of this book is to provide trainers with an overview of the programme along with an explanation of the content and some information of how to get the programme up and running. Before you start this programme as a trainer you must read this book. Ideally you should read this book at least six weeks before you intend to start the programme. You do not have to follow the instructions and suggestions exactly; you are free to make whatever adaptations that are necessary to enhance the learning processes of the participants.

This hand book is in two parts, Chapters 1 and 2 outline the structure of the programme and explain how to get started. Chapters 3 to 8 cover the programme content and contain supporting material for the slides, formative assessments and a suggested lesson plan for that module. Chapter 9 gives final recommendation and notes on how to implement the course.

This programme was developed under the project Erasmus+ *APInno: Action Project for Innovation* Project N° 2014-1-BG01-KA203-001561.

The main learning methodology is flipped learning for the theory. The students work on a real business problem, divided in groups and led through the process by mentors, representatives of business. The course methodology combines knowledge and understanding, cognitive skills, and soft skills. The IM competencies are developed in three parts:

- **First – ice breaking** – the students play games in groups that are formed randomly. The games are selected in a way to help the mentors and the professors to identify the students' profiles as well as to get to know each other, going through the Bruce Tuckman's "Forming, Storming, Norming, and Performing model". There is a special session focused on the MBTI typology tests the students make, and group discussion on valuing the differences . At the end of the first part the new groups are created according to the students' profiles.
- **The second part** of the course is for the **theory** – understanding, analysing the main terms and processes of the IM. At the end of this section, students receive the business case descriptions.
- **Third part – solution** –students work with mentors under the case. During this period the students have at least one meeting with the business owner (CEO or CFO) to pinpoint the decision direction.

The students' attitude is significant for the course. The learning process is monitored. Students thoroughly examine the task and have fun, learning by doing and exploring new opportunities.

There are two pilot courses in Bulgaria at the project coordinator – University of Library Studies and Information Technologies (ULSIT) and at one of the project partners - Middlesex University, UK.

Currently the course in IM is implemented in both universities.

The synergy among triangle elements, their competencies and implementation provide the syllabus structure working on a real problems:

- **Ready** – “ice breaking” – the students play games in groups that are formed randomly. The games are selected to be identified the students' profiles as well as to get to know. At the end of first part the new groups are created according the students' profiles.
- **Steady** – theoretical preparation – understanding, analysing the main terms and processes of the IM. At the end of this section, students receive the business case descriptions and end with presentation to receive feedback.
- **Innovate** – finding solutions to real innovation cases – MSc students work with mentors under the case. During this period students have at least one meeting with the business to pinpoint the decision direction.

This handbook is integral with the project's Guide for collaboration and Students handbook.



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## 2 Chapter 1: Programme Overview

Business leaders agree on what is holding Europe back: high labour costs, excessive regulation and a lack of culture of innovation and entrepreneurship. It is inarguable that Innovation is and will be the way for businesses to achieve economic success and organic growth, and to achieve it companies will have the need to develop new skills and knowledge - such as a far deeper understanding of customer and stakeholders' needs and expectations, the ability to collaborate, to create social value, etc. It is crucial to create and sustain long-term competitiveness and economic value especially of SMEs.

The opportunities and risks associated with innovation are visible across all industries. Large, well-established firms can suddenly find their businesses disrupted by new competitors with emergent business models. New technologies create new products that alter, enhance, or shape patterns of consumer behaviour. Consumers respond to new products in unexpected ways, driving unanticipated change and the need forever newer products and services. The concept of Innovation Management is still a key challenge.

### 2.1 Programme Overview

The APIInno aims at fostering the collaboration between business and universities as one key issue to be targeted by developing an innovative approach and methodology for teaching one of the under-exploited concepts - Innovation Management. The course does this by integrating theory and practice through a series of workshops. As participants develop their theoretical understanding of Innovation Management, they work on a real problem for a local business. While working on that problem they are supported by experienced business mentors.

There are four groups of people each with a different role who participate in and contribute to the programme:

- *Trainers:* The trainer facilitates the learning around the various theories, concepts and notions that are Innovation Management
- *Participants:* The participants engage in the learning processes with the intention of developing their Innovation Management skills
- *Mentors:* The mentors provide support to the participants and reinforce the theoretical learning in practice as the participants seek to solve a business problem

- *Business owners:* The business owners are local business owners who have an unsolved real problem within their business and are looking for a solution.

The 180 hours training course is organised in six training modules. It is anticipated that this consists of 7 face to face sessions on 4 to 5 hours depending on the level of the participants and 145 and 152 hours of self-directed learning by the participants.

The course content is practical and grounded in the real world, not just academic theory. The programme focuses on what happens before, during, and after delivering training, and what to do if training is not the right solution. The course is designed taking into account the high value of student engagement, expert facilitation, and application of new methods and techniques. The training course is aligned with the competencies required by the most successful practitioners.

While innovation and Innovation Management are related, they are distinct. The focus of this programme is on Innovation Management, that is the enactment of activities that develop innovative solutions to problems.

### **2.1.1 Areas of Learning**

The training will include the following areas of learning:

- Providing background knowledge relevant for the understanding of the innovation management.
- Learn the basics of business concepts and frameworks.
- Gain a foundation in conducting the trends analysis.
- Applying knowledge and skills to develop and prioritise innovation concepts.
- Comprehend the market, offering, delivery, production and business model.
- Identify a range of strategic opportunities for development of innovation and provide an action plan and business model.

### **2.1.2 Learning Process**

The learning process in these areas will be:

- Interactive: involving the participants actively
- Practical: applying theory to concrete situations, either through cases, role plays and exercises, or through analysing the processes within the group
- Participatory: making the group itself a learning body and mobilising its self-organising capacities

- Emerging: drawing from the experience, knowledge and personal resources of participants

### **2.1.3 Training Methods**

The teaching methods should include the following strategies. However, you are not restricted to these tools and approaches and you are encouraged to experiment with your own ideas:

- Games, energisers, ice-breakers
- Workshops
- Self-directed learning
- Individual work and group discussions
- Personal and group reflection, sharing of experiences
- Case studies
- Role playing activities

The learning strategies of the participants should include the following processes:

- FLAP learning<sup>1</sup>
- learning by doing:
  - a. problem-based learning
  - b. inquired-based learning
  - c. competence-based learning
- self-directed learning
- experiential and action learning

### **2.1.4 Course Objectives**

The overall objective of this training is:

- to develop student capability to identify business concepts and problems relating to those concepts, and to research and develop innovative solutions to the problems.

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<sup>1</sup> FLAP Learning – Facilitated learning and assessment in practice; experienced business owners and mentors support participants as they learn through practice

### **2.1.5 Course Outcomes**

Upon completion of the course, participants will be able to manage small scale innovation management projects that develop solutions to existing problems.

#### *Knowledge*

At the end of this programme the participants will be able to:

- Competently explain basic innovation management concepts
- Demonstrate understanding of if issues of working within a live business context
- Competently explain how to use various innovation management tools to develop solutions.

#### *Skills*

At the end of this programme the participants will have developed the ability to:

- Develop a project plan to resolve a simple business problem
- Research and prepare a coherent presentation around a proposed solution
- Work with a diverse group of people with a range of different skills.

### **2.1.6 Target Group**

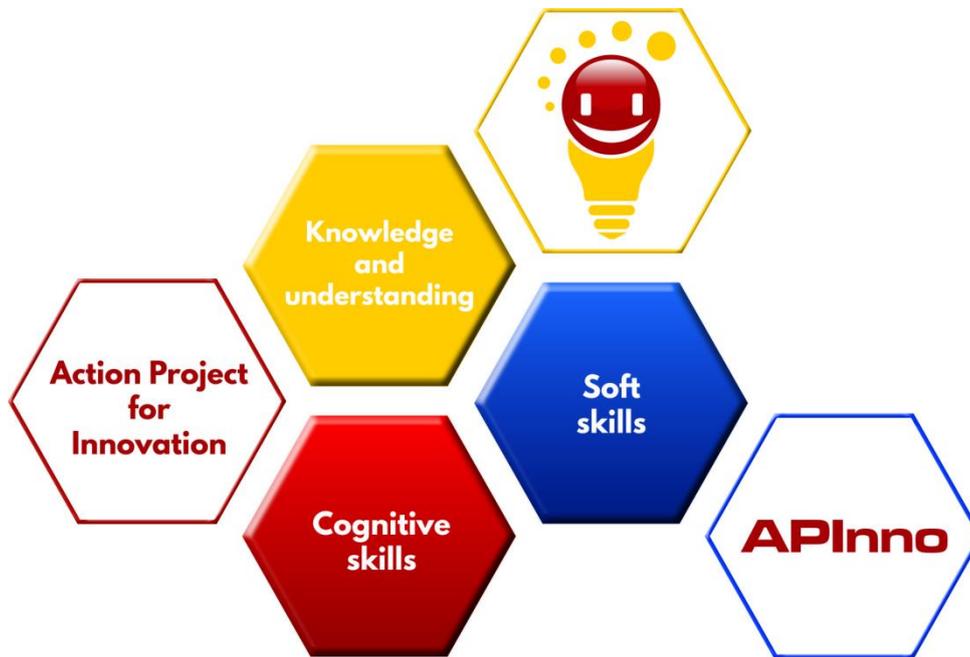
The course is orientated towards final year undergraduates, first and second year master students. In particular, this programme is suitable for students who do not have a business training or studying background.

## **2.2 Programme Structure**

The overall structure is student centred built around the needs of various businesses. A series of workshops provide students with a framework of theories, ideas, notions and concepts to build understanding. The students then interact with businesses to develop new ways of doing things within that business that are theoretically sound. In the process students are expected to question the veracity and value of the theories as they try to put them into practice.

Developed from the quality assurance descriptors, the programme focuses on the holistic development of the participant.

**Figure 1:** Quality assurance descriptors



Specific evidence of meeting the quality assurance descriptors of knowledge and understanding, soft skills and cognitive skills are demonstrated below.

Knowledge and understanding of:

- Theoretical perspectives, methods and techniques of innovation management;
- Key features of success when developing an innovation strategy;
- Critical components of the innovation management process;
- Financial and risk assessments of an innovation strategy.

Cognitive skills in being able to:

- Research and develop an innovative solution to a problem;
- Evaluate the relevant skills needed to manage innovation at a variety of levels;
- Identify and evaluate elements of an innovation strategy;
- Analyse and synthesis information from multiple sources to reach justifiable conclusions;
- Use conceptual skills to create and implement decisions.

Soft skills that enable the ability to show an ability to

- Manage small scale projects;
- Prepare a basic project management chart;
- Lead a small group;

- Work productively with others;
- Communicate effectively with others;
- Negotiate and resolve conflicts in a team setting while under pressure;

The overall structure of the course is in 3 stages: **Ready, Steady and Innovate**. These three stages are divided into 6 steps (modules): *Break the ice, Introduction, Preparation, Ideation, Consolidation and Implementation*. In each step the information presented is one of 4 concepts: Theory, Case studies, Exercises, Games and Templates. The relationship is demonstrated below.

**Figure 2:** Programme structure



### 2.2.1 Delivery Method

The programme is intended to be delivered as a face-to-face on-site workshop combined with e-learning support. The e-learning support is in the form of resources available online on the programme web site, and you are encouraged to develop your own relevant resources for your participants to access.

## 2.3 Overview of Module Content

### 2.3.1 Module 1 Break the ice

**Title:** Getting to know each other

**Key Content:**

- to introduce the students to each other
- to identify student's psychometric profile
- to meet the Mentors and Business Owners

**Learning Objectives:**

- Understand what is expected of them in this programme

- Understand their personality profiles and how this relates to working in a team or group
- Formed teams
- Developed a broad understanding of the business case or problem

### **2.3.2 Module 2 Introduction**

#### **Title: Introduction to Innovation Management**

*Key Content:*

- Significance of innovation
- Innovation definitions
- Innovation challenge
- Innovation management
- Work process

*Learning Objectives:*

- Understand the role and contribution innovation makes to a business or non-profit organisation
- Define innovation and innovation management
- Understand the challenges facing innovation/management
- Understand the processes involved with innovation management

### **2.3.3 Module 3 Preparation**

#### **Title: Set-up for innovation**

*Key Content:*

- Strategy for innovation
- Innovation drivers and need for change
- Financial costs and risks

*Learning Objectives:*

- Understand why to innovate
- Define strategic goals and innovation drivers
- Determine the extent and type of innovation
- Determine the investment profile - the risk level and the time interval

### **2.3.4 Module 4 Ideation**

#### **Title: “Create dots”**

Key Content:

- Factors influencing the business or non-profit organisation
- Generate ideas
- Business Opportunity Map

*Learning Objectives*

- Create a field for idea generation
- Consider the ideas from different perspectives
- Create Business Opportunity Map

### **2.3.5 Module 5 Consolidation**

**Title: “Connect the dots”**

Key Content:

- Analyse and substantiate the generated ideas and collected information
- Analyse potential problems
- Create detailed concepts for innovation

*Learning objectives*

- Identify a range of emerging opportunities and generate range of business concepts
- Prioritise those with highest potential and develop further
- Select the best concept to recommend

### **2.3.6 Module 6 Implementation**

**Title: Implementation**

Key Content:

- Develop business model of the chosen innovation concept
- Conduct some initial due diligence to validate the priority concept
- Propose innovation portfolio and pipeline with alternative solutions

*Learning objectives*

- Create a plan which clearly summarises the business concept
- Propose an action plan for the concept implementation
- Propose alternative solutions
- Prepare the action plan

## 2.4 Assessment

Assessment of this programme is formative and you may apply to one of the providers to discuss the possibility of the programme being credited for your participants. It could be provided either as 180-hour, 6 ECTS credits or alternatively you can use the materials and adjust them to meet your organisation's accreditation process and provide respective credit to the participants. You should provide the participants with a "Certificate of Participation" on completion of the programme. We recommend that you only award this certificate to participants who have an attendance record of 80% and have completed all the formative assessments.

Specific formative assessments are built into the learning process and there is a final formative assessment which takes the form of a presentation to the business owner. All the formative assessments can be adapted as summative assessments.

## **3 Chapter 2: Getting Started**

There are several steps you should follow in setting up a programme. While you can adapt the steps to your own circumstances you should consider carefully each step.

### **3.1 Establishing a need**

Running a programme like this requires a lot of effort, time and resources. So, you should ensure that there is sufficient interest in the programme before you start. There are 4 different groups of people who need to be involved in this programme: trainers, participants (students), mentors and business owners (managers), each taking a different role. So, one of the first things you need to confirm is that you have a trainer available. The trainer may be yourself, or it could be a colleague.

Before committing yourself to organising the programme you as a trainer should read this book. If you feel comfortable in delivering the content, then you are over the first step. You should then establish that you can recruit enough participants for the programme in order to pilot it first and then follow your organisation's internal procedure to implement it as a full-time course in the curriculum. We suggest you send out a call for expressions of interest from potential participants. We recommend a minimum of 12 participants. This will enable you to have at least 3 groups of 4 participants to work on producing a solution to the business problem. We would expect a maximum of 32 participants to give you 8 groups of 4. You can vary the size of the groups, but ideally, they should be between 4 and 5.

It is also a good idea to assess the level of interest from mentors and business owners (managers) as they also play a significant role in the programme. You can do this by sending out a request for expression of interest, or approach local business owners to see if they are willing to participate.

### **3.2 Setting up**

Once you have established a need you should arrange for the event to take place. If you have a clear idea of the final number of participants, you need to arrange for a space to conduct the face to face part of the programme. Generally, you need to run 7 or 8 face to face sessions each 4 to 5 hours depending on the knowledge and skill level of the participants. We recommend that you run a face to face session once a week as this

enables the participant to undertake the research and self-directed learning necessary to meet the learning outcomes for the programme.

Although there is enough material to run the programme we recommend that you review the material and then add to it. It is always a good idea to look at the materials and develop a lesson plan to identify aspects you feel require more attention. You will find suggested detailed lesson plans in the Module outlines, while below is a suggested lesson plan you might want to consider:

**Table 1:** *Suggested lesson plan*

| TIME | TOTAL | ACTIVITY   | LEADER                           |
|------|-------|--|----------------------------------|
| 0:50 | 0:50  | Workshop on theory and concepts of Innovation Management | Trainer                          |
| 0:10 | 1:00  | Break  |                                  |
| 0:50 | 1:50  | Workshop on theory and concepts of Innovation Management | Trainer                          |
| 0:10 | 2:00  | Break  |                                  |
| 0:50 | 2:50  | Group work on developing solution                        | Trainer/Mentor                   |
| 0:10 | 3:00  | Break  |                                  |
| 0:30 | 3:30  | Discuss the problem with the business owner              | Trainer/business owner (manager) |
| 0:30 | 4:00  | Review and summary                                       | Trainer                          |

### **3.2.1 Recruiting Participants**

Once you have ascertained that there is enough people interested in taking this programme you need to recruit participants. This programme is targeted at final year undergraduate and first year post-graduate students. However, you can modify the content to different groups. It is also targeted at students who are not undertaking studies in business, but that should not exclude students from a business programme taking part.

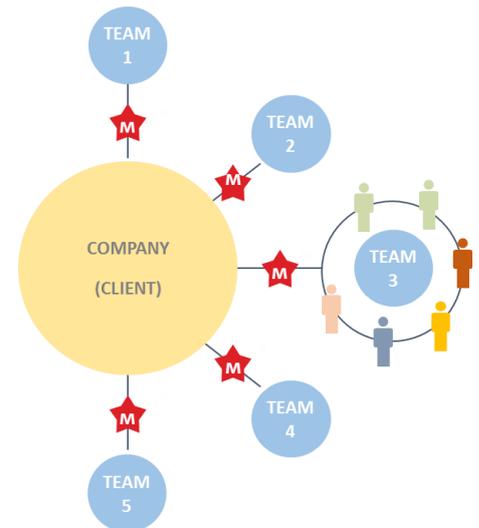
### 3.2.2 Recruiting Mentors

Mentors play an important role in helping the participants take the theory and apply it in a practical sense. Ideally the Mentor should be someone other than the Trainer and have some business experience as a business owner/consultant/expert/manager/entrepreneur.

### 3.2.3 Recruiting Business Owners/Managers - Challengers

The business owner should be running an existing business and have a clearly identifiable problem that needs solving. It is important to the students leading that the business owner does not solve the problem while the students are working on it. There is a separate handbook available for Business Owners (Challengers) that outlines their involvement and role in this programme. The participants' model of interaction is presented in Figure 3.

It is very important to define the roles of each participant and to manage everyone's expectations. It is a good approach to organise a "get to know each other" session as part of the programme preparation as well. The mentors support the student teams and liaise the communication and interactions with the client, i.e. the Challenger. In the first module "Break the ice" each team goes through a series of exercises and sessions which aim to structure them and identify the team leader. S/he is the main point of contact with the mentor and with the business representative (Challenger) as well so that correspondence and interactions are limited and lean.



**Figure 3** Participants' interaction model

## 4 Chapter 3: Module 1 “Break the Ice”

### *Getting to know each other*

One of the key factors that influences innovation is the ability to work with others. This programme understands this and focuses on problem solving within teams or groups. This Module is designed to develop the participants team working and communication skills.

The purpose of this first module of Stage 1 “Ready” is to introduce the participants to each other, for participants to develop an understanding of their personality profiles, for the participants to understand the structure and objectives of the programme, meet the mentors and be introduced to the case problem they will look to solve.

You should review the slides before you begin this programme. You are free to add any additional material or remove content you feel would enhance the participants understanding of the various concepts, theories and notions covered in this Module. For example, there are excellent videos available on YouTube that explain Myer Briggs personality test.

### **4.1 Module Outcomes**

At the end of this Module the participants will:

- Understand what is expected of them in this programme
- Understand their personality profiles and how this relates to working in a team or group
- Formed teams
- Developed a broad understanding of the business case or problem

### **4.2 Module Activities**

There are four parts to this Module:

- Introduce participant to each other
- Provide the participants with an overview of the programme
- Undertake psychometric testing and form groups
- Meet the Mentors and Business Owner and get an overview of the problem.

## 4.3 Module 1 Content

### 4.3.1 Introductions

#### **Module 1**

There are many activities you can use to get the participants to introduce themselves to each other, even if they already know each other before coming onto the programme. You can look at this [web site](#) for inspiration.

### 4.3.2 Overview of the Programme

#### **Module 1 Slides 2 -5**

The programme consists of the basic steps of the innovation process. Each of the following Units address one of the steps. In this module, you need to go through the slides and provide the students with an outline of the programme and what is expected of them in each Module.

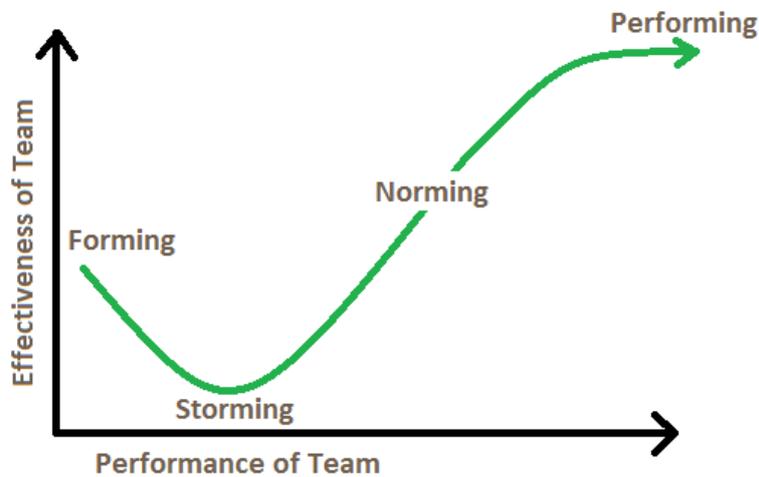
There are several slides that you should use that will provide an overview of the programme.

### 4.3.3 Psychometric Testing and Forming Teams

#### **Module 1 “Break the ice”**

There are many psychometric assessments; some are more complex than others and measure different aspects of your personality. For example, Myers-Briggs® looks at 16 personality aspects to assess how students deal with information, how they make decisions, how they deal with the world around them and whether they focus on their internal or the external world. An alternative psychometric test is Belbin Group Role. This test helps to identify the role students are most likely to take when working in a group. When people first come together in a group they go through several stages as they come together and work out what is required. These stages are known as Forming, Storming, Norming and Performing. This is the first stage of the programme where the programme is introduced to all students, its purpose and what they will learn is outlined. More recent research shows that this process is not quite as linear as first thought but groups often move back and forth between the different stages.

### Tuckman's Team & Group Development Model



**Figure 4** Tuckman's team and group development model<sup>2</sup>

In this programme, we recommend Myers-Briggs®, although you can use an alternative. You will need to ensure that the participants understand that this process is not judgmental and any assessment is neither good nor bad.

To enable further understanding of psychometric testing there are numerous videos available online that you could show the participants.

Once you have developed personality profile of each participant you need to form groups. Ideally the groups should have a balance of personalities. The group should then sit together and spend some time getting to know each other. We suggest that they also prepare a behavioural contract that outlines how they expect themselves and each other to behave. The group member should also exchange contact information and discuss their availability for out of class work and discussions.

#### **4.3.4 Meet the Mentors and the Challenger – business owner/manager**

The mentors should introduce themselves to the different groups and confirm exactly how the mentoring will work.

The challenger is usually a business owner or a manager. It is very important for the programme that this person is at a decision-making position in the organisation who will act as a “client” in the work process. They should introduce themselves and provide an outline of the problem.

There is a separate handbook/guideline for the Challengers to be used.

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<sup>2</sup> <https://www.thecoachingtoolscompany.com>

## 4.4 Formative Assessment

There are no formative assessments for this module.

### 4.4.1 Suggested activities

- Ice-breaking activities
- Psychometric assessment such as Myer Briggs Typology Indicator® or Belbin
- A completed behavioural contract between the students
- A reflective journal entry that demonstrates understanding of the strengths and weaknesses of psychometric testing

## 5 Chapter 4: Module 2 Introduction to Innovation Management

### *Innovation and innovation management*

This is the second step in Figure 2. In this Module, you will introduce to the participants the notion of Innovation Management.

### 5.1 Module Outcomes

At the end of this Module the participants will:

- Understand the role and contribution innovation makes to an organisation or business
- Define innovation management
- Understand the challenges facing innovation management
- Understand the processes involved with innovation management

### 5.2 Module Activities

There are 5 topics in this module:

- Significance of innovation
- Innovation definitions
- Innovation challenge
- Innovation management
- Work process

### 5.3 Module 2 Content

#### **Significance**

*Slides 12-14*

Innovation is of critical importance for the business development and when looking for new solutions to existing problems. These problems occur because organisations are trying to survive in an increasingly competitive and changing world. The competitiveness occurs as technology disrupts traditional business models. For example:

- The world's largest public transport business owns no vehicles (Uber)

- The world's largest accommodation provider has no buildings (Airbnb)
- The world's largest phone companies have no telephone infrastructure (Skype/WeChat)
- The most valuable retailer has no inventory (Alibaba)
- The most popular media content providers do not create content (Facebook/YouTube)
- The fastest growing bank has no cash deposits (SocietyOne)
- The world's largest movie house has no cinemas (Netflix)
- The largest software vendors do not write apps (Apple/Google)

## Innovation Definitions

### *Slides 15*

The word to innovate comes from the Latin word **innovare**, which means to change. There are many myths and misunderstandings of what innovation is and is not. One common myth is the idea that people have a sudden insight to a solution to a problem. However, research shows that in fact big insights occur after a long and deep period of incubation, often when we are thinking of other things. An epiphany is only the very last moment when all the pieces come together. Another myth is that innovation can solve everything. There are problems and there are problems. Some problems are not necessarily easy to solve because there are not enough pieces of the puzzle yet. They are connected to the myth of the epiphany; you have the epiphany because all the pieces are in place. Other problems are easy to solve because the pieces are all there. What these myths suggest is that while you cannot innovate out of every situation you can use innovation in a structured way to find solutions to problems.

### *Slide 17*

It is critical to not confuse innovation with science. The goal of science is to understand the world around us. Innovation is a process of value creation, which consists in changing the composition of a set of variables describing a system.

### *Slide 18*

There are several types of innovation although the most popular and common ones are innovative products and services. However, the business model innovation brings more premiums and sets barriers to the competition, as it is much harder to replicate the "pattern" of business of the whole organisation as opposed to products and services.

### Slide 19

Innovation varies also according to the level of change. Innovation occurs at different levels. The magnitude of change the innovation causes is reflected in the degree to which the change takes place. The model that we look at is detailed below:

- Rethink – substantial and significant changes are enacted
- Redesign – large and immediate changes are made
- Incremental improvements – smaller ongoing changes are enacted
- Remedial treatment – repair sections that are not functioning
- Cessation – remove unnecessary factors.

### Slide 20

Innovations generally take place within an organisation's business model. Typically, a business model consists of 4 components: Production, Offering, Delivery and Markets. Each of these components is made up of critical features that organisations resolve. It is to the resolution of these components that innovation is most widely applied.

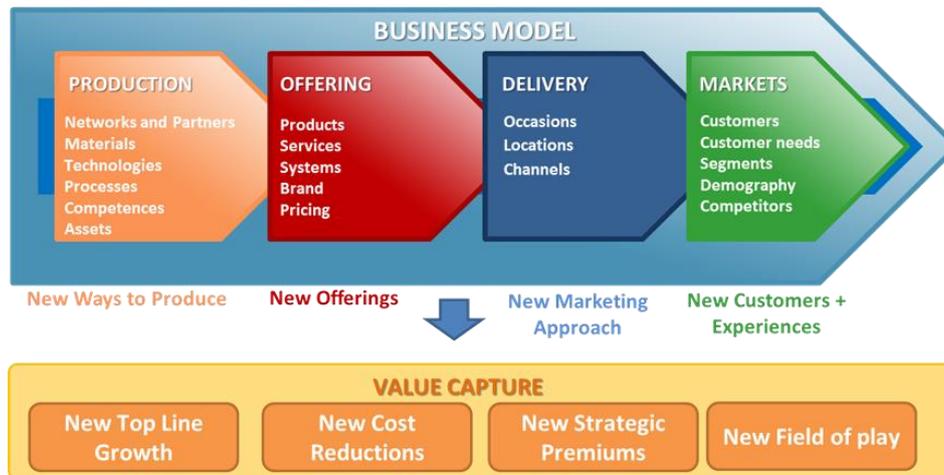
Innovation is a process of resolving a problem in a way that has not necessarily been used before. Innovation leads to innovation breakthroughs that present the retention or an increase in value for an organisation. This can take the form of:

- New networks and partners – this can lead to new relationships
- New pricing strategies – this can lead to new ways of bundling your product or service
- New ways to deliver – this can lead to new ways of accessing your customers
- New business models – this can lead to new ways running a business

In this respect this graph represents clearly the broad definition of innovation that we will be using in our course:

**The definition for innovation that we will use is:**

**“The creation and capture of new value in new ways.”**



**Figure 5** Innovation definition

Slides 21-22

Business model innovation is of critical importance to gain competitive advantage and put barriers to competition and replication. One key concept about business model innovation is the one of the Boston Consulting Group (BCG). You should clarify the model and its elements as well as the notion that “innovation” corresponds to the simultaneous change in two of them. Business model innovation involves making simultaneous, coordinated, and internally consistent changes to multiple aspects of the business model to reignite growth, combat disruptions, or access new markets.

Slide 23

Additional framework is provided by university St. Gallen with the four key questions representing the elements in the business model - Who? What? How? What generates revenue?

We need to clarify few more innovation concepts: Open innovation, Blue ocean strategy, Disruptive innovation.

Slides 24-26

Open Innovation is a paradigm that assumes that firms can and should use external ideas as well as internal ideas, and internal and external paths to market, as the firms look to advance their technology. Open Innovation combines internal and external ideas into architectures and systems whose requirements are defined by a business model. Open innovation is the use of purposive inflows and outflows of knowledge to accelerate internal innovation, and expand the markets for external use of innovation, respectively. [This paradigm] assumes that firms can and should use external ideas as well as internal ideas, and internal and external paths to market, as they look to advance their technology.

Slides 27-28

Also, it is important to explain Blue Ocean Strategy: Blue ocean strategy is the simultaneous pursuit of differentiation and low cost to open up a new market space and create new demand.

*Slide 29*

Another key concept to be presented and clarified is the **disruptive innovation** as a term introduced by Clayton Christensen - it describes a process by which a product or service takes root initially in simple applications at the bottom of a market and then relentlessly moves up market, eventually displacing established competitors.

## **Innovation Challenge**

*Slide 30*

Innovation is a strategic imperative for most companies but most CEOs are dissatisfied with their execution on innovation. Organisations and businesses that are innovation leaders tend to have greater shareholder returns, more loyal customers, better partners and employees of higher quality.

One of the key factors that makes innovation challenging is that you start the process with an intended outcome but often are unsure where to start and the actual outcome is often different from the intended outcome. Furthermore, there are often delays between the attempt to solve a problem and the solution because not all of the required parts are available. For example, an organisation may be prevented from effectively delivering a key service and is seeking to resolve that problem. The solution may require a level of investment in terms of staff skills that the organisation does not have and would take time to achieve.

*Slides 31-32*

Innovation can also be a challenge because many organisations get stuck focusing on their core activities that they do not have the resources to move beyond what they do day to day. To overcome this inability to move beyond core activities, organisations need to enact the following:

- Experiment and create innovative concepts
- Think what-if and what's-next
- Build multidisciplinary teams
- Appoint a creative agent – “An Idea King”
- Strategy requires a clear scope and area for innovation; defining the types of innovation and forming “pipeline of innovations”

The right corporate culture and leadership are essential and key success factor that nurture innovation within organisations.

## Innovation Management

Slide 33

Innovation and Innovation Management are related but distinct – the focus of this course is on Innovation Management. Innovation is an outcome of innovation management; they are not the same thing (Table 2).

**Table 2:** Innovation versus Innovation Management

| INNOVATION  | INNOVATION MANAGEMENT  |
|---|--|
| The Creation and Capture of New Value in New Ways | The Business Discipline that Enables organisations to Identify Innovations in Consistent and Repeatable Ways |
| Innovation is a Process                           | Innovation Management is a Business Discipline   |

**Innovation management is a business function and discipline that enables organisations to identify and develop innovations in consistent and repeatable ways**

Slide 34

Innovation management is the process that enables innovative actions to take place. It provides a degree of structure around the activities to ensure that the activities remain focused on the process of finding a solution. There are many varieties of innovation management processes and in this programme, we look at one that has the following four components:

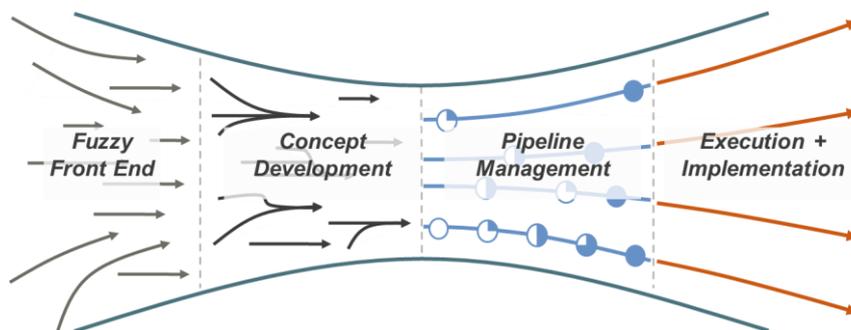
- **Innovation culture** – encouragement and support for innovation activities; establish environment to foster innovation
- **Innovation strategy** – a strong justification for engaging in innovation processes; set stretch and clear goals and targets for growth through innovation
- **Innovation capacity** – resources such as skills, time, finance and facilities are readily available or accessible
- **Innovation discipline** – management of the process through control of participants' actions against clearly defined outcomes and metrics to sustain the innovation process in the organisation

## Work Process

Slide 35

Throughout this course, we will make a simulation of the innovation process (cycle) at organisational level which corresponds to the respective stages of the innovation pipeline.

**Figure 6:** Innovation pipeline



## 5.4 Formative assessment

There are 6 suggested activities that can be used as formative assessment.

### 5.4.1 Activity 2.1 Innovation

Thinking about your daily life can you identify a change that has enhanced either a product or service that you use in the last 2 years? An example may be the introduction of an electronic ticketing system for public transport, or the introduction of touch and go payments using your debit card.

Each person in your group needs to identify at least one product or service then you should answer the following questions. Finally create a table that shows the relationship between your answers.

- What is the change?
- Who does it impact on (everyone, only people who use the product or service)?
- What are the wider implications of the change (who may be indirectly affected)?
- Has everyone benefited from the change and why?

### 5.4.2 Activity 2.2 Innovation Definitions

In your groups identify three innovations that are neither a product/service nor a technology and explain why it is innovative. What type is it?

### **5.4.3 Activity 2.3 Innovation Definitions**

In your group identify three products or services you use on a daily basis. Discuss with your group how the four innovation breakthroughs components are evident. Chose two items from your groups list and develop a table that contrasts and compares the two items across the four components. Identify the levels by either low, medium or high.

### **5.4.4 Activity 2.4 Innovation Challenge**

What do you think about the statement “Everybody is an innovator in the innovative companies” – true or false, why?

### **5.4.5 Activity 2.5 Innovation Barriers**

In your group discuss and list all obstacles that could occur to innovation in organizations/ What are the key and most common barriers you have identified?

### **5.4.6 Activity 2.6 Summary**

In your groups, using the concepts and theories covered in this Module begin working with the mentor to develop a deeper understanding of the problem the business you are working with faces.

This module ends with introduction of the company and the case to be solved by the student teams. During the last session, the company representative presents the case and has a discussion with students in order to answer their questions and clarify what is expected throughout the course. On this first meeting the business challenger should:

- Outline the Challenge/business problem
- Provide background material about the company
- Detail consequences of not finding a solution
- Identify any known constraints/ limiting factors to resolving the challenge/ business problem.

## 6 Chapter 5: Module 3 Preparation

### Setting up for innovation

This is the third step in Figure 2 and the first module of Stage 2 “STEADY”. In this Module, you will introduce to the participants the starting process of Innovation Management.

### 6.1 Module Outcomes

At the end of this module the participant will

- Understand why to innovate
- Define drivers for innovation
- Define strategic goals
- Determine the extent and type of innovation – innovation portfolio
- Determine the investment profile - the risk level and the time interval

### 6.2 Module Activities

There are 3 topics in this module:

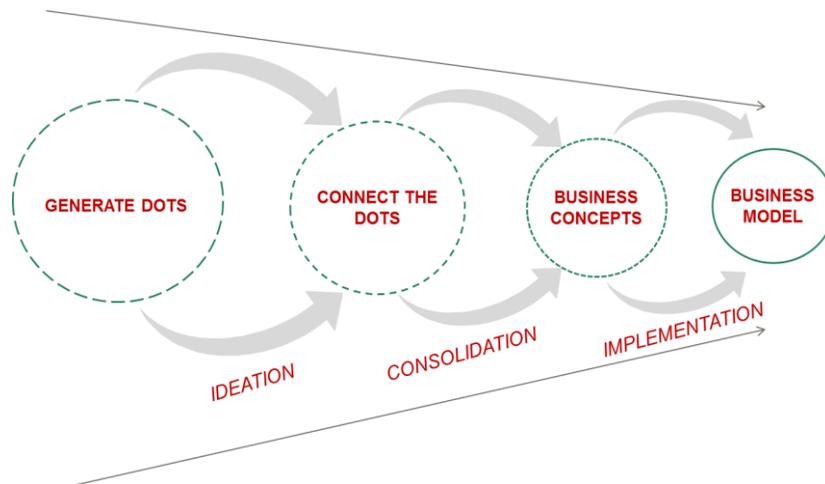
- Drivers for innovation
- Creating a case for change
- Financial costs and risks

### 6.3 Module 3 Content

*Slides 36-37*

Innovation does not occur in a vacuum, nor does it occur randomly. It follows a clearly defined pathway of investigation, analysis, synthesis and application. Creating a clear plan to undertake these activities is crucial to the success of developing an innovative solution. During the next two stages STEADY and INNOVATE! we will make a quick simulation of the real innovation process and provide a solution to our Challenger.

**Figure 7:** Innovation work process



In reality, businesses and organisations have multiple problems to solve. So, one of the first steps is to determine which problem students are going to solve. However, in this programme they will work on a single problem that has been defined by the business owner/manager – the Challenger. This makes the set-up process somewhat simpler.

### **Innovation Strategy**

In this programme, we take a structured approach to innovation. At this stage of the programme students need to develop the strategy for innovation and the goals for their particular case and the company. We start with definition of the innovation strategy. We have already explained that innovation doesn't happen in vacuum and organisation's capacity for innovation stems from an innovation system: a coherent set of interdependent processes and structures that dictates how the company searches for novel problems and solutions, synthesizes ideas into a business concept and product designs, and selects which projects get funded.

*Slide 38-40*

A strategy is a commitment to a set of coherent, mutually reinforcing policies or behaviours aimed at achieving a specific competitive goal. Good strategies promote alignment among diverse groups within an organisation, clarify objectives and priorities, and help focus efforts around them. Companies regularly define their overall business strategy (their scope and positioning) and specify how various functions—such as marketing, operations, finance, and R&D—will support it.

*Slide 41*

Companies should determine whether they will innovate only with regard to its products and services or also internally with its organizational structure, business model and processes.

*Slides 42-43*

Strategy includes thinking about three positions: *first, product and market; second, knowledge; third, innovation*. And as the competitive landscape changes, organizations must continually realign these positions. Thinking more broadly about innovation can also help a company considering its strategy. That is, don't just look at the innovation process, but look at a variety of key strategic drivers and consider how extensive they are: knowledge technologies, new and better services, lower prices, better operational execution, better understanding of customers and markets. Taken as a whole, that is a company's innovation position

*Slide 44*

A good example of how a tight connection between business strategy and innovation can drive long-term innovation leadership is found in Corning, a leading manufacturer of specialty components used in electronic displays, telecommunication systems, environmental products, and life sciences instruments.

*Corning case study*

Over its more than 160 years Corning has repeatedly transformed its business and grown new markets through breakthrough innovations. When judged against current best practices, Corning's approach seems out of date. The company is one of the few with a centralized R&D laboratory. Because novel materials often require complementary process innovations, heavy investments in manufacturing and technology are a must. And by keeping a domestic manufacturing footprint, the company is able to smooth the transfer of new technologies from R&D to manufacturing and scale up production. Corning's strategy is not for everyone as long-term investments in research are risky.

To be truly competitive, companies need to think not just about what they produce, but what they know and how they plan to innovate as well. Strategy must include thinking about these three positions: *first, product and market; second, knowledge; third, innovation*. And as the competitive landscape changes, organizations must continually realign these positions.

Slide 45

**Buckman case study**

Buckman Laboratories International Inc., a Memphis, Tennessee-based specialty chemicals manufacturer operating in more than 90 countries, is a company that has been able to do this successfully. Since 1945, Buckman has gone through three phases of strategic transition. Originally, the company competed on product leadership, aiming to manufacture the most effective microbicides and to sell them competitively. It didn't focus on market segments. It did focus on broadly acquiring knowledge of chemistry and chemical engineering associated with microbicides, hiring people with advanced degrees in these areas. The company focused on internally driven innovation — advancing its products' chemical properties. Then, as its industry became more competitive, Buckman found many of its key products becoming commoditized. Prices went down and margins began to shrink. So, the company shifted its strategic focus from a product-oriented position to a knowledge-based one. It decided to learn more so that it could create leading-edge products. The company also began to move away from selling products alone to selling value-added services based on showing customers how to use its products to greatest effect. Finally, Buckman began to narrow its market focus, identifying pulp and paper, water treatment and leather manufacturing as its three primary segments, so that it could focus on the knowledge and innovations needed to serve those markets best. In essence, Buckman's innovation position shifted from internal, chemistry-driven product innovation to external, customer service-driven innovation<sup>3</sup>.

An effective strategy thus is comprised of three key components that must be aligned: *product/market, knowledge and innovation*. And as the competitive landscape changes, organizations need to continually revisit their alignment among these positions.

Slides 46-48

**Strategic goals**

We clarify the strategic goals of the company as well as the specific goals to solve the particular case.

- Coordinate why we should or should not innovate – is the environment changing?  
How?
- Define strategic goals
- Determine the extent and type of innovation – innovation portfolio

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<sup>3</sup> <http://www.innovationmanagement.se/imtool-articles/innovation-strategy-thinking-beyond-positioning/>

- Determine the investment profile - the risk level and the time interval

The innovation strategy defines also the type of projects within organisation. The purpose of the innovation management is developing a holistic approach to fill a pipeline of innovations not just “one time projects and activities”. Thus we should consider the key parameters of the innovation portfolio:

- Geographic scope – local/regional/global;
- Internal vs. external
- Change magnitude – incremental vs. disruptive innovations;
- Time scope – short-term vs. long-term;
- Near or far of the core(current) business;
- Investments – small vs. big;
- Leveraging existing opportunities or finding new ones.

### **Innovation Drivers**

Successful innovation breakthroughs are built around the following key principles:

- Serve basic human needs –these needs are based on Maslow’s Hierarchy of needs.
- Takes advantage of emerging and sustaining trends – the innovation leverages off trends and developments that are emerging and builds on them to create an innovative solution.

#### *Slides 50-51*

“Needs” are one of the key drivers to be taken into consideration when setting up the innovation process. They are human emotional or physical necessities. Remember: Needs are verbs (activities and desires with which your user could use help), not nouns (solutions). Identify needs directly out of the user traits you noted, or from contradictions between two traits – such as a disconnect between what they say and do.

Empathy consists of two parts:

- The intellectual identification with the feelings, thoughts, or attitudes of another.
- The vicarious experiencing of those feelings, thoughts, or attitudes.

Keep in mind, while they are close, empathy is not sympathy.

*Thought leadership* is becoming a stronger requirement for proper leadership. Some leaders hold back because they don’t want to seem egotistical — or they’re just being lazy. One of the biggest factors to becoming a great thought leader is contributing to

credible sources of information about your industry. If you aren't doing this, then your employees won't be as inspired to mimic your sense of innovation or create their own<sup>4</sup>. "It's not a must to take on every idea that comes from your employees (some can be downright crazy). However, you should create an environment where people are consistently encouraged to come up with innovative ideas. Always keep an open mind and evaluate these ideas when they come to you."

Defining the drivers for innovation and respective need for change is a key starting point to garner support for undertaking an innovative response to a problem. This case then provides the framework from which the innovative solution emerges.

Identifying the global trends that are influencing the business or organisation is important as it provides a structure to the process and helps define solutions.

Innovation drivers and enablers are key elements and should be well explained and considered. For example, open communication and "broken" organisation silos, employees and employers' mindset and attitude towards change, risk and failure are key success factor to develop innovative organisations.

*Slide 52*

The case for innovation comes from summarizing all innovation drivers including identified customer needs related to the empathy map. The innovation drivers confirm if there is a case for innovation, i.e. change. From this case the groups can then identify the various initiatives and tasks and ultimately provide a clear action plan to the Challenger that need to engage in.

Competitors are a good source of information regarding opportunities and influences in order to review the competition and see what we miss in our strategy and what could we use from the competitor.

### **Assessing Risks and Costs**

Assessing the risks and costs are the final stage of setting up the innovation process. Customers will expect quality within the framework of the product. The solution needs to arrive in the market place at the right time. The cost of developing, producing and applying the solution must add value to the business or organisation.

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<sup>4</sup> 10 Barriers to Employee Innovation, John Hall, <http://www.forbes.com/sites/johnhall/2013/04/29/10-barriers-to-employee-innovation/#5119a7251113>

## 6.4 Formative Assessment

### 6.4.1 Activity 3.1 Making a Case

In your groups define the changes in the landscape of the company we are working with: what is happening with the competition, the demand, the customers and their needs. Why do we need to change? How much and what needs to be changed?

Try to develop a case/imperative for change, i.e. innovation and present it in a compelling way to your peers. Look at a variety of key strategic drivers and consider how extensive they are: knowledge and technologies, new and better services and products, lower prices, better operational execution, better understanding of customers and markets, unmet and unknown customer needs.

### 6.4.2 Activity 3.2 Empathy map

Good teamwork is grounded in a deep understanding of the people with whom you are working. This is known as empathy. An Empathy Map is one tool to help you synthesize your observations and draw out unexpected insights about your empathy towards your team members. You can reflect on your own level of empathy. Think back to when you first joined your group and how you have acted since then.

Create a four-quadrant layout on paper or a whiteboard. Populate the map by taking note of the following four traits that reflect your actions:

- **SAY:** What are some quotes and defining words you used?
- **DO:** What actions and behaviours did you notice yourself engaging in?
- **THINK:** What might your team members be thinking? What does this tell you about his or her beliefs?
- **FEEL:** What emotions might your team members be feeling?

Note that thoughts/beliefs and feelings/emotions cannot be observed directly. They must be inferred by paying careful attention to various clues. Pay attention to body language, tone, and choice of words.

**IDENTIFY NEEDS:** “Needs” are human emotional or physical necessities. Needs help define your design challenge. Remember: Needs are verbs (activities and desires with which your user could use help), not nouns (solutions). Identify needs directly out of the user traits you noted, or from contradictions between two traits – such as a disconnect between what she says and what she does. Write down needs on the side of your Empathy Map.

**IDENTIFY INSIGHTS:** An “Insight” is a remarkable realization that you could leverage to better respond to a design challenge. Insights often grow from contradictions between two user attributes (either within a quadrant or from two different quadrants) or from asking yourself “Why?” when you notice strange behaviour. Write down potential insights on the side of your Empathy Map. One way to identify the seeds of insights is to capture “tensions” and “contradictions” as you work<sup>5</sup>.

### 6.4.3 Activity 3.3 Assessing Risks

In your group, should consider the financial data provided by the company – what is publicly available as revenue, cost, EBITDA, etc. and prepare forecast for the next three years given they innovate or not.

Student teams should develop scenarios to see what investment needs to be made and what ROI is expected. They should consider the risk tolerance of the company.

At the end of the module all teams should prepare the three key outputs to send and/or present to the business owner for feedback:

- drivers for innovation
- empathy map
- financial and risk analysis

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<sup>5</sup> Adapted from <https://dschool.stanford.edu/wp-content/themes/dschool/method-cards/empathy-map.pdf>

## 7 Chapter 6: Module 4 Ideation

### “Generate dots”

This is the fourth step in Figure 2. In this Module you will introduce to the participants the starting process of generating ideas, i.e. “creating dots”.

### 7.1 Module Outcomes

At the end of this Module the participants will be able to:

- Create a field for idea generation
- Consider the ideas from different perspectives
- Collect and analyse information from different sources
- Analyse potential problems

### 7.2 Module Activities

There are three topics in this Module:

- Factors influencing the business or organisation
- Generate ideas and collect information
- Converge and analyse into a Business Opportunity Map

### 7.3 Module 4 Content

#### Developing Solutions

The starting point for developing a solution is to adequately define the problem. Here you need to develop the boundaries for the process. The strategic goals need to be defined along with the final criteria that will define success.

*Slide 56*

There are many different models that can be used for defining problems, generating ideas and working out solutions. Whether one is any better than another is open for discussion and there is no clear answer. Some other models you may consider include:

- **Problem reversal** – Take the opposite view, identify the positives and then the negatives
- **Attribute listing** – similar to the features and benefits model and then look for potential changes

- **Experimentation** – apply various solutions to the problem to see what works
- **Journal** – write copious notes of the group’s observations which you then discuss

#### Slide 57

Discipline is quite critical when defining the problem and generating the solution. Again, there are many different ways of ensuring that people stay on track when developing solutions to problems. In this course, we suggest de Bono’s six thinking hats. Each hat has a different colour depending on the thinking style. By focusing on the task through the use of de Bono’s six thinking hats is useful.

#### Data collection – primary research

##### Slides 58-60

As part of this course students need to get out of their comfort zone and “go out” of the classroom to collect information and generate insights. It is critical for the mentors to support and prepare the teams by common guidance on how to conduct professional interviews with employees, stakeholders, competitors, etc. Various means of communication and research could be used – e.g., phone interview, face to face meetings, email, etc. Focus groups are also an option when organised properly and in professional manner.

## 7.4 Business Opportunity Map

##### Slides 61-64

Once the problem has been identified the group need to set the limits for the process. They also need to set some objectives for their group. From these objectives they need to determine the various group activities. Both these actions should then help the groups to define the outcomes they are aiming for. One tool that should be referred to is the innovation portfolio from the previous module. This matrix helps you determine the “what how and why” you are going to innovate. This matrix should be used to help determine the objectives team activities and outcomes you are looking for.

A Business Opportunity Map<sup>6</sup> is a systematic and easily accessible tool for collecting insights and intelligence about the environment that the business/non-profit organisation operates in.

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<sup>6</sup> A tool created by the Center for innovation, excellence and leadership – IXL Center, [www.ixl-center.com](http://www.ixl-center.com); Eleonora Ferrero, “An effective way to map business opportunities”, publ. Aug.4, 2014, <https://www.linkedin.com/pulse/20140804004732-33705437-an-effective-way-to-map-business-opportunities>

The following key questions can be used to support the process:

### MARKET

- What market segment do we target?
- What needs do we serve?
- What substitutes are customers using?
- Who could be a lead user?
- Who are our competitors?

### OFFERING

- What products do we offer?
- What experiences does the offering involve?
- What services does the offering involve?
- What brand do we offer (if any)?
- What applications do we offer?

### DELIVERY

- On what places is the offering provided?
- Through which channels is the offering provided?
- What is the logistics of the offering?
- When do we offer it (for seasonal goods)?

### PRODUCTION

- What technology do we use?
- What is the production process?
- What resources do we need, incl. HR?
- What assets and technologies are needed?

### BUSINESS MODEL

- Who (will) we partner with?
- What is the pricing strategy?
- What are the expenses?
- What is the revenue model and how we generate it (where does it come from)?
- What is the marketing strategy?

## 7.5 Formative Assessment

### 7.5.1 Activity 4.1 Identifying Trends

Your group should research and document the key trends influencing the business or organisation you are working with. You will need this information later. You should consider:

- Global trends
- Competitive landscape
- Changing capabilities and technologies
- Changing needs and customers

Make a list and use various tools to generate and map them – mind mapping, brainstorming, future perfect, scenarios, etc. It is important to have a discussion around the trends analysis – some cases and examples will be helpful to better grasp the idea of what and how to analyse them.

*It is a good idea to have mentors participating in this activity.*

### 7.5.2 Activity 4.2 Business Opportunity Map

The Business Opportunity Map (BOM) is a tool that allows structuring of the big variety of information into five key categories:

- Market – trends, customers, needs, behaviours, segments, competitors, etc.
- Offering – products, services, customer experience, brands, applications (ICT)
- Delivery – distribution channels, communication, logistics, location, etc.
- Production – equipment, technologies, competences, processes.
- Business model – pricing strategy, revenue model, partners, marketing, etc.

Each group needs to create three BOMs using the following perspectives:

- of the current business and industry
- based on a “future perfect scenario” – what would be wishful future situation for our business

- from a different point of view – we can choose a certain competitor, partner, supplier or other partner from the value chain – each team decides which perspective to use.

The BOM is generated by filling and structuring all generated ideas and collected information.

*In order to gather all necessary information students should use both primary and secondary research. In this module, mentors should help prepare to take interviews, send emails, use surveys and other tools to make their work more successful and fill in as much insights as possible.*

## 8 Chapter 7: Module 5 Consolidation

### “Connect the dots”

This is the fifth module of the course and the last part of Stage 2 STEADY. In this Module, you will introduce to the participants the starting process of Innovation Management.

### 8.1 Module Outcomes

At the end of this Module the participants will be able to:

- Analyse and consolidated the ideas and information collected and filled in the Business opportunity map in Module 4
- Prepare three to five innovation concepts using the fields and elements of the BOM.

### 8.2 Module Activities

This module involves more practical work than theoretical concepts and trainings. Work is done in teams with the support of their mentors. Key part of it is preparation of presentations of each team for the Challenger.

#### Innovation concepts

*Slides 66-68*

Company X's market is defined by its current strategy, customers and competences. There are many opportunities in this larger market space which could be interesting for Company X.

Unfortunately, the chances of winning with these opportunities outside of the defined market space is low for a range of reasons e.g. strategic intent, competences, commitment to stay with the core business and current opportunities, fierce competition, etc. It is important to “look at the big picture” and define new strategic areas for growth through innovation. A portfolio of business concepts and not random selection of ideas should be pursued to create a new strategic thrust for companies.

*Slide 69*

Key aspect of this module is the prioritisation and elaboration on the concepts. We recommend using the Attractiveness – Feasibility (Fit) matrix with its dimensions – market attractiveness product (business) fit.

### **8.2.1 Activity 5.1 Innovation concepts**

All students should prepare three to five concepts for innovation as described in the module following the steps and the model of the BOM with the following elements:

- What customer segments are we serving?
- What are their needs?
- What is our offering?
- How do we produce?
- What is the delivery?
- What is the business model?

### **8.2.2 Activity 5.2 Prioritisation of the concepts**

Using common criteria and previously defined frameworks – provided by the challenger and/or developed by students and mentors – all teams should select top two concepts to recommend for further elaboration and implementation by the client organisation. One framework that we used and recommend is the Attractiveness-Feasibility matrix.

This module ends with a face-to-face meeting with the challenger for presentation of the work done in Stage 2 STEADY and selection of concepts to be chosen from.

## 9 Chapter 8: Module 6 Innovate

### 9.1 Implementation

This is the final module and third stage INNOVATE of the course. All teams should finalize and summarize their findings, key conclusions and feedback by the challenger from the work so far and elaborate them, in order to prepare their presentations with business model and action plan for implementation of the proposed concepts.

### 9.2 Module Content

Visualise the selected concepts through prototypes, diagrams, images and other tools. Presentations should include information about financials, risks and implementation plan so to present in a compelling way.

### 9.3 Module Activities

Student teams work with the mentors' support to finalize their concept and revert all information to business model canvas filling all key elements provided by the framework.

#### 9.3.1 Business model canvas

Business model canvas<sup>7</sup> is a popular and useful tool for describing, visualizing, assessing and presenting. It is widely used by start-ups and entrepreneurs when “pitching” their business concepts to investors. In our case the tool will help students better and faster (using “elevator’s pitch approach) present to the challenger.

In its terms the business model describes the rationale of how an organization creates, delivers and captures value. Its key elements (building blocks) are presented below:

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<sup>7</sup> A tool developed by Alexander Osterwalder , Business model generation, John Wiley & Sons Inc., Copyright 2010, <https://strategyzer.com/canvas/business-model-canvas>

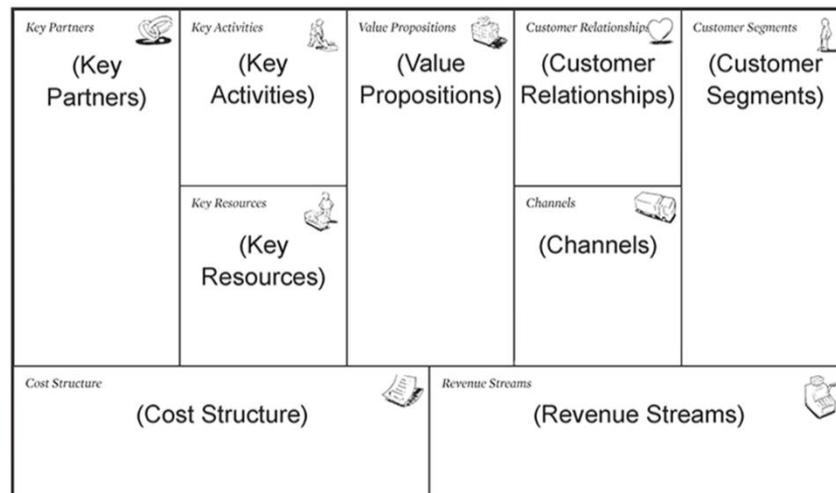


Figure 8 Business model canvas

- Customer segments
- Value proposition
- Channels
- Customer relationships
- Revenue streams
- Key resources
- Key activities
- Key partnerships
- Cost structure

All above elements have been analysed and identified throughout the previous three units in the stage STEADY and particularly in the tool BOM. Part of this module is substantiating the information and filling “gaps” of precise data to raise the readiness level as a final outcome and benefit for the client/challenger. The module ends with final presentations to the company representative. Prior to this mentors should prepare teams to make professional presentations as if in real world. Both creativity and insightfulness should be encouraged.

During the presentations, the representative together with mentors choose a winning team after carefully defined criteria.

## 10 Chapter 9: Final notes and conclusion

This course has been developed as final result of Erasmus+ project funded under KA 2 Strategic partnerships for innovation and exchange of good practices. Its fundamentals lie on the “experiential learning” approach and participation of trainers, mentors, and challenger – business owner/manager who provides a real business case for innovation which seeks solution by the students.

The course was tested through pilots in parallel sessions at two partner universities in Bulgaria and UK – University of library studies and IT (BG) and Middlesex university Business school (UK).

The following key elements are key success factors for high efficiency and satisfaction of all participants:

- Involvement of external experts – consultants, experts, entrepreneurs and others who act as mentors and support the work of trainers who are faculty members and lecturers at the university.
- There are 4 different groups of people who need to be involved in this programme: trainers, participants (students), mentors and business owners (managers), each taking a different role.
- Students are the active participants who drive the process and mentors and trainers should act as facilitators
- The Challenger should be at decision making position – senior management, business owner and be committed to the process. They are involved with at least three face-to-face meetings and/or workshops to discuss medium and final results and provide feedback to students.

The course is developed to serve two main groups of students – IT and business. It can be modified and adjusted to the needs of future university lecturers providing common framework to elaborate on. In the supporting files – Students’ handbook and Guide for collaboration - you will find several templates that you can print and distribute to your participants.

All partners could be contacted via the project website for more details and support when implementing the course.

*Wishing you successful work and implementation!*