EQ-WOOD

ERASMUS KA2 - Cooperation and Innovation for Good Practices

Sector Skills Alliances in vocational education and training

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WP5

DELIVERABLE
D5.9
TRAINING TOOLKIT

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01. TRAINING TOOLKIT

1.1 INTRODUCTION

In this document all the storyboards of each developed Unit are collected.

This is a summary document of the contents present in the platform, developed to create the platform and revised to make it accessible to anyone.

The Units developed are those present in the curriculum of Innovation Advisor:

1.Design thinking, concepting, prototyping

2.Innovation / Innovation management

3.Design, trend & innovation research

4.Project management

5.Professional development, networking & intercultural skills

ANNEX 1: Summary Units (translated in all Partner languages)

1.2 UNIT 1_DESIGN THINKING, CONCEPTION, PROTOTYPING

TRAINING PILL TITLE	**Introduction to Design Thinking, Conception, Prototyping**
PARTNER RESPONSIBLE	**PLANET**
CONCEPT FORMAT	A short, instructive video in which a teacher, placed in a 3D virtual environment, explains the subject consisting of the following learning areas: Introduction, 3 thematic topics, final recommendations and learning assessment tests. We will play a teacher, who will explain the concepts that will be shown on screen that are engaging thanks to virtual settings, motion graphics and keywords that appear on the screen, through which the user can interact with a simple click, to consult the additional in-depth materials provided in different formats (PDF, links to videos or external websites, etc.), which will always be presented by an introductory text. We will use different scenarios, depending on the topic. Tests will be displayed, allowing users to make choices, becoming the experience formative. When this section of the course is finished, the learner will be able to: 1. Recognise the phases of Design Thinking. 2. Illustrate each phase of Design Thinking with a concrete example. 3. Apply the phases of Design Thinking to his or her individual project.
3D SETTING	

SUBJECT	AUDIO IN STUDIO	VOICE OVER	KEYWORDS
Elements that will be indicated to clarify the flow of the text and the topics covered and that can also be shown on	**Text that will be recited by the character in a 3D virtual environment (trainer)**	**Text that will be recited by the characters as users scroll through the elements in Motion Graphic**	**Keywords that will appear on the screen through which the user can interact with a simple click, accessing the in-depth materials**

screen in the form of sensitive words			provided for consultation
INTRODUCTION TO DESIGN THINKING			
	Welcome to an Introduction of Design Thinking.		
	This series of videos will be organised in the following way: this introduction video will explain the content to be presented.		
	The first video is an introduction to the Design Thinking Methodology and how it can help you to design better products.		DESIGN THINKING*attached file"Design thinking key terms"
	The second video focuses on the methodology for leading and brainstorming, especially the definition of the problem and idea expansion.		CONSISE PROBLEM DEFINITION IDEA EXPANSION
	The third video dives into how to select your best ideas for further product development.		IDEAS SELECTION
	And the final video will talk about validating your ideas using experimentation with prototyping and testing those prototypes.		IDEAS VALIDATION
	After you have completed the videos, you can use the supplied checklist to keep you on track as you go through your Design Thinking and product development process.		
	In this session you will learn the phases of Design Thinking, how it supports problem identification, the conception of ideas, and the role that		DESIGN THINKING

	prototyping will play in your development process.		
DESIGN THINKING PROCESS	When we talk about Design Thinking, we want to be clear that this is much about mindset and problem solving as it is about the "Design" of things, check out Tim Brown's video to learn more.		DESIGN THINKING
		We want you to think in a broad way about the world around you and how the products and services that you will design, bring value, not just more "stuff" into the world.	
		In watching the Tim Brown video, hopefully you have learned that the best design is design that solves meaningful problems and by following these ideas, you will be a better entrepreneur.	
	Design Thinking can be described in a series of steps from an initial thought to the beginning of problem definition through idea generation, to the selection and prototyping of potential solutions.		
	Overall, we like to think of Design Thinking as a learning process by which you are always fine tuning your knowledge and along the way, developing desirable products and services.		DESIRABLE SOLUTION
	To help you visualise this process, we will use a path that has been developed with the intention of providing you with the tools you need to make the right steps and advance accordingly.		
	But you should notice and expect, and we will remind you, that sometimes you will need to come back and revisit earlier steps when you learn something new.		

	In Design Thinking we refer to our customer as the "user", this helps us to always keep our connection to the humans involved front and centre to the process.		USER
DISCOVER	The first phase of this path is discovery where we dive into the context of the problem.		DISCOVER
		Discovery means opening to new possibilities, things you hadn't thought of before and getting inspired to create new ideas.	
	This step means that you need to find out everything possible that could impact your business from costs, profit needs, margins, and beyond.		
	And it also requires that the problem is properly defined in the context in which it needs to function, as well, constraints you will face, in order to establish a solid baseline for the ideation of potential solutions.		
		For example, since you are working within the wood industry, you must think about the cost of raw materials, labour, shipping of final products, etc.	
		Or maybe you must think about the kind of trees that will give the wood needed to meet your functional design requirements.	
		Or what specifically are you hoping that your product will supply your customers from a functional point of view, what they will pay for and beyond!	
	Investing heavily in the discovery phase of your project will pay many dividends later and is worth your time to do well.		

	At the end of this phase, you should have a simple, one sentence challenge statement and have identified important principles that must be met.		
INTERPRET	The second phase of this path is the interpretation of the information you have gathered as you worked towards your challenge statement and to meet your key principles.		INTERPRET
	This means you must understand how this problem can be translated into a market need that you have the capability to solve in practical ways.		
	By understanding the needs of the user and the world in which your solutions will need to work, you will be more successful.		USER
	If you do not properly interpret the problem, through the eyes of the user, and the context in which it must function, it is possible that you will either be working on the wrong problem or interpret the problem so poorly the solution is meaningless.		PROBLEM SOLVING IN CONTEXT
		Investing time in good problem interpretation and opportunity identification gives you a competitive advantage.	
		It might be as simple as considering the materials you are using, is wood the best material solution?	
		Or it could be that wood gives some very specific advantages and you should know what they are to maximize your opportunities.	

	This way of problem solving is not exclusive to Design Thinking, but it is a holistic way of thinking about the challenges you will face as a springboard to develop creative answers that give you a step up compared to the competition.		
IDEATE	After you have all the information you need, you must interpret the issues in terms that make sense for your industry so that you can ideate based on them.		IDEATE
	Ideation takes many different forms and there are a variety of methodologies that you can use to achieve the largest number of ideas possible.		
	The focus should be to think about the problem from different angles in your context, in order to come up with the maximum number of ideas possible in order to have fresh solutions.		
	And don't be afraid to ask for the help of others, friends, skilled professionals, possible customers when you are ideating.		
PROTOTYPE	Prototyping means taking your ideas a little further and practically testing them in the most appropriate manner – this could be "back of envelop" sketches, "mock-ups", early stage rough prototypes, etc.		PROTOTYPE
	In the early stages it is important to have a lot of ideas and find ways to visualise your ideas in meaningful ways so that others can understand what you are trying to communicate and to add their ideas.		
	These ideas can then be carried through an iteration process that begins with the development of the idea to improve your		

	understanding of what would be required to make it a reality.		
		Listen to Guido Stompff to understand more about speeding up innovation and the power of idea visualization.	INNOVATION
IDEAS SELECTION	Once many different ideas have been conceptualised and prototyped, iterated upon, you can start to select those ideas that will be taken to the next phase of the process—the development of higher-level working prototypes.		
	And -- it is important to understand that not all ideas, even those that appear to be good ones, will result in successful solutions, so don't get too attached to your ideas!		
EXPERIMENT	That is why it is important to experiment with the most promising ideas by prototyping them to get better feedback on what might and what might not work for you, try to do both "looks like" and "works like" prototypes.		
	Prioritise finding ways in which you can do fast prototypes to test your thinking.		
		This helps the team to improve their communication and to be sure that they understand what each means by their ideas.	
	While concepting and prototyping, you will probably find that some aspects of what you want to develop look great on paper but might not work in real life.		
EVOLUTION	The prototyping process allows you refine your ideas in response to feedback from others and benefits you greatly regarding adaptations to be made before it goes into final production.		

	And this iteration and evolution process will help you develop something that not only fits the market need defined during the ideation and contextualisation phase but also makes the most sense from a production point of view.		
CHECKLIST	We will finish the Design Thinking videos with an overview of all the steps we have taken and give you our recommendations for carrying out Design Thinking in your own context.		
	The checklist we share will serve as a guide for the different phases - but should be adjusted to your needs.		

TOPIC 1: HOW TO STIMULATE DESIGN THINKING			
DESIGN THINKING	Now you have a sense of the Design Thinking process, you might be feeling overwhelmed when you just want to go and design a product that seems to meet a market need.		
	But the thing is, the world around you is full of people designing "things" and you need a way to differentiate yourself in the market, as well begin the process of building up a method to develop appropriate insight to build a long term business strategy.		
		By taking the time to really understand your customer, the world around you and the true needs of the user, you will design products that bring value to the market and have the possibility be more successful.	

	And, don't forget that Design Thinking can be used for other kinds of problems besides just products; for example, the development of a new service model, or even your business strategy.		
	There are many different models or methodologies of Design Thinking and, as you become more comfortable with them you can experiment with mixing aspects from different ones together.		
	A second advantage of using Design Thinking is that because you have a structured framework to follow, it is easy to bring in a wide range of people and disciplines.		
	Everyone, will have visibility to the process and it demystifies the designing process so that everyone can contribute their skills and knowledge.		DEMYSTIFY
	So, plan on gathering a cross functional team to tackle the challenges that you are working on.		
		The skills that come from different life experiences and academic learning will allow your team to create something, new and unique and be able to address issues that are often not possible with a single discipline team.	
	At the same time, it is important to note that a diverse team will usually need more project management and team coaching than a less diverse team.		
	This is because when people see things from different perspectives, they are more likely to		

	pay attention to distinct details and have a lot more questions that need to be answered.		
	And while this trait is extremely beneficial for developing creative solutions, it also means that creating a shared point of view is not always simple and you might find that you have more up-front consensus building than you are used to.		
	However, when you create a cross functional team that can work well together, they will be able to generate more interesting solutions than a less diverse team would be able to achieve.		
	In summary, by using Design Thinking you will be able to work in a cross functional collaborative team that will design more relevant products that your customers care about and, eventually, purchase.		CROSS FUNCTIONAL COLLABORATIVE TEAM
		Once you have finished this section, we recommend going back to your notes on the Project Management section, to ensure that you are developing the tools to support a strong, diverse team that will create the final outcomes you are looking for.	
OTHER DESIGN THINKING MODELS	Three other examples of Design Thinking models are from IDEO, the Institute of Design at Stanford, and the Design Council.		

		The Design Thinking model from IDEO considers three main phases: inspiration, ideation, implementation.	
		Especially when focusing on Human-Centred design, IDEO shares a lot of introspective questions that the developer should consider when creating a product or service to ensure the output is something that serves the needs of the customer.	
		Another tool that IDEO implements is that the phases are broken down into subphases of divergence and convergence to ensure that multiple ideas are looked at and only the best ones are chosen.	
		The Design Thinking model from the Institute of Design at Stanford has five phases: empathise, define, ideate, prototype, test.	
		This model is based on the idea that, in order to create great designs, it is essential to know the users and care about their lives.	
		This knowledge then greatly impacts the definition of the problem and development ideas accordingly.	
		The final phases show us the importance of creating prototypes and testing the results in order to make improvements as necessary.	

		The Double Diamond method from the Design Council gives us four main phases: Discover, Develop, Design, Deliver.	
		These phases are meant to be repeated until a final solution has been developed that responds both to the problem and to the user needs, again using divergent and convergent thinking	DIVERGENT AND CONVERGENT THINKING
		This is because the Design Council supports serious reflection, and going backwards if necessary, to be able to create the outcome you are truly looking for.	
		Another model we want to share with you is a design thinking method known as Biomimicry.	BIOMIMICRY
		When you visit the website and look at the biomimicry toolbox you will see many concepts that you have learned about in the other design thinking methods.	
		The difference with the biomimicry method is that it puts life at the centre of the design process and asks the question "How might we create conditions conducive to life?", we think that is important.	
CONCLUSION	By sharing these different Design Thinking models, we expect you are now starting to understand this is a fascinating and inspiring world of creativity and innovation.		

	Remember that Design Thinking is as much about mindset as it is following strict rules, your best results come from practicing what works for you from a diverse collection of methods.		
	We will work together with the Biomimicry Granada's model to get you started and comfortable with the concepts.		
	And if one of the previously shown models has concepts that better fits your needs, feel free to use those and experiment on your own.		

TOPIC 2: METHODOLOGIES FOR BRAINSTORMING			
OUR DESIGN THINKING MODEL	So, let's get started		
	In the Biomimicry Granada Design Thinking model, there are five different phases: Discover, Interpret, Ideate, Experiment, and Evolve.		DISCOVER, INTERPRET, IDEATE, EXPERIMENT, AND EVOLVE.
		This template can be used as a guide to determine the phase that you are currently in and what the next steps in your process could be.	
PREPARING TO BRAINSTORM	In this section we will work with the first three phases: Discover, Interpret, Ideate.		
	These phases help you better understand how to define and refine the problem; brainstorm new ideas;		

	and ensure that what has been developed truly fits the needs of the user.		
DEFINITION OF THE PROBLEM	Let's get started with the definition of the problem.		
	Using "discovery" as our mindset, we are going to focus on carefully defining a problem that when we solve it, it will be desirable.		DISCOVER DESIRABLE
	This will help us identify who the customer is and what the potential solution will need to do in order to provide them with something that is useful and that they will pay for.		
		Within this phase, these are the kinds of activities you should consider including: • Identifying your customers and what is important to them • Collecting information about what they use today, competitor products, market conditions • Observing your users and possible customers with how they use what exists today • Inspiring your team to learn more • Collaborating on ideas that you need to work on together	HUMAN CENTERED DESIGN
		These activities push you to look at different elements that impact the problem and its context, giving you a good understanding of your design challenge; give yourself plenty of time to do this phase well.	

		By using the concept of "discovery" we want you to be inspired to imagine new possibilities as you complete your discover phase activities and build a solid foundation for your ideas.	
		This is especially important because creating meaningful solutions begins with a deep understanding of needs.	
		Depending on the size of the project, the timeline, and the needed outcomes, there can be many stages in this phase of the process, and you should scale them appropriately.	
	The goal of the discovery phase is to create a one sentence design challenge and to identify important principles that must be met.		
	Collect everything together of what you already know, whether it be on paper or digitally, photographs, samples, or other forms of notetaking and record keeping.		
	You are going to change your perspective on the problem by asking questions of each other in a new way.		
	By using this kind of questioning in your team, using what you do know, you are able to create a 360º vision of what is going on.		
	In this first phase of the Design Thinking method, when you are working to define the problem, you		

	should also be looking to use all the different perspectives around you		
	And, with the right preparation and support, this can be eye-opening as new concepts pop up that you had not previously thought about.		
		Talk to clients, family members, and friends to see their perspective on the problem and the elements that would need to be included in the potential solution	
		You can ask them how they might describe the problem and what the most important elements to improve or to fix are—to them.	
		In addition, consider how other people who are not close to the problem, can lend you their insight, maybe invite some new people to parts of your brainstorming session.	
		Consider each team member and how they will ask different kinds of questions because they have different views on the subject than you.	
		You will be able to use this collaboration to define your problem and the context in which solutions need to work, creating an all-encompassing view of the challenge.	
	One way you can work to get a new perspective on the situation is by using a methodology that we call "Reverse Brainstorming" and allows you to develop		INSIGHT

	deeper insight before you jump into possible solutions.		
TOOL: REVERSE BRAINSTORMING METHODOLOGY	The reverse brainstorming method we will use is inspired by Hal Gregersen's Better Brainstorming technique.		
	We like to call it reverse brainstorming because, instead of looking for ideas or potential solutions, the goal is to figure out what questions you should be asking.		Reverse Brainstorming
	The methodology works as follows: You have one facilitator and several group members.		1. One facilitator 2. Several group members
	The facilitator explains the processes to the rest of the group: The group will work together in a team and will be given three minutes to come up with as many questions around the topic as possible.		3. For three minutes, the group will work to come up with as many questions as possible
	Set a goal of at least 15 questions.		a. Minimum 15 questions
	During the 3 minutes, the facilitator has two main responsibilities, write down all the questions and make sure that no one in the group tries to answer any questions.		4. The facilitator writes down the questions 5. No solutions are given
	The team should review all the questions together and see if they feel there are more questions should be asked.		6. Questions are reviewed
	Repeat the session as necessary until you feel that you have all questions identified.		
	Now you should identify which of the questions are the most important relative to your project, this can be achieved by a simple voting method such as each person allowed to vote for 3 questions.		

	Once the session is over, the questions should be carefully recorded so that they can feed into your problem definition statement.		
		The goal of this exercise is to come up with a fresh look at the challenges through new kinds of questions that had not been considered previously, to provide insight behind the challenges.	
DEFINITION OF THE PROBLEM	Now you have discovered what is behind the problem and its contextualisation, it is time to refine the information that you have in a way that fits your situation.		
	Look at your hierarchy of questions and create a one sentence challenge statement that encompasses who you are designing for, why it is important, what you are working on and what will change.		One sentence challenge statement that addresses: Who is this for? What are we working on? Why it is important? What will change?
	Take a second look at your hierarchy of questions and create list of important principles that your design solution must meet in order to be successful.		List of important principles: • How we work together • Who are our stakeholders? • What do we hope happens?
	Share widely and post your challenges statement and important principles in a visible location.		
INTERPRET	Now you have a good sense of what you are working on it is time to dig in to make sure you really understand the meaning of the opportunities through working with your users, the marketplace and why		INTERPRET

	what you will do can be more successful than the competition.		
		Within this phase, these are the kinds of activities you should consider including: • Immersing yourself in the world in which your users live so that you can understand what matters to them • Learning broadly about the market, the materials and technology available to you • Observing how your competitors are solving these problems today • Translating this knowledge in a way that everyone on the team can understand • Create a hypothesis about the problem and solutions in the form of a design brief	
		Consider making a storyboard or other visual tool to help you better communicate what you know and where your thoughts are going.	
	This process will help you define and delimit the problem and contextualisation that you have already developed in concrete ways.		
	By having a clear visualization of the information, you are allowing other people to see differences to the problem or potentially simple solutions more easily.		
	And once you have all information and brought the team together, you are ready to jump into problem solving.		
		The goal of the interpret phase is to develop a simple design brief that defines the context and key project requirements.	

IDEATE	Now is the fun part, you have done all the background work and collected a large body of knowledge and it is time to tap into your creativity.		IDEATE
		Within this phase, these are the kinds of activities you should consider including: • Collaborating in generous ways to help each other be the most creative that you can be • Generating a lot of ideas that give the basis for your final solutions, you should be thinking expansively and without constraints • Focusing when needed and diverging too – you need both approaches to work through your thinking • Building to think – create small prototypes to test a hypothesis • Refining thoughts with your team	
	Don't be afraid to bring in others outside of your immediate team, for example, maybe some of your users and target customers can help with brainstorming also.		
	The goal of the ideate phase is to generate a lot of ideas that give the basis for your final solutions, you should be thinking expansively and without constraints.		
IDEAS FAN-OUT	As we talk about ideation let's go back and try another brainstorming technique that is working towards coming up with as many ideas as possible, no matter how odd or out of the box so that we can later narrow them down into those ideas that are the most plausible solutions for our problem.		

		Brainstorming in such an open way, preferably with a diverse team, encourages the group to think expansively and without constraints.	
		And, while impossible ideas are often developed, it can easily be the wildest solutions that spark visionary thoughts and help with the development of true answers to the problem at hand.	
	To get the best results, consider how you can create a situation where your participants truly understand the problem, its contextualisation and the rules around the brainstorming session you wish to carry out.		
	The goal is to disrupt your normal thinking process by using all the information you and your team have built to date.		
	The result should be tens, if not hundreds of potential solutions to your problem.		
	And remember, no matter how improbable they are, the process of going through ideas will help you create something truly unique.		
TOOL: POST-IT METHODOLOGY	One of our favourite brainstorming methods is one where you get to use Post-its – you can literally see creative energy spilling out of people.		

	Make sure you have a large pile of Post-its and something to write with - black felt tipped pens work best.		
	Use just one size and one colour of Post-it so that you are not confused by different visual signals.		
	Before you get started, write out your agreed to challenge statement and important principles in large script so that they are visible to everyone.		
	Now everyone is going to brainstorm around the challenge statement within a set timeframe - such as 10 minutes, each person making as many Post-its as they can.		
	The team is trying to answer this question – "What are all the ways in which we can solve this problem?"		
	Each person should record their answers on a Post-it.		
		Important! Put just one idea on each Post-it. One idea.	
	Next, find a large space that is wide open and smooth so the Post-its will stick in place, this could be a white board, window, table, flip chart, etc.		
	One person reads out a Post-it and places it on the open board and asks if anyone has a Post-it that is related to that idea and those are placed with the first Post-it to create a related grouping of similar ideas.		

	Keep going until all similar thoughts are collected together.		
	Once the first related set of Post-its ideas is complete ask for a new Post-its idea to be read out loud and place in a new location on the open board and follow the same process to find related topics that are then grouped together.		
		Don't be afraid to move Post-its around if the idea grouping makes better sense as you learn more from each other and it's OK to add clarifying notes to a Post-it if you need.	
	Now you need to step back and evaluate the groupings that you have created to understand if you still feel the same way about your original challenge statement and see if new ideas have popped up or doubts about the problem.		
	See if you want to rewrite your challenge statement and try a second level of brainstorming to come up with some new ideas.		
	Or just dive in deeper to the ideas that have emerged, in the same way using the Post-its method.		
	Once you are sure you have exhausted your creative juices, make sure to record your brainstorming session so that in the future, the ideas are there ready for you to review.		
	This "idea bank" forms the basis for your next stages of work.		

TOOL: MIND MAPPING AND CONCEPTION OF IDEAS	Another tool that we like to use for generating a lot of ideas, organising them into a hierarchy that clarifies our concepts is mind mapping.		
		Mind mapping is writing out all the elements that are included in the idea that you are thinking about and can be an excellent way to visualize abstract ideas.	
		While there are many different free mind mapping tools out there, we like this one that offers you free use of the platform on all basic mind maps or the possibility to upgrade from more features:	
		To create a mind map, you start with one central idea and, from there, divide the idea into important sectors, adding all essential information under the appropriate headings and creating subheadings as necessary.	
		For example, if you are working with a central product, let's say a wooden table, you could start with the section of design, adding beneath it the sections of materials, necessary tools, etc.	
	While developing this mind map, be sure to include elements such as how much money materials will cost, how much time it will take you to produce the final product, how you will be able to market and sell the product, and any other elements that are		

	important to producing something that is successful for you.		
	Try to repeat the same sections through as many of your ideas as possible.		
	By maintaining the same sections, you will make the comparison process simpler and facilitate the selection process later		
	In this way you should be able to get a good overview of which of your ideas will be the best on, helping with the ideas' selection process.		

TOPIC 3: IDEA SELECTION			
	Now you have many ideas and potential solutions, it is time to move onto the final stage of this section: idea selection.		
	You need to narrow down the ideas you want to begin experimenting with and that you will eventually want to develop.		
	As you work through the concepts of each idea, you should understand the production and development process so that you are sure they are credible ideas.		
	So, take each of your ideas from your "idea bank" and make sure you understand what		

	would be involved to both develop and produce the idea.		
	Be sure to include all your team members to that you aren’t missing key pieces of information.		
	This will prepare you for an assessment session of each idea and allow you to prioritize them.		
IDEAS SELECTION	Now you are ready to decide which ideas you want to take to the next level.		IDEAS SELECTION
	This process of idea section is important because by choosing an idea you are giving it a chance to become a final product.		
	You will need to agree on the criteria by which an idea will move forward to the prototyping stage and once that is done, selecting ideas shouldn’t be too difficult.		

TOOL: USING A 2x2 MATRIX		To support you in this process, consider developing a 2x2 matrix that allows you to visualise where your ideas fit on dimensions that are important to you.	
		The matrix we are showing here compares market potential and product performance, but you should create a comparison with the dimensions that are the most important to you. These could cover a wide range of comparisons such as: • Speed to Market • Cost to develop • Effort needed from team • Technology available • Desirable to the customer • Importance vs. urgency	DESIRABLE
		In the matrix, you can see in the lower left-hand corner, that both elements are lacking—these ideas are probably better left for further development later.	

		In the upper right-hand corner, you can see that both elements are covered—these should be the ideas you are looking to focus on in this development phase.	
		In the other two quadrants you will find ideas that have potential but will need a bit more work before they are the ideal product.	
	Finally, it is important to note that just because an idea is good because it scores high on both of the elements that you value or that it is bad because it does not do as well on one of the elements, you still need to talk as a team to make sure it "feels right".		
ADDITIONAL TOOLS	If the 2x2 matrix doesn't quite fit your thinking process, check out the different tools collected together by the Interaction Design Foundation.		
	Deciding what idea you want to take on to the next phase of idea validation is a subjective process and when you begin to prototype and experiment with the ideas, you will learn much more.		
	That means that even though an idea doesn't fit into your outline perfectly, it still could potentially be valid.		
	The priority is to make sure that your ideas address the needs in the design brief, or go back to your brief and see if you need to update it based in the new things that you have learned.		
	Design Thinking is part science, part art and together with the conceptualisation of your		

	ideas, you will get closer to deciding which ideas have the most potential.		
	So, commit to some ideas and take them to the next level to validate your thinking through the experimentation phase.		

TOPIC 4: IDEAS VALIDATION			
IDEAS VALIDATION	In order to understand the best potential ideas, it is necessary to validate them.		
	This is because not all ideas, even good ideas that end up in the upper right-hand corner of your matrix, will end up being successful products.		
	The first step we will look at here is the experiment phase.		EXPERIMENT
	By building prototypes, you are making your ideas tangible, driving to the next step of communication and understanding.		
	However, the experiment phase does not exist without evolution.		EVOLVE
	This means that as you develop your prototypes and experiment with products, you will also have to adapt and improve your initial idea, evolving it until it is something that can be a final product.		
EXPERIMENT	Let's start with experimentation.		

	When you decide to experiment with an idea, you are bringing it to life by making a tangible prototype of it.		
		Within this phase, these are the kinds of activities you should consider including: • Building rapid prototypes that can tell you what works and what doesn't work • Testing with targeted users and related stakeholders • Gathering feedback so that you can make sure to incorporate the best insights into your product • Evaluating which aspects of the feedback matter, which concepts need to be changed to meet your user's needs • Capturing the information in easy to use ways for the team to build out their knowledge over time	
		Oftentimes it is a good idea to start prototyping your idea in a small size with an easy to manipulate material to quickly test concepts.	
	And don't be afraid if your prototypes are rough – speed is more important than perfection.		
		This first step will help you better visualise the process of creating and developing your final product.	
		This is because, even if the prototype is not an exact replica of your idea at this point, it will still help you share the idea with other people and receive valuable feedback about it.	
	Getting feedback is a valuable stage in the validation process because it will help you better understand if the idea will provide the		

	solution you are looking for or if it will not work at this time.		
	If the idea doesn't seem to fit what you are aiming for with your product, this will give you the opportunity to learn and, potentially, transform the way you are thinking about the problem itself.		
	And even if you feel as though the idea and the prototype is successful, you will probably have to make adaptations and improvements to your initial idea before you come up with a final one.		
EVOLVE	These changes that you make to your initial idea are referred to as "evolutions."		
	As the end goal of this whole process is the development of innovative ideas that have market potential, it is important to keep in mind the fact that modifications of ideas is inevitable.		
		Within this phase, these are the kinds of activities you should consider including: • Gathering feedback on your prototypes and incorporating improvements into your design solutions • Checking your solutions with your project brief and user needs • Developing technical and design specifications that the product must meet in production • Testing products against the specifications to make sure production is of a consistent quality • Creating a marketing plan for the product launch • Documenting the process for quality control, future product development and communication tools	

	That is not to say that the original idea was not good but that we often conceptualise the idea before we have a true understanding of what it means to produce it, market it, etc.		
	During the evolution phase of the idea's validation, these details become clearer and you can continue to progress until you have something that truly fits your needs.		
		The two phases of experimentation and evolution will be intertwined as you will find yourself developing something only to improve it before creating the second prototype.	
		In fact, you have probably already experienced this cycle of trying something, adjusting, and building something that is not new, only slightly changed.	
	However, because you have already completed the problem definition, ideas development, and conceptualisation, this should be an easier process than if you would start from nothing ever time.		
	Through experimentation and evolution of ideas, you should be able to arrive at a final product that both fits your needs and has market potential.		
	While the process may seem long, the positive results will be worth it.		
	Continuing after this video, you will find a checklist walking you through the different phases of Design Thinking that we have presented with these videos.		

	Use this checklist to start your innovation process today.		

TRAINING PILL TITLE	**Ideas Implementation - Rapid Prototyping**
PARTNER RESPONSIBLE	**PLANET**
CONCEPT FORMAT	A short, instructive video in which a teacher, placed in a 3D virtual environment, explains the subject consisting of the following : • INTRO- Understand Different Rapid prototyping process; • How to lead and control the process of Rapid prototyping; • How to create an STL; • STL check; • 3D printing; • A final learning assessment test. We will play a teacher, who will explain the concepts that will be shown on screen that are engaging thanks to virtual settings, motion graphics and keywords that appear on the screen, through which the user can interact with a simple click, to consult the additional in-depth materials provided in different formats (PDF, links to videos or external websites, etc.), which will always be presented by an introductory text. We will use different scenarios, depending on the topic. Texts will be displayed, allowing users to make choices, becoming the experience formative. When this section of the course is finished, the learner will be able to know the process and the most important tools of rapid prototyping / 3D printing and apply them to his or her individual project.
3D SETTING	

SUBJECT	AUDIO IN STUDIO	VOICE OVER	KEYWORDS
Elements that will be indicated to clarify the flow of the text and the topics covered and that can also be shown on screen in the form of sensitive words	**Text that will be recited by the character in a 3D virtual environment (trainer)**	**Text that will be recited by the characters as users scroll through the elements in Motion Graphic**	**Keywords that will appear on the screen through which the user can interact with a simple click, accessing the in-depth materials provided for consultation**
UNDERSTAND RAPID PROTOTYPING			
	Welcome to Rapid Prototyping.		
	You are watching the first of a series of video that will guide you through the firstly the concept and then the execution of Rapid Prototyping (RP).		
	Through this series of lessons, you will learn how to make your idea tangible with the most innovative technique of RP, the 3D Printing.		
	Rapid Prototyping represents the Experimental Phase of a Design Thinking process, that gives you the opportunity to validate the idea and step into the following phase of Evolution.		

		We will go through the following video: The introduction where you will understand the different Rapid prototyping process. A second video that will describe the design modelling with CAD software: we will understand what is an STL file and how to create it. With the third video you will learn how to check the STL file created in your CAD, what kind of software to use for the optimization, the software for slicing objects and the GCode files. Finally in the fourth video we will go through the process of 3D printing.	
INTRODUCTION	Now is time to start to understand what prototype is and what does it mean creating a Prototype.		
WHAT IS A PROTOTYPE?	Prototyping is an integral part of Design Thinking and User Experience design. A prototype is an experimental model of a proposed solution, used to test or validate ideas, design assumptions and other aspects of its conceptualisation, in quick and not expensive way		DESIGN THINKING
	In other words, a prototype allows you to test your ideas quickly and improve them in a timely manner.		
	Prototypes can have many forms, and these forms are useful tangible expressions of your ideas.		
	Prototype can be quick and rough, useful for early-stage testing and learning, or can be fully formed and		

	detailed. The resolution of your prototype will be commensurate with your progress in your project.		
	We prototype for improving the solutions we have on paper and see ,in a tangible form ,if , they respect our initial idea and really solve the identified problem. Sometimes it happens that you come up with a new idea from the old one.		
PROTOTYPING IS GETTING IDEAS AND EXPLORATIONS OUT OF YOUR HEAD AND INTO THE PHYSICAL WORLD	Prototypes do not need to be full products. Prototyping is getting ideas and explorations out of your head and into the physical world		
	In early explorations you can keep your prototypes rough and rapid to allow yourself to learn quickly and investigate a lot of different possibilities		
	Prototypes are most successful when people - the design team, the user, and others- can experience and interact with them.		
	What you learn from those interactions can help drive deeper empathy, as well as shape successful solutions.		
	One of the most important reason why you should prototyping is to test functionality.		
WE PROTOTYPE TO	Many of the goals of prototyping are shared across all four of the above categories. We prototype to:		
LEARN		Learn	

		If a picture is worth a thousand words, a prototype is worth a thousand pictures. Solve disagreements. Prototyping is a powerful tool that can eliminate ambiguity, assist in ideation, and reduce miscommunication.	
CONVERSATE		Start a conversation. A prototype can be a great way to have a different kind of conversation with users.	
FAIL		Fail quickly and cheaply. Creating quick and dirty prototypes allows you to test a number of ideas without investing a lot of time and money up front.	
MANAGE		Manage the solution-building process. Identifying a variable to explore encourages you to break a large problem down into smaller, testable chunks.	
	The best way to reach the final level with minimum rework lies with prototyping and user testing.		

	So don't skip it. Don't believe in any guesses or gut feelings.		
	Have an idea? Simply create possible prototypes for it and validate with end users.		
	Let the real users experience what you have in mind rather than just explaining it and leaving it to imagination. Just show them how it works.		

SUBJECT	AUDIO IN STUDIO	VOICE OVER	KEYWORDS
TOPIC 1: HOW TO LEAD AND CONTROL THE PROCESS OF RAPID PROTOTYPING			
	Welcome. You have already learn WHAT a prototype is and why we do prototype.		
DEFINITION OF THE CONTEXT	We will now go more in deep in the techniques for use and doing Rapid Prototyping.		RAPID PROTOTYPING
	We will also see how this process can be applied to the furniture design.		FURNITURE DESIGN
	With mechanical injection molded plastic parts, before the days of rapid prototyping, you would send the design off for tooling. This process could last 3 months. The mold wouldn't be polished and a few things likely wouldn't fit quite right.		

	With rapid prototyping, you use a completely different process.		
RAPID PROTOTYPING TECHNIQUES	Rapid prototyping is a group of techniques used to quickly fabricate a scale model of a physical part or assembly. Construction of the part or assembly is usually done using 3D printing or "additive layer manufacturing" technology.		
	The innovation of rapid prototyping is the introduction of the CNC (Computer Numerical Control) Machine		CNC MACHINE
	CNC Machines can process different materials like wood, plastic, metal, ceramic and more, following a coded programmed instruction and without a manual operator.		
	It is the software embedded in a computer attached to the tool that manage the entire production process.		
	3D PRINTER are an example of CNC Machine. 3D Printing is the most new and commonly used rapid prototyping technique.		
	However "Rapid" is a relative term. Most prototypes require from three to seventy hours to build, depending on the size and complexity of the object.		

	This may seem slow, but it is much faster than the weeks or months required to make a prototype by traditional, such as hand-made or mechanical prototyping .		
	These dramatic time savings allow manufacturers to bring products to market faster and more cheaply.		
Technology	Understand and choosing the right rapid prototyping technology, is critical to the success of a prototype		
	Rapid prototyping doesn't need to be limited to one process : we can use more than one manufacturing techniques to assemble a prototype.		
	Production processes can be grouped in three categories: Additive, Subtractive and Formative Production.		
ADDITIVE MANUFACTURING	Additive Manufacturing is an appropriate name to describe the technologies that build 3D objects by adding layer-upon-layer of a quite large selection of materials - thermoplastic, photosensitive resin or powder grains of metal - that can being fused together		THERMOPLASTIC
	Each of these layers can be seen as a thinly sliced horizontal cross-section of the eventual object.		
	The additive production is the most commonly used and effective technology which you can use for rapid prototyping.		

SUBTRACTIVE MANUFACTURING	The second category is the subtractive manufacturing or subtractive fabrication, that involves cutting away from a solid block of material.		
	A CNC Milling Machine is one of the rapid prototyping technologies, that have been around for years.		
	It consists of removing material from an initial block of the material of the part to obtain the desired shape.		
	Cutting or hollowing out a piece of wood or plastic is an example of subtractive manufacturing.		
		This image explain quite good the difference between the 2 kind of process additive and subtractive.	
LASER CUTTING	It is worth to name one of the most flexible technologies for subtractive production that is often overlooked, the Laser Cutting.		
		It is a non-contact process which utilizes a laser to cut materials. Is likely to be the most economical manufacturing method.	
	This technology has in its favour the great variety of materials that can be processed: wood, fabric, opaque plastics, translucent, bi-layer and metals like aluminium and steel		

FORMATIVE	Casting is a technique where you create several parts from a first model, used as a reference.		**CASTING**
	This initial part is usually made using an additive manufacturing technology. Once the object is 3D printed, a mold is created around it with silicone rubber. It is cured and then removed. Afterwards, the mold can be filled with the final material – usually resin.		
		This image can be used like a recap for understand the different kind of process presented	
APPLICATION OF RP: The Furniture Industry. How RP changes Design Process	The furniture industry represents one of the most trendy utilization of RP.		
	One part of the furniture business that has traditionally required significant time and financial investment is the design process		
	Prototypes have to be made, models tested and pieces reworked to reach a final product.		

CONFIDENT DECISIONS	This ability to interact with physical hardware early in the design process, rather than exclusively rely on models and drawings, empowers designers to make more confident decisions.		
		3D printing streamlines, simplifies and reduces the cost of designing furniture. Being able to create lightweight furniture prototypes quickly and inexpensively with 3D printing enables designers to test their creations more thoroughly and maximize the beneficial features in the finished product.	
	A rapidly growing number of furniture design firms are experimenting with 3D printing, and the results have been quite creative. 3D printing lets companies develop furniture that is as beautiful to look at as it is functional.		
	While large-scale 3D printing is becoming increasingly possible, the technology is still most commonly used to develop ideas on a smaller scale. However, this shouldn’t stop you from thinking big when it comes to using additive manufacturing techniques for prototyping larger products.		

	We'll look at ways to use 3D printing to prototype furniture, covering three of the crucial aspects of furniture design.		
		AESTHETIC FORM	
		ERGONOMIC FUNCTION	
		STRUCTURAL SOUNDNESS	
3D PRINTING FOR COMPONENT DESIGN	Many modern functional furniture products, including office chairs, adjustable standing desks, and desktop lighting, are comprised of several smaller components that are assembled to produce the final product.		
		These are some sample of component design	
	Each of these components — seat-adjusters, armrests, or lamp bases, for example — will have basic functional requirements. However, the distinguishing features for any particular furniture product will comprise the structural performance, ergonomic design, and aesthetic form. This is where		

	the value of 3D printing comes into play for these design features. Initial parts can be modelled, printed, and immediately tested for ergonomic fit and function.		
	One of the key strengths of 3D printing is the ability to cost-effectively produce multiple iterations of an idea in a short period of time. Having actual components on-hand quickly allows the designer to evaluate key aspects of ergonomic design, like the particular grip feel or viewing angles and then make rapid design optimizations.		
	With the use of 3D printing technology, furniture product designers can more easily and accurately evaluate these features before building production parts and in the end save time and money.		

SUBJECT	AUDIO IN STUDIO	VOICE OVER	KEYWORDS
TOPIC 2: HOW TO CREATE AN STL FILE			
3D DESIGN	We have learnt about the advantages of doing RP and the RP application to the design process.		
	In this video you will learn how to create the STL file.		STL

	3D design is the modern way of sculpting objects, using special softwares and a virtual space instead of scalpel and hammer, which makes it faster and less ...dusty.		
	It is the process of representing a three-dimensional object in a mathematical way.		
	The object to be built is modelled using a Computer-Aided Design software package. Computer-aided design software, or more commonly referred to as CAD, is used to generate virtual 2D or 3D models.		CAD
	2D CAD designs are generally for technical engineering/architecture, while 3D models are typically either used for digital applications such as animation or for manufacturing prototyping processes like 3D printing.		

DESIGN FOR 3D PRINTING: SOFTWARE	The software you should use when designing something to be 3D printed is entirely dependent on what you are trying to make. In general, 3D design software falls into two categories. The first is CAD software and the second is 3D modelling software.		
		CAD software is usually used when creating industrial objects such as mechanical objects.	
		On the other hand, 3D modeling software allows more artistic freedom as designs do not need to work mechanically, be functional or fit to a real world device.	
	There exist many CAD software that can be distinguished by type of use, complexity and cost of licence. Here you can find a quite complete list of CAD software available on the market		
KEY DESIGN RULES	In this part of video we will talk about the key design considerations, that apply to all 3D printing processes.		
	The specific design software you use to create your 3D model does not matter. Anything can be "drawn" in 3D on a digital canvas, but not everything can be 3D printed.		

	The most important thing to remember while designing for 3D printing is the fact that your digital design will become a physical object.		
	While keeping in mind this logic, here are 4 elements to which pay attention, that are the most focus to have, when we design for 3D printing projects.		
OVERHANG		First point: 3D printer do not like Overhangs All 3D printing processes build parts layer-by-layer. Material cannot be deposited onto thin air, so every layer must be printed over some underline material. Avoid overhangs in your design when possible, by using angles smaller than 45°	OVERHANG
WALL THICKNESS		Second point: Consider the wall thickness. When using your 3D modeling software it's possible to design a surface without a wall thickness. However, 3D printers need the information about how thick you intend the wall of your object to be Walls with thickness greater than 0.8 mm can be printed successfully with all processes.	

WARPING		Third point: Remember that the materials used for 3D printing undertake physical change: they are melted, sintered or scanned with a laser and solidified. The heating and cooling of material can cause the parts to warp while printing. Avoid large flat surfaces and use rounded corners to avoid warping.	
RESOLUTION		Forth point: Level of detail - Resolution The minimum level of detail is connected to the capabilities and mechanics of each 3D printing process and to the selected layer height. All 3D printing processes build parts layer-by-layer. Due to the additive nature of 3D Printing, the thickness of each layer determines the resolution of a print in a similar way that the number of pixels determines the resolution of a television or computer monitor. Lower layer height typically results in parts with smoother surfaces.	

	If you are designing with a specific 3D printing process in mind, you can follow the links to read the full guidelines for each of them		

EXPORT YOUR DESIGN: STL FILE	STL files describe the surface geometry of a 3D object, without any representation of colour, texture or other model attributes.	.	
		It is created using a mesh of triangles, representing the surface of the physical part of an object.	MESH OF TRIANGLES
		Unlike a CAD file, an STL file is an approximation of the original design and contains the information of both the inside and outside of a part.	
		These triangles create a 3D network of points, edges, and faces. This mesh defines the internal volume of the model.	
	The STL (Stereolithography or Standard Tessellation Language) file format is the most commonly used file format for 3D printing.		
	This format has been adopted and supported by many CAD software packages, and today is widely used for rapid prototyping.		

	STL file is the end product of the 3D modeling process.		
	Here is a guide to explore in deep the STL file.		

SUBJECT	AUDIO IN STUDIO	VOICE OVER	KEYWORDS
TOPIC 3: STL FILE CHECK			
	At this stage, you have your CAD project.		
	During the designing process you have considered the limitations and constraints of the 3D printing process.		
	Then, you have exported your STL file. However, not all STL files are perfect and some may have defects. Defects lead to poor printing or outright print failures.		
CHECK OF THE STL FILE	Here we are at the checking phase. As we said, anything can be "drawn" in 3D on a digital canvas, but not everything can be 3D printed.		

	One of the most common errors leading to printing failures is missing triangles. This occurs when the adjacent triangles fail to share two common vertices.		
	The following images will let better understand this concept.		
		As we said the STL file represents the surface of the digital model as a mesh of triangles, which are composed of 3 elements: -Vertices (points) - Edges (lines between points) - Faces (surfaces between lines)	
		Each triangle also has a normal vector, which defines which side of a triangle faces outward.	
		An STL file is 3D printable if each edge is connected to exactly two faces (manifold). This way the 3D model is represented accurately and without any ambiguity.	
		A “good” STL file must conform to two rules:	

		- Adjacent triangles must have two vertices in common.	

		- The orientation of the triangles (what side of the triangle is in and what side is out) as specified by the vertices and normals must agree.	
	If these requirements are not met, you can face some issues when printing your file. Let’s see in the specific.		
	BOUNDARY EDGES	If some edges of the STL file are not connected to only one face, this essentially means that the model has holes and does not represent a closed surface. The STL checking software can repair the boundary edges by simply clicking a button.	
	INTERSECTING FACES	Intersecting faces are detected when two surfaces collide with each other. This error is commonly encountered when multiple bodies are occupying the same space. Intersecting faces usually lead to failures during slicing, as the software cannot recognize which areas are "inside" the model and which are "outside". It is relatively straightforward to repair such errors. Most dedicated 3D printing file preparation software can repair these errors, but success is not always guaranteed. It is good design practice (and will save you a lot of time and effort later) to combine all bodies into a single solid in the native CAD software before exporting them into STL.	

	Many software solutions exist dedicated to the preparation of STL files for 3D printing and they can repair most STL errors.		
		See here the most used	
		Or check the link to a complete software list.	
SLICING	Once the checking phase is complete, there is the slicing phase		
	A slicer software takes a 3D drawing (most often in .STL format) and translates this model into individual layers. It then generates the machine code that the printer will use for printing		LAYER

	After having sliced the model, the software converts the STL file into G-code, which is the language that 3D printers understand. It's called a slicer because that's literally what it does; it divides the 3D model into thousands of flat 2D layers and provides G Code instructions to the printer about how to print each layer.		G CODE
PRINT SETTING	A slicer program allows to calibrate printer settings for various types of "areas to print" Layer Height is the setting that establishes the height of each layer of filament in your print. In some sense, layer height in 3d printing is akin to resolution in photography or videography. Wall Thickness is the outer wall of a designed object Fill density or infill is a measure of how much material will be printed inside the outer shell of the object Print speed is how fast the print head travels while extruding filament		

	The program may also generate an auxiliary structure to support the model during the build, useful for overhangs, internal cavities, and thin-walled sections.		**AUXILIARY STRUCTURE**
	Slicer software plays an integral role in helping turn your 3d ideas into reality. Therefore, how you use the slicer, specifically how you use the settings, is often a critical difference between printing success and failure.		
	Here is a list of the main slicing software you can use.		

SUBJECT	AUDIO IN STUDIO	VOICE OVER	KEYWORDS
TOPIC 4 - 3D PRINTING			
	After having exported your Gcode file you are ready for print it.		
3D PRINTING MATERIALS	Now you need to choose which material will best achieve the specific properties required for your object. The variety of materials used in 3D printing is very broad. It includes plastics, ceramics, resins, metals, sand, textiles, biomaterials, glass, food.		

	The material chosen for the project will also determine which printing methods are most suitable.		
	The range of materials suitable for 3d printing is becoming more and more wide. You can explore them at this link.		
	Let's look now the most commonly used 3D techniques, for each group of materials		
	For RP the most common and useful process is certainly linked to the production of plastic or resin objects.		
PLASTIC BASED PRODUCTIONS	If you want to print Plastic, there are 2 processes you can choose:		
FDM - FUSED DEPOSITION MODELING	The FDM - Fused Deposition Modeling - Technology is at the very entry of the market as it mainly used by individuals. It is probably the most popular printing method due to the number of printers available on the market.		
		FDM is an affordable 3D printing process compared to other 3D printing technologies. This process works by material being melted and extruded through a nozzle to 3D print a cross section of an object each layer at a time. The bed lowers for each new layer and this process repeats until the object is completed. Layer thickness determines the quality of the 3D print.	NOZZLE

		Some FDM 3D printers have two or more print heads to print in multiple colours and use support for overhanging areas of a complex 3D print.	
SLS - LASER SINTERING - TECHNOLOGY		SLS - Laser Sintering -Technology is a 3D printing technique consisting of the fabrication of an object by melting successive layers of powder together in order to form an object. The process most notably facilitates in the creation of complex and interlocking forms.	
RESIN - WAX	If you are interested to print resin or wax material the technology you will need is the photopolymerisation. This technique involves the solidification of photopolymer resin by means of a UV light. It is used by different 3D printing processes such as:		PHOTOPOLYMER
		SLA (Stereolithography) Technology uses a vat of curable photopolymer resin. The build plate descends in small increments and the liquid polymer is exposed to light where the UV laser draws a cross section layer by layer.	UV - LIGHT

		Digital Light Processing (DLP) a projector is used to cure photopolymer resin. This is very similar to the SLA method except that instead of using a UV laser to cure the photopolymer resin, a light bulb is used. Objects are created similarly to SLA with the object being either pulled out of the resin	
	For sake of completeness, some printers can use metals. The application of this kind of production is specific often related to mechanical industry.		
		In the tables presented, the most common plastics and metals used in 3D printing are summarized.	
	With this video we conclude the series of video on Rapid Prototyping.		
	To examine in depth the RP and in particular the 3D printing technology, click on this link. Hope you enjoy the videos.		
	You can have a final assessment of your learning activities by clicking on the following link.		

1.3 Unit 3_Innovation management

TRAINING PILL TITLE	**Innovation management**
PARTNER RESPONSIBLE	**Woodwize / InnovaWood**
CONCEPT FORMAT	Instructive series of videos with a presenter in front of a neutral screen (white/blue) He/she explains the content with the help of graphics that are slowly animated (fading in and out / morphing, highlights with arrows or similar)
3D SETTING	

CHAPTER I: Introduction to innovation and innovation management

Subject	Audio in studio	Voice over	Keywords
Elements that will be indicated to clarify the flow of the text and the topics covered and that can also be shown on screen in the form of sensitive words	**Text that will be recited by the character in a 3D virtual environment (trainer)**	**Text that will be recited by the characters as users scroll through the elements in Motion Graphic**	**Keywords that will appear on the screen through which the user can interact with a simple click, accessing the in-depth materials provided for consultation**
Innovation and innovation management	(Intro)		

Subject	Audio in studio	Voice over	Keywords
	Welcome to this introductory series about innovation management. In this series, you will learn about the importance of innovation for companies, and which role an innovation manager can play for the transformation of a business. So in this unit, let's have a first look on what innovation means today.		
Innovation and innovation management	We live in exponential times. Digitalisation is doubtlessly one of the most significant drivers of change in our society today. ICT have entered today almost all domains, from industry to administration, government, education, health etc. The tremendous impact it has on the way we live, and work is unforeseen.		
Innovation and innovation management 4th Industrial Revolution	Technological innovations have led to what is called "the 4th Industrial Revolution". The change is seen to be as important as the invention of the steam power engine for mechanisation, the electrification or the invention of computer chips, which have been the main big steps towards modern mass production.		

Subject	Audio in studio	Voice over	Keywords
Innovation and innovation management Smart Factory Digital Transformation		In a Smart Factory of the Future, all assets – that is workers, suppliers, customers, machines, resources, processes - are connected and fully integrated in the production systems. Through digital connectivity and the globalisation, any major technological or social innovation can be spread and taken up much faster than ever before.	
Innovation and innovation management Economy – policy - education	The digital transformation will be the most decisive change of the industry in the near future. This has an impact on • first, the economy, considering entrepreneurship & employment, • second, policy - on the European, national, regional and more than ever, also on city level, and • Third, on education: the change leads to a different need for competences, knowledge and skills of managers and employees.		

Subject	Audio in studio	Voice over	Keywords
Innovation and innovation management The triple helix model of innovation		It is clear now, that by just looking at your own business, innovation can start, but might not reach an expected higher level. This graph shows in a Triple Helix model for innovation, how the roles of the three players State, Industry and Academia has evolved. Traditionally all three payers used to be quite static and separated. Luckily, during the past decade, changes have been made in European policy and at the educational level to promote more exchange and collaboration both in research, entrepreneurship and innovation, and to make it easier for industry to start innovating from their side. Today, more and more creative and fluid innovation environments are forming in many sectors. Nevertheless, the gaps between education and industry are still not fully bridged, and many government regulations or legislation still block innovation in businesses. Understanding this triangle of interaction helps actors in innovation to	

Subject	Audio in studio	Voice over	Keywords
		make better progress and even to identify good opportunities.	
Innovation and innovation management Societal challenges	Innovation is important for every organization to maintain an advantage in view of their competitors. But not only for an organization, also for the whole society innovation is essential to find new solutions to combat critical and social risks and threats. In general, innovation implies improvement. From the perspective of the society, innovation is set in order to stimulate economic growth. Especially technological innovation is considered as an important driver of economic growth, because coming up with new ideas and technologies can increase the productivity and generate greater output with the same input. Furthermore, innovation is expected to increase the well-being of every individual citizen and to find effective solutions to ensure environmental sustainability.		
Innovation and innovation management		For an organization, innovation creates a competitive advantage. Companies need to foresee what is happening in a	

Subject	Audio in studio	Voice over	Keywords
Competitive advantage Better teamwork		changing market to keep on satisfying their customers. In fact, increased competitive advantage and continuous innovation has a direct effect on performance and profitability. Furthermore, innovation evokes an increased productivity and a positive impact on the company culture. To become innovative, a company needs to involve all its people and connect all their knowledge to the transformative process.	
Innovation and innovation management Start with the WHY?	Now what is the striking feature about innovation? As Simon Sinek stated during his famous TED-talk: "Start with the why"! Why are some people and firms more inventive and pioneering than others? And why are they able to repeat their success again and again? In business it does not matter what you do, it matters why you do it! In his book he analyses why innovative leaders like the Wright brothers, Martin Luther King or Steve Jobs conquered the world: he concludes that they all		Check out the inspiring talk of Simon Sinek (2009):

Subject	Audio in studio	Voice over	Keywords
	think the same way: "They all started with why: why do we do what we do? People do not buy what you do, but they buy why you do it." Learning to ask these questions can unlock the secret to inspirational business.		
Innovation and innovation management		Here is an example for the wood industry. Quite usually, a company would market their product in the following way: "We produce nice wood-frame houses (what), and these wood-frame houses use the best materials, and they are really strong and sustainable (how)." But this is quite uninspiring. Most companies communicate from the outside to the inside, and often fail to address the "why".	
Innovation and innovation management Reduce ecological footprint Save the planet		If you want to inspire your audience, you should start with the "why", for example: "We want to change the way we produce, and we want to reduce our ecologic footprint, to leave a more healthy planet to our children. Therefore, we work only with sustainable wood material, so that we construct the eco-friendliest wooden house you can imagine."	

Subject	Audio in studio	Voice over	Keywords
Eco-friendly construction			
Innovation and innovation management Values		People don't buy what a firm is making, but people buy why the firm is making it. So the clients should be addressed from the inside to the outside of the circle: first why, then how, finally what. When an organization inspires customers, they will change their belief and behaviour. In other words, it is not about the specific qualities of a product, but about the values that a product represents for their customers.	
Innovation and innovation management 1. Digital transformation pushes industries to innovate 2. Organisations need to collaborate in innovation ecosystems	(Conclusion) In this introduction about innovation, you have heard about: 1. How the digital transformation is changing the industry, 2. How different types of organisations need to collaborate more to unleash the power of innovation and transformation of the society, and 3. How organisations need to put real values in the centre of their innovation		

Subject	Audio in studio	Voice over	Keywords
3. Innovation is about value for customers	process, to convince clients that they can make a difference In the next unit, we will go deeper into what innovation is actually about and what it means for the development of companies.		

PART 2: What is Innovation?

Subject	Audio in studio	Voice over	Keywords
What is innovation?	(Intro) In this unit, we will look at different types of innovation, the different phases in a company, and how the macro-economic environment influences the innovation cycle.		
What is innovation? Different views of innovation - Economic - Social	The term innovation can be defined from various backgrounds: An economist sees innovation mainly as an opportunity to contribute to more growth of the national economy. A social scientist is more interested in the ways how individuals innovate or how they adopt innovations. A manager on the other hand will mostly think about how		Based on Devos 2018. reference

Subject	**Audio in studio**	**Voice over**	**Keywords**
- Managerial - Technical	organisations can adopt or implement innovations. Lastly, an engineer looks at innovations mostly as a technical artefact.		
What is innovation? 1. Product innovation 2. Process innovation 3. Marketing innovation 4. Organisational innovation Visualize with pictures of examples	A commonly known typology by the OECD distinguishes four types of innovation: • Product innovation implies a product or a service that is completely new or has been significantly improved. A most prominent example is the smartphone. • Process innovation is defined as a new or significantly improved production or delivery method. A good example is e-commerce of everyday good such as clothes, books, or food. • Marketing innovation is the adoption of a new marketing method involving significant changes in product design or packaging, product promotion or pricing. An example are prime broadcasting rights for a television provider for a special football league. • Organizational innovation involves a new organizational method in business practices. An example is the change to an open source software.		Based on OECD 2015 Reference
What is innovation?		(Voiceover begins, graphic emerges) But in the context of a company, what types of innovations do matter and need to be understood by an innovation manager?	Based on Moore 2007 Reference

Subject	Audio in studio	Voice over	Keywords
		While the literature is full of different categorizations and typologies, we refer here to a central concept to better understand the different types of innovation. According to Moore, "there is never a time when the market rewards not innovating." Acknowledging this thought, his work distinguishes 15 different types of innovation that range over the entire maturity cycle of a product. The combination of category and maturity offers a framework for analysis of all market forces that affect a competitive advantage strategy of a company.	
What is innovation? Show heading: Innovations during the introduction phase Highlight step by step the following key terms in the graph 1. Disruptive innovation		When a new product in launched into the market, a disruptive innovation is the first strategy an entrepreneur can go for: the new product opens new market areas where even the product was formerly unknown. The example of the introduction of wood-frame houses in new countries to build more passive houses can be considered as a disruptive innovation in the construction market.	Based on Dodoo and Gustavsson 2013 Reference

Subject	Audio in studio	Voice over	Keywords
2. Application innovation 3. Product innovation 4. Platform innovation		After such a disruptive innovation is launched, there are different possibilities to apply this solution also for other versions of the same product or service. In our example, wood-frame constructions can not only be used in private houses, but also in company buildings, where low environmental impact is an important feature. This secondary strategy is called application innovation. The third strategy is product innovation. This means that for example also other types of wood or wood technologies can be used. Furthermore, also the distribution channel can be changed or renewed by which other customers are targeted and the market is grown. This type is called platform innovation.	
What is innovation? Heading: Innovation during the growth phase		Once the new product is known by a large audience of clients, the product has reached its growth phase. Here several other strategies can be applied to innovate: In the customer intimacy zone, the product line can be extended by what is called line-	

Subject	Audio in studio	Voice over	Keywords
		extension innovation. This means to reach other customer segments with a different type of the initial product: most of the time, a beta-version of the new product line that is a bit cheaper will be added to the market. The products can then be further improved and put on the market with new features of an alpha-plus type of the product or service. This is called enhancement innovation.	
What is innovation? Heading: Innovation during the maturity phase		During the maturity phase of a product, the entrepreneur can also choose from the operational point of view to go for more types of innovation. These options are value-engineering, which explores how can my product create extra values for other customers, or: integration innovation, which explores how the company can cooperate with its partners or competitors to better integrate other services in the original product concept. Four more types of innovation strategies can be used during the maturity phase, two from the customer's point of view and two	

Subject	**Audio in studio**	**Voice over**	**Keywords**
		from the operational excellence point of view. New marketing innovation is possible to reach even more new customers. The company can also choose to use experimental innovation with quite special new product features or service types.	
What is innovation? Heading: Innovation during the decline phase		Even during the decline phase, there are still innovation options that a company can aim for. A typical option in this phase is process innovation, which aims to reach a better operational performance of the production to obtain still profitable sales. However, the entrepreneur is already aware that the product itself lacks sufficient innovation, and that the end of the product or service is approaching. At that stage, the company can decide to go for a complete renewal innovation and has two options. First, via an organic renewal strategy, the product line itself will	

Subject	Audio in studio	Voice over	Keywords
		be fully innovated, which means the old products will be quickly phased out, and the new products will be introduced proactively. The customer base will perceive the renewed product as an innovative, modern product and sales increase again. Second, the renewal can also be achieved by an <u>acquisition renewal</u>, during which a strategic partnership with a strong partner is forged and is directly linked with the renewed product. However, if none of these two strategies works, it is time for the company to acknowledge the decline phase. Here, the company can still choose to go for <u>value migration:</u> By cooperating with other brands, it can migrate its product into another existing type of product or service. If none of the above innovation strategies work, the last step is to <u>harvest</u> all cash and <u>exit</u> the market.	
What is innovation? Heading:	(Presenter steps in again) In order to understand trends in innovation, it is also very important to look at the macro-economic playing field, in which different		

Subject	Audio in studio	Voice over	Keywords
Macro-economic forces and global competition Subheading Europe's innovation strategy Knowledge + Entrepreneurship = Innovation	regions and countries all around the world are competing for resources and growth markets. Governments and policies in Europe have promoted our continent as a leading region of knowledge-based society and economy. This is our main strategy to compete with other strong regions and countries on a macro-economic level. In the last decade, many manufacturing industries and large multinational companies delocalised their factories to low cost countries, for example to Eastern Europe, China or India. In this context, the European Commission has identified Entrepreneurship as a main catalyst to bring international competitiveness of Europe to the next level: KNOWLEDGE plus ENTREPRENEURSHIP equals INNOVATION. This is why the innovative businesses are at the heart of Europe's innovation strategy.		
What is innovation?	In Europe, it is important to consider the diversity of countries and regions. The main difference to large producer countries such as China, India, USA or Russia is, markets of such scale and size are much more difficult to reach in Europe. This is due to the complex differences in legislation, language, culture		

Subject	Audio in studio	Voice over	Keywords
	and history among countries in Europe, which can block trade and innovation. Examples to overcome such specific barriers are special business policies and innovation zones, such as in Portugal, or e-government solutions, such as in Estonia. Regarding the policy trends towards 2050, cities are getting into the focus as the places where most of the innovation will happen. Combined with the trend of digitization, this is leading to emerging policies for Smart Cities, a field with many new opportunities for business innovation.		
What is innovation? - Smart Factory & Digital Transformation - Triple helix model of innovation - Societal challenges -	(Conclusions) In this unit, you have learnt about the many different aspects of innovation. We have looked at how a company can choose from 15 different types of innovation strategies to enhance and renew its product during the maturity cycle, and to enlarge its customer base. We also discussed how the global macro-economic context influences the role of innovation specifically in Europe, which has		

Subject	Audio in studio	Voice over	Keywords
	put the innovation of companies on top of its policy agenda. In the following unit, we will learn what innovation management is about.		

PART 3: Innovation management

Subject	Audio in studio	Voice over	Keywords
Innovation management	(Intro) In this unit, we will introduce you to what innovation management is and how different types of innovation can drive a company. We will also introduce you to "gap analysis" as a useful method to innovate an organisation.		
Innovation management Defining innovation management	Innovation management is a combination of the management of innovation processes, and change management. It refers to product, business process, marketing and organizational innovation.		https://en.wikipedia.org/wiki/Innovation_management

Subject	Audio in studio	Voice over	Keywords
List The strategy of innovation Portfolio management Project management Leadership and organizational culture Human resources External relations Organizational design Innovation processes Performance measures Marketing Resources Knowledge and intellectual property management	Innovation management involves many different components and requires the management of a variety of areas including: - The strategy of innovation - Portfolio management - Project management - Leadership and organizational culture - Human resources - External relations - Organizational design - Innovation processes - Performance measures - Marketing - Resources - Knowledge and intellectual property management - Technology		

Subject	Audio in studio	Voice over	Keywords
Technology			
	Innovation management includes a set of tools that allow managers plus workers or users to cooperate with a common understanding of processes and goals. Innovation management allows the organization to respond to external or internal opportunities, and use its creativity to introduce new ideas, processes or products. It is not related to R&D; it involves workers or users at every level in contributing creatively to an organization's product or service development and marketing.		(remains)
Innovation management Innovation management tools List: brainstorming,	By utilizing innovation management tools, management can trigger and deploy the creative capabilities of the work force for the continuous development of an organization. Common tools include for example: brainstorming, prototyping, product lifecycle management, idea management, design thinking, TRIZ, Phase–gate model, project		(remains)

Subject	Audio in studio	Voice over	Keywords
prototyping, product lifecycle management, idea management, design thinking, TRIZ, Phase–gate model, project management, product line planning portfolio management.	management, product line planning and portfolio management. The process of innovation management can be viewed as an evolutionary integration of organization, technology and market by iterating series of activities: search, select, implement and capture.		
Innovation management **Technological change** - Incremental innovation		Technological change often leads to organizational change: the introduction of new Information and Communication Technologies (ICT) has led many organizations to change their structure and operation. In turn, a new work organization may demand new systems and technologies.	

Subject	Audio in studio	Voice over	Keywords
- Radical innovations - Disruptive innovation - Diffusion		Most innovations are more modest and represent largely incremental improvement of existing ways of doing things. Other inventions cause revolutionary, changes, which are called radical innovations. Large established firms are generally less good at radical innovation, whereas smaller companies tend to be more flexible and able to make radical innovation. The most known example is the story of Microsoft and Apple. These started in the 1980s as then small start-up companies, which introduced a radical new concept of microcomputers. This was the beginning of their worldwide success. The large established tech companies at that time such as IBM could not follow and adapt to this trend. If radical innovations lead to decisive advantages and are then taken up by many more companies	

Subject	Audio in studio	Voice over	Keywords
		also in different sectors, these are called disruptive innovations. The process of adoption and uptake by others is also called technological diffusion.	
Innovation management Gap analysis		Gap analysis is an effective technique for transforming companies in an innovative way. To carry out a gap analysis, a double diagram needs to be developed: the "Current state diagram" and the "Desired state diagram". The "as it is" diagram describes the present state of the organization's culture and capabilities. The "as it should be" diagram describes the future desired state into which the organisation wishes to evolve. The goal of the gap analysis is to identify the difference between the current and target business state. The results are important to improve the business process and identify the key factors for change, which are then collected in an action plan. The action plan is a key part of the change	

Subject	Audio in studio	Voice over	Keywords
		management to move the company towards the desired state.	
Innovation management Innovative companies follow their vision	Both the desired state and the answer on the "why we do what we do" question make it clear that an innovative company needs to have a vision. Having a vision is desired in order to really have an impact in a market, and to reach a large audience of clients. Together with your own employees, the audience believes in your company's values, and that you are the best to offer the value they want to have.		
Innovation management Company vision Incremental vs. radical vs. disruptive innovation Gap analysis	(Conclusion) In this unit, you have learnt that innovation management involves all aspects of a company and needs to be driven by a future vision of the company and the value it creates for its customers. Various tools can help to make use of the creative potentials inside an organization, involving all its staff members. The technological change of an organisation can build on incremental versus radical innovations. Very successful radical innovations can		

Subject	Audio in studio	Voice over	Keywords
	even be disruptive to a whole market or sector. Gap analysis can be used as an effective technique to address to develop a path and action plan towards an innovative vision of a company. In the following unit, we will learn what the role of an innovation manager is in the transformation of a company towards that vision.		

PART 4: The profile of an innovation managers

Subject	Audio in studio	Voice over	Keywords
Profile of an innovation manager	In this unit we will introduce you to the innovation manager, which qualities and roles, and what profile of competencies he or she needs to have.		
Profile of an innovation manager		Let's start with the question what is an innovator? Here are a few examples	https://en.wikipedia.org/wiki/Henry_Ford

Subject	Audio in studio	Voice over	Keywords
What is an innovator? Henry Ford (1863-1947) Bill Gates (born 1955) Steve Jobs (1955-2011)		from history of very influential innovators: • Henry Ford was the founder of the Ford Motor Company, which developed the first assembly line for mass production of automobiles. • Bill Gates is a co-founder of the Microsoft Corporation, and Steve Jobs is a co-founder of the Apple company, which led the tech revolution around personal computers in the 1970s and 80s. Innovators are people who by chance or by imitation invent something very new. Innovators often become then entrepreneurs to realize their invention on a larger scale. If their product or service is successful, their companies are growing fast, and more and more employees with specialist knowledge are needed. The innovative knowledge is the key asset of the company, so company espionage or knowhow theft is a big risk.	https://en.wikipedia.org/wiki/Bill_Gates https://en.wikipedia.org/wiki/Steve_Jobs
Profile of an innovation manager	(Presenter steps in frame) Established companies who are in a transition phase to adopt new trends are		

Subject	Audio in studio	Voice over	Keywords
Innovators versus innovation managers - Intrapreneurial skills - Driving change in an existing company	not in need of an innovator, but in need of an innovator manager: someone who has the same competences as an entrepreneur, but who actually handles the transformation from inside the company. Here we speak of intrapreneurial skills or competencies. The innovation manager is a central coordinating figure in the company, understanding the language of the R&D department as well as that of the other divisions of the company. Furthermore, the innovation manager needs to know about important technological, economic and social trends that are relevant to the company's future.		
Profile of an innovation manager Qualities of an innovation manager - organized - goal-oriented - eloquent - fluent in English (and more)		An innovation manager has to be a person with many qualities: - He / she needs to be organized, in order to manage a plan and carry out project. - He / she needs to be goal-oriented with the motto "do not go, do not exist". - He / she needs to be eloquent in order to talk to the different departments of the company and also to customers, suppliers and partners.	

Subject	Audio in studio	Voice over	Keywords
- eager to learn - curious - self-confident / challenge others		- He / she needs to be fluent in English, and possibly also other languages, when international alliances are developed. - He / she needs to be open to learn, not to learn everything in detail but he needs to have a general knowledge from all areas. - He / she needs to curious in order to recognize trends early. - He /she needs to behave challenging: innovation managers must not shy away from conflicts but rather deal with conflicts and changes. When a company is still rather small, an external innovation manager could be hired. If a company is working with an internal innovation manager, this manager should be member of the staff team and located very closely to the office of the boss.	
	(Short appearance of presenter) When a company is still rather small, an external innovation manager could be hired. If a company is working with an internal innovation manager, this manager should be member of the staff and be positioned very close to the main office of the boss.		

Subject	Audio in studio	Voice over	Keywords
Profile of an innovation manager (maybe organize these words in a cloud around this subtitle, or an image) Roles of the innovation manager in a company: - Idea finder - Idea manager - Innovation scout - Continuous improvement process manager - Innovation strategist - Futurologist - Organizational developer - Innovation project manager - Developer - Patent manager		An innovation manager can play 12 possible roles in a firm: - Idea finder - Idea manager - Innovation scout - Continuous improvement process manager - Innovation strategist - Futurologist - Organizational developer - Innovation project manager - Developer - Patent manager - Funding manager - Portfolio Manager and controller	

Subject	Audio in studio	Voice over	Keywords
- Funding manager - Portfolio Manager and controller			
Profile of an innovation manager T-shaped capability profile		The innovation manager needs to have what is called a "T-shaped capability profile". This means that he or she combines the capabilities of an "expert", who has deep knowledge in one or more fields, with the capabilities of a "generalist", who can understand and relate to many different fields, without having deep expert knowledge in these topics. This combination of expert knowledge and empathy towards other fields and people allows him or her to communicate with experts in different fields and help them to collaborate with experts of other fields.	
Profile of an innovation manager Learning in times of constant change	(Return of presenter) To be able to think and act in an innovative manner, the innovation manager must not only be able to learn on his or her own, but also be able to unlearn and relearn. Knowledge, technologies and industrial processes are constantly changing and evolving. Completely new technologies		

Subject	Audio in studio	Voice over	Keywords
	(for example artificial intelligence) are now entering companies and need to be integrated. The innovation manager needs to acquire the essentials of this new knowledge, reconfigure and combine it with existing knowledge in the company, and guide other staff in the company towards a common understanding of it.		
Profile of an innovation manager - Innovators versus innovation managers - Qualities and roles of an Innovation Manager in a company - T-shaped capability profile	(Conclusion) In this unit, you have learnt about the capability profile of an innovation manager, who has special intrapreneurial skills and can coordinate between different departments of a company. He or she is a strong communicator and can, thanks to his "T-shaped capabilities", facilitate exchange and collaboration between people with very different expertise and experience. The innovation manager is also constantly updating himself/herself about new trends and technologies and uses this knowledge in a creative manner. In the following chapter, you will learn about the innovation process and how it can be managed by the help of an Innovation Canvas.		

CHAPTER II: Innovation as a process: the Innovation Canvas

PART 1: The innovation process – how to use the Innovation Canvas

Subject	**Audio in studio**	**Voice over**	**Keywords**
Innovation as a process	(Intro) In this unit, you will learn how innovation can be conceptualized using a special tool, the Innovation Canvas. We will walk step-by-step through each section of the canvas, to let you understand how it can be used as a guiding roadmap for innovation in an organisation. We will start with an overview of the canvas.		
Innovation as a process Popular business innovation tools - Business Model Canvas - Value Proposition Canvas (VPC)	Innovation can be seen as a process by which new ideas are generated and successfully exploited to create economic, social and environmental value. A vast set of business methods and tools have been created to facilitate such processes. Well-known methods include the Business Model Canvas, the Value Proposition Canvas (VPC), the Lean Canvas, or the Lean Startup process. Today they have become standard methods to conceptualize		BMC video Stretegyzer: https://www.youtube.com/watch?v=QoAOzMTLP5s

Subject	Audio in studio	Voice over	Keywords
- Lean Canvas - Lean Startup	business ideas and are applied all over the world.		
Innovation as a process Innovation Canvas	In this chapter we will introduce you to the Innovation Canvas (IC), which combines several key aspects of these aforementioned methods and startup processes. They are united into one tool, which highlights the aspects especially important for innovation. The IC can help organizations to determine and align their business activities in a simple, creative and interactive way		
		The IC consists of 11 building blocks, which ensures that all vital components of starting up a business are duly considered. The IC contains all elements to fully describe the business model and apply it. Every organization can apply it in a creative way. The canvas is most appropriate for existing start-ups or established businesses, but not for new businesses that are still emerging.	

Subject	Audio in studio	Voice over	Keywords
		Because the IC can be used in an interactive way, it should be reviewed periodically, as all factors listed here can change over time. As a strategic document, it can be reviewed using post-it notes, hand drawings, weblinks, pictures and even videos. Organisations should let teams work on each of these building blocks, to find a better way to explain their innovative aspects to each other.	
Innovation as a process Start with 'customer segments'		Different from the standard tools, we place "customer segments" on the left side, and we will start here. Since it is fundamental to target the right customer segments, we will start by trying to understand their needs and create a beneficial offer for them including core values they can relate to.	
Innovation as a process Align the 'core values' of your		To start a new business idea or to start an innovation within an existing business requires a vision - looking towards the WHY of your innovation.	

Subject	Audio in studio	Voice over	Keywords
business innovation Identify the 'Unique Selling Points' (USP)		These addresses the "core values" that you will be offering, which should match with the values of the customer segments on the right. To make it a profitable model, it is crucial to identify an "unfair advantage", or Unique Selling Point (USP), which makes your offer stand out from competitors and outperform them. These steps are like addressing needs of target groups in "Design Thinking" or in "User Experience" (User UX), or to the definition of competitive features in "Agile Development" or "Growth Hacking". Customers, the core value and the unfair advantage are the three building blocks that are fundamental of the innovation framework. Without having established these in the beginning, we cannot start an innovative business. Without a good fit between them, the business won't be able to grow.	

Subject	Audio in studio	Voice over	Keywords
Innovation as a process Define your 'revenue streams'		Another key aspect is to find out how we are going to make money from the innovation. Without a solid "revenue stream" no business can become sustainable. Investment can pre-finance costs of an innovation for a certain period. But it is essential to find revenue streams that can deliver a Return on Investment (ROI), and to find a recurring revenue model that can create sustainable growth.	
Innovation as a process Continuous loop process		The IC and similar models are designed to look in a cross-sectional way on a business. They are good tools to provide a snapshot picture of a current situation of a business. However, business in real life changes very often and quite suddenly. Therefore, these sort of situation assessments can be integrated in a "continuous loop" of the innovation process, where the business concept is constantly re-checked and updated. Thus, they can become a part of a continuous lean innovation process.	

Subject	Audio in studio	Voice over	Keywords
		In the continuous loop, the value proposition of a business will be based on several assumptions. These assumptions should be tested by surveys or interviews. Analyses of the responses provides the firm possible new missions reframing the business model canvas. New hypotheses and experiments are needed, providing a new prototype which should be tested an analysed again. In this way a business needs to continuously pivot and to rethink the idea and the surrounding factors in order to analyse what is possible and what is not.	
Innovation as a process Innovation Canvas - Customer segments - Core values - USP - Revenue streams - Continuous loop	(Presenter steps in) In this introduction, you have obtained a first overview of the Innovation Canvas and its main important components, including customer segments, core values, USPs and revenue streams. The canvas is a snapshot, which can be revised and updated during a continuous loop process. We will now go in detail through the different other elements of the Innovation canvas, starting with the "Product Idea".		

PART 2: Brainstorming and co-creation – your product idea

Subject	Audio in studio	Voice over	Keywords
Product idea	To start developing your Innovation Canvas, we'll have to look at the "Product Idea" section at the upper part of the canvas. As a company, you have to ask yourself: Do you want to improve existing products/services? Or do you want to offer something brand new? Such innovations can often be technology related. But also new trends about taking more care about environment and sustainability can offer large opportunities for innovating your products, too.		
Product idea Brainstorming		To find new ideas and come up with an improved version of your products or a completely new product or services, the most common method is 'brainstorming'. It requires to have an open mindset, allow creative thoughts with no conditions or restrictions.	

Subject	Audio in studio	Voice over	Keywords
		Brainstorming works best when you leave your workplace (that is your typical environment), and choose a good, inspirational location, where you team up with your colleagues and possibly other people, and work together on new ideas, making use of idea generating techniques.	
Product idea Co-creation & mass customization		A trend is to co-create products together with the customers and start brainstorming together with them and look at possibilities to mass-customize products. Adding customized features to a mass products makes it more unique and attractive to the customer.	
Product idea Customization in furniture	For example, a furniture company produced chairs in a mass production, but the seating, legs, colour and style can differ according to the choice of the customer. In this way you can customize one chair concept into 16 possible product version.		
Product idea Trendspotting		Here we want to introduce you to one of such helpful tools: the Trendspotting Tool. First you will look at current trends for inspiration. You define the general problem (the "job to get done") and then challenge yourself (and your team members) to find diverse solutions to it. Important at the start	

Subject	Audio in studio	Voice over	Keywords
		is that you define 4 key success criteria, which will decide in the end if an idea is good or not. Using brainstorming, you are then generating a lot of ideas that can go in any direction. This is called the "divergence" step. When you have created enough different potential solutions, you then go to the selection phase where you pick the most innovative and feasible ideas, based on both subjective and objective criteria. This is called the "convergence" step. Then you highlight those ideas that you really like subjectively and you also test these ideas objectively against the 4 key selection criteria. This way you'll get a pretty clear idea how your new product or service could perform in the market.	
Product idea - Brainstorming & co-creation - Mass customization - Trendspotting	So now you have seen how you could generate new ideas for the Product section of the canvas. Using brainstorming and co-creation to design customizable mass products is a major trend in furniture making. Spotting new trends early own is also important for furniture companies to stay ahead of the game.		

Subject	Audio in studio	Voice over	Keywords
	In the next video, we will learn how to address the different target groups in your innovation canvas.		

PART 3: Customer Segmentation – your target groups

Subject	Audio in studio	Voice over	Keywords
Customer Segmentation	The second step in developing your Innovation Canvas is to analyse your target groups, your future customers, in the left part of the canvas. As value creation for customers has become an important element in contemporary business management, understanding the value which customers perceive of your company becomes a strategic asset. Especially for SMEs, it is an important precondition to extend their knowledge about the "perceived customer value". The whole consumption chain with different consumption phases must be considered, which forms the basis of the outlined managerial framework accordingly. So let us now zoom in on the 'customer segmentation' the innovation canvas.		

Subject	Audio in studio	Voice over	Keywords
Customer Segmentation Primary customers versus primary users		"Customer Segmentation" is the search for a certain group of people or organisations who are more likely to buy and use your product than the general mass population. An important distinction needs to be made between <u>primary customers</u> and <u>primary users</u>: 1. A customer is the buyer, who does the payment for a product or service. 2. A user, or better 'end user', refers to the person that ultimately uses the product or service, without necessarily being the one who is paying for it. For example, your employer paid for your office furniture that you are using daily. But you did not pay for it, although you are the end user.	
Customer Segmentation	Very often the customer and end user are the same person. But in larger organisations, it is often one person who has the responsibility for the purchase of office equipment including furniture, who does not necessarily use it him- or herself.		

Subject	Audio in studio	Voice over	Keywords
	On the other hand, in a multi-sided market, you might serve two or more independent customer segments at the same time. For example, AirBnB has both house-owners, who are willing to rent out rooms, and tourists, who are seeking rooms, as customer segments at the same time. The way these rooms are equipped with furniture plays an important part in the business model.		
Customer Segmentation Who are your early adopters?		When you address the customers, keep in mind the different types of customers. The "Crossing the Chasm" diagram is highlighting the different types of customers. We start by looking at the primary customer segments, of whom we believe they will value our offer the most, with the least efforts necessary reaching out to them, because you won't be able to directly target the complete market. These are often described as "early adopters". Remember, these basically relate to the "disruptive innovation" phase. Defining precisely the user and customers segments might be hard especially for start-ups, because they do not have any customers yet and they do not know anything about their real profile.	

Subject	Audio in studio	Voice over	Keywords
Customer Segmentation Who are your early adopters?		It becomes even harder when you want to do business to business (B2B) or business to government (B2G), because you might need to identify the real end user, and need to also consider other actors in these organisations, for example: 1. The initiator, that is the one who decides to start the buying process, and 2. the influencer, that is the person who influences the decision, trying to convince other about buying or not buying, who can in fact sometimes be the real end user. Then, 3. the decider, is the one who makes the final decision about purchases. 4. the buyer is the person putting g cash on the table or making the bank withdrawal. And last, the end user, that is person that will be the one using the purchase, with or without being involved in the buying process.	
Customer Segmentation Levels of criteria for segmentation	Customer Segmentation can look at many criteria for segmentation, such as demographic, geographic, psychological, behavioural differences. For example, people from older generations, especially those born around the 1940s and		

Subject	Audio in studio	Voice over	Keywords
	who have experienced the war times, tend to value strong and long-lasting materials, much more than the younger generation X does in the same country. So those elderly people will likely choose solid oak wood furniture rather than laminated OSB wood furniture. So such segmentations of your future clients will help you to find your primary customers.		
Customer Segmentation Jobs to get done “Customer jobs describe what customers are trying to get done in their work and in their lives, as expressed in their own words.” (Strategyzer) “People don’t want to buy a quarter-inch drill, they want a quarter-inch hole!” (Clayton Christensen)		We can identify our primary customer segments by thinking about “what jobs needs to get done” for the customer and user. Customers often buy things because they find themselves with a problem – a job to get done. Once you understand why the customer is buying something, it makes it easier for you to create a product that solve that job in a better way. A “job” is significant when a) the customer’s failure to satisfy the job has significant consequences, b) when the existing solutions on the market don’t get the job done in a satisfying way, or c) when a large number of customers have the need for this job, or when a small	

Subject	Audio in studio	Voice over	Keywords
		number of customers are willing to pay a lot of money to satisfy this job.	
	Here are some typical examples of "jobs to get done": - getting from home to work and back - having to eat breakfast while commuting to work - dropping of the children in time at school - having to give a presentation at work		

Customer Segmentation
 	
Jobs to get done
 	
Different types:
 	
- Functional
- Social
- Emotional
- Supporting Jobs
  - Buyer
  - Co-creator
  - Transferrer
  -
		There are different types of jobs customers are trying to get done:
		
		• <u>Functional jobs</u> are jobs where your customer tries to perform or complete a specific task or solve a specific problem he or she is facing.
		
		• <u>Social jobs</u> are jobs where the customer wishes to give a good impression or to gain more power or a higher status. These jobs define how a customer wants to be perceived by others.	

Subject	Audio in studio	Voice over	Keywords
		• Emotional jobs are jobs where your customer seeks for obtaining a specific feeling, such as feeling good or feeling secure. • Supporting jobs are jobs, where the customer has to perform an ancillary job, while he or she is trying to get a main job done. Here the customer has more than one different role to fulfil. These supporting jobs can be divided into three categories: 1. the Buyer: In this role, your customer performs jobs related to buying, such as comparing offers, deciding which products to buy, performing a purchase, or taking delivery of a product or service. 2. the Co-Creator: In this role, your customer performs jobs related to co-creating value with you as an organization, such as co-designing a product or solution or even creating part of the value proposition. 3. the Transferrer: In this role, your customer performs jobs related to the end of the lifecycle of a value proposition. This could be, for example, how customers dispose of a product, transfer it to others, or resell it.	

Subject	Audio in studio	Voice over	Keywords
		The most important in this step for you is to write down every major job you intend your customer to get done.	
Customer Segmentation Pains and gains	Not knowing exactly what sort of job the customer needs to get done, can have some negative side effects, such as risks, obstacles, or bad outcomes. These side effects can occur before, during or after the job got done, and are what we call 'pains'. On the other hand, the customer could also have positive side effects when getting the job done. Such concrete benefits we call 'gains'. In fact, pains and gains are not just opposites. Think about: You should clearly define the customer's lower bar of expectations. It means, if your product is above the bar, your customer sees it as a gain, but, if it does not meet those expectations, it will be a clear pain. So you should look for possible continuums, where pains can be turned into gains, and clarify the boundaries and bars of those continuums.		
Customer Segmentation Customer profiles		Here we present you an extra tool, the "Customer profile", that helps you to further finetune your analysis of the job to get done, and of the related pains and gains.	

Subject	Audio in studio	Voice over	Keywords
		The figure below helps you to understand how to rank the jobs, the pains and gains, and to obtain a more detailed picture of your customer profile. It allows you to understand whether a job is more important or rather insignificant; if a pain is extreme or only moderate for your client, and if a gain is essential, or just a "nice to have".	
Customer Segmentation Persona canvas		And here is another tool that is especially helpful for marketing purposes - the "Persona Canvas". The persona canvas can be used to give a customer segment a face and name and make it easier to step into the shoes of the customer. Personas make talking about customers and their characteristics more tangible and concrete and make it easier to refer back to a pattern of characteristics. Personas make it possible to create and share mental models and have a common language about several customer types.	
Customer Segmentation	In this section, you have learnt about how to use customer segmentation to differentiate between primary customers and primary users.		

Subject	Audio in studio	Voice over	Keywords
- primary customers vs. primary users - Roles and uses of customers - "Jobs to get done" - Pains & gains - Customer profiles & persona canvas	Buyers and end users or not always the same person. We have seen different types of users, and which roles they can have that influence the decision to buy a product or service. To better understand your customer, you should know which needs for "jobs to get done" they have, and which "pains" and "gains" go with it. With tools such as the "Customer profile" or the "Persona Canvas", you can obtain a good understanding of your customer target groups. In the next section, we will look into techniques how to design your specific value proposition offer.		

PART4: Value proposition design - your offer

Subject	Audio in studio	Voice over	Keywords
Value proposition design	In this chapter, we will address the "Offer" section of the Innovation Canvas. It is now the moment to have a closer look at the value proposition that ideally fits the customer's profile and that solves the customer's problems.		

Subject	Audio in studio	Voice over	Keywords
Value proposition design		This graphic visualizes the "Value proposition design" concept. We start with the left side of the process: First you need to consider the "What": What is the value behind your proposition, what is your company's DNA, out of what is it existing: Which products or services are you offering? What is the offer you are helping the customer with, to get the job done? The "Why" addresses the following questions: Which core value are you offering to the customers and users, and how do the customers perceive these values? Which values are proposed with the offered product/service? What is your main story? Why should customers or users be comfortable to buy from you? These correspond in fact to the "What" and the "Why" questions in Sinek's golden circle.	
Value proposition design Company example: Van Hoecke NV, Belgium	Let's have a look at an example: Van Hoecke NV is a company that is innovating all the time regarding their products in order to inspire their customers in a different way than their competitors. Their marketing does not present the kitchen only as a working base to cook food, but moreover as a creative living space where you can relax, enjoy your time. Their		

Subject	Audio in studio	Voice over	Keywords
	fully extending kitchen drawers are ideal for this, creating the special value for every customer type. Here is how it is being presented: "The kitchen will always be the heart of a home. It is a living space where we welcome guests, sit together as a family or relax after a long day at work. An open kitchen remains popular and is increasingly becoming an extension of the living room. All great reasons for ensuring space is created as efficiently as possible! Before starting to equip your kitchen, you should think about your cooking habits. Do you love cooking and regularly spend time at the hob, or do you prefer to knock something up quickly? Do you shop once a week or go to the shops on a daily basis? By taking personnel preferences into account, you will create a kitchen that is perfectly tailored to you. Cutlery, cooking equipment and products that are used frequently should be close to hand. They should be stored at an accessible height, ideally between knee and shoulder height. This means less bending or stretching. Fully extending drawers offer a good overview and easy accessibility to the contents; you'll even be able to reach the tins at the back."		

Subject	Audio in studio	Voice over	Keywords
Value proposition design Prototyping Canvas : pivoting your prototype ideas		To develop your value proposition, we want to introduce you to some more helpful tools: This is the Prototyping Canvas. Simply put, prototyping is the art of faking it before making it, where 'it' refers to an innovative product or service. Prototyping is used to make value propositions tangible and concrete. It helps you test a certain aspect of the product of service you have in mind. This is a perfect step to take after having defined your business model and your value proposition canvas. The process can be done repeatedly, getting back from core value to customers' jobs to get done, and vice versa: this is what is called 'pivoting'. The aim is to finetune the primary segments and fit the value proposition, each time better than before, until the convincing level of "product – market" fit has been reached. This process helps you to explore, analyse and decide on your ideal customer segments and the core DNA of your value proposition.	
Value proposition design		Let us have a look now what makes your value proposition stand out in the market.	

Subject	Audio in studio	Voice over	Keywords
Unfair Advantage “Unique Value Proposition: a single, clear compelling message that states why you are different and worth buying.” - Steve Blank “The company that consistently makes and implements decisions rapidly gains a tremendous, often decisive, competitive advantage.” - Steve Blank “A real unfair advantage is something that cannot be easily copied or bought” - Jason Cohen		Ideally, your value proposition is unique compared to the competition, which are the so-called Unique Selling Proposition (USP). That is what most companies tell their customers, but often they are not really different. For example, offering “customized” products is itself not a unique proposition compared to other players. Here are a few well known quotes about the USP. In the coming next years, some companies might exploit unfair advantages for a while by being the first to apply new trends like “artificial intelligence” in in customization and marketing. But this so-called “first mover advantage” is not always an unfair advantage. It can even become an “unfair disadvantage”, because you have to take the risk of the pioneer, which can cost a lot of effort in time and money. The competitors might just wait, observe and learn, before they also follow the new trend. So a real unfair advantage is something that cannot be easily copied or bought. It relates to the “HOW” in Sinek’s Golden circle. Some examples of unfair advantages are insider information, the right ‘expert’ endorsement, personal authority.	

Subject	Audio in studio	Voice over	Keywords
Value proposition design Unfair Advantage	It’s not always possible to obtain an unfair advantage from day 1 of your business - sometimes it needs time to emerge or grow. For example, Mark Zuckerberg did not have an unfair advantage when he started Facebook, because there were already existing social media platforms with large communities and more accessible funding. But he new, that with growing level-of-scale, his biggest advantages would rise: having huge gains from large network effects. So the HOW of climbing up within the market and HOW the added value for users/customers increased in the growing network in the end became a story of unfair advantage for Facebook. Once you have built an unfair advantage, competitors or copycats might want to try to find out how to break or copy it. But a real unfair advantage cannot be copied. For example, several regions all over the world have been claiming to be the new Silicon valley, but in reality, they never could succeed in copying the specific strengths of the local ecosystem. But of course, this does not mean that at some point in time, another innovative trend from another, unexpected side, can disrupt the market again. This is what innovation is about.		

Subject	Audio in studio	Voice over	Keywords
Value proposition design Prototyping Canvas Uniques Selling Proposition Unfair Advantage	In this chapter, we introduced you how to develop the value proposition of your innovation canvas. You need to clearly address the “What” and “Why” of your business idea, how your product or services create value for your customer. The Prototyping Canvas can help you to work through various versions of your value propositions and improve them. The aim is to develop your Unique Selling Proposition (USP), which can give you an unfair advantage to be ahead of your competition. In the next chapter, we will look at the brand and message section of the innovation canvas.		

PART5: Brand and messages

Subject	Audio in studio	Voice over	Keywords
Brand and messages	(intro) In this part of the canvas, we focus on marketing and sales and make sure, that your customer or user feels interested or even teased towards the value of the brand.		

Subject	Audio in studio	Voice over	Keywords
	We will learn how to create value to the customer using the brand name, the brand logotype and the brand message. Behind the logo and the name are the messages of the value that you will be promoting towards the clients.		
Brand and messages	Important is that customer or user who could benefit from your value proposition, gets to know about it. The better you were able to define the earlier 3 steps, the easier it is to target your customer segment and clarify the story behind your product or service and its values. Remember always the big "WHY" that we were talking about earlier. Think again about your core values and unfair advantage you have. What fits this value as a name and logo?		

Subject	Audio in studio	Voice over	Keywords
Brand and message 6 steps to S.U.C.C.E.S.		Try out the following 6 steps to successfully grab the attention of audiences with a story. A message should be: • **S**imple – find the core of any idea • **U**nexpected – grab people's attention by surprising them • **C**oncrete – make sure an idea can be grasped and remembered later • **C**redible – give an idea believability • **E**motional – help people see the importance of an idea • **S**tories – empower people to use an idea through narrative In that way your message should tell why what you do is different from competitors and why that difference should matter to customers. All in one sentence.	
Brand and messages Elevator pitch	Besides logo, name or message, how are you explaining the story towards your customer? That is where you need to have a pitch talk ready. It’s important because you will use your pitch at many occasions, everywhere: when you meet new partners and clients for example at trade fairs, when you have a talk at business events, when the press wants to communicate what you do, and so on. If your pitch is too long, it means that you don’t have enough focus yet, and you will need to work until it feels right, concise and catchy.		

Subject	Audio in studio	Voice over	Keywords
Brand and messages Elevator pitch		By using AIDA or NABC principles you can give structure to the pitch and make sure, that you really tease the audience.	
Brand and messages Canvas tools		There is a set of extra tools we can recommend you to develop your brand's name, message and logo.	
		The Persona Canvas helps you to step in the shoe of a customer. Give you customer a name and reflect on what is he looking for!	
		The Branding Canvas helps to define or innovate your branding strategy	
		The Storytelling canvas walks you through the process constructing a story that people care to listen to	
		Read and find out more about these tools by following these links	

Subject	Audio in studio	Voice over	Keywords
	So now you have learnt about the role of branding, and how you should develop your pitch to be ready to communicate effectively your business idea to others. In the next chapter we will talk about the channels to reach your client.		

PART6: Channels and relations

Subject	Audio in studio	Voice over	Keywords
Channels and relations	(intro) Once you have a product designed to solve your customers' problems in a unique way, how are customers going to know about that? In this chapter we will look at which channels and relations you can use to reach your target customers.		
Channels and relations	In order to find the best mix of channels that suits your customer best, it helps to stop and ask yourself, what routines your customer has? Does your customer wants to be reached online or offline? Does your customer wants to be reached directly or indirectly? And then, at what phase are you in communication with your client?		

Subject	Audio in studio	Voice over	Keywords
	Lest have a look how it works.		
Channels and relations Five stages of channels		There are five phases through which a channel needs to pass. Fi**rst phase** is Awareness, when you want to educate customers about the characteristics of the products and services we have. This is the marketing and advertising phase. It is how you let your customer know about your value proposition. Are you going to use social media? Word of mouth? Newspapers?	
Channels and relations Five stages of channels		**Second phase** is Evaluation. Here you can aid customers in evaluating our Value Proposition. Examples of tools here can be reviews or surveys to help customer evaluate, read about or use your product and form an opinion about it. Another example is the promotion or 'Try me before you buy me'. In this way the customer will get to know why you are a better option than your competitors.	
Channels and relations Five stages of channels		**Next comes** the third phase, Purchase**,** during which we want to help customers in buying their preferred product or service. This can be done by offering them their preferred way of buying – through web or	

Subject	Audio in studio	Voice over	Keywords
		through brick and mortar, or maybe through self-checkout.	
Channels and relations Five stages of channels		**Phase four is** Delivery, which looks at how do we deliver the promised Value Proposition to customers. This is the fulfillment stage and defines how the product will reach the customer. Examples can be handing the product or service over the counter or home delivery, or catering.	
Channels and relations Five stages of channels		**At phase 5** we provide After Sales for customer care and support. This stage provides a person for the customer to call when they have a problem or question about the product. Examples include Call center; Return policy; and Customer assistance.	
Channels and relations Direct channel Indirect channel	The channel you chose plays a critical role in customer satisfaction and customer retention. A **direct chann**el will include your sales force that would go after your customer segment and bring them in. A website is another direct channel that can be under the company's control. In i**ndirect channel t**he company will not sell to the customer directly but through an intermediary, by placing their products in partner stores.		
Channels and relations Types of relationships	The choice of channel type and phase is matching with the type and phase of customer relationships you aim for.		

Subject	Audio in studio	Voice over	Keywords
Retain your client	**What type of relationship do our customer expects from us to establish and maintain with them?** In order to establish a customer relationship, first step is to get the customer onboard. As important it is to retain those clients and build a strong customer relationship with them in order to have recurring revenues as well as growing potential, when, in the best occasion, your customers are so satisfied that they become brand advocates or start to co-create with you and become prosumers. Worse is when you only focus on acquiring new customers, forgetting about the existing ones and so potentially ending up with unhappy clients, shouting out bad publicity about you.		
Channels and relations		This is the illustration of the journey potential customers are going through in their purchase. Its's your job to determine what your ideal customer needs at each point to nudge them from their initial interest through intent to the purchase.	
Channels and relations (maybe organize these words in a cloud around this title, or an image) Customer relationships.		So first step is to look at the goals you aim for when looking at customer relationships: • Is it to attract new customers? • Acquire customers? • Retain customers? • Upsell to existing customers? • Enlarge the customer segments	

Subject	Audio in studio	Voice over	Keywords
• Is it to attract new customers? • Acquire customers? • Retain customers? • Upsell to existing customers? • Enlarge the customer segments		Knowing this, it’s easier to follow a specific strategy, and measure it in order to reach that goal.	
Channels and relations Customer relationships. (maybe organize these words in a cloud around this title, or an image) • Personal assistance • Dedicated personal assistance • Self-service • Automated service • Community based		The second step is to find out how personal your customer is expecting to be reached: • Personal assistance • Dedicated personal assistance • Self-service • Automated service • Community based	
Channels and relations		If you try to really understand some of these areas, and make an effort to bring your customer more support, service, quality and satisfaction, this can help deepen your existing client relationships and return more loyal customers	

Subject	Audio in studio	Voice over	Keywords
Channels and relations Digitalization Customer Relationship Management (CRM) software FAQs		The choice will impact the costs linked with this relationship and thus the prize and efficiency. Here digitization can play an important role. Customer relationship management these days is often accompanied with online support, as in Customer Relationship Management (CRM) software. Further more and more companies, use chatbots or place Frequently Asked Questions (FAQ's) online instead of offering phone support to their customers. In this way even smaller companies and startups succeed in offering efficient customer relationship solutions.	
Channels and relations		There is an extra tool we can recommend to think from your customer's perspective. Click on the link on the next screen to find out more.	
Channels and relations	(conclusion) You have now learnt about various channels to reach your customer and the importance of building long-term relationship with them.		

Subject	Audio in studio	Voice over	Keywords
	In the next chapter we will talk about the Key partners and types of partnership to make your business work.		

PART7: Partners

Subject	Audio in studio	Voice over	Keywords	Interactions
Partners	We will now take a look at the partners section of our innovation canvas. A partnership in business is similar to a personal partnership. Individual skills and resources are shared, and money is pooled toward a common			Further reading https://www.thebalancesmb.com/what-is-a-business-partnership-398402

	purpose, while ups and downs are shared via profit and loss. A business partnership is a specific kind of legal relationship formed by the agreement between two or more individuals to carry on a business as co-owners.			
Partners Full partnership Limited partnership Limited liability partnership		Some partners have full or limited participation and hence full or limited liability for the debts and lawsuits against the business. However, a partnership is not a separate entity from the individual owners. This way there are three different types of partnerships: • General partnership (full partnership) • Limited partnership (limited partners do not participate in daily operations and have no liability) • Limited liability partnership (comparable to limited partnership but some partners can be seen as general partners)		

Partners Strategic business partnerships		Strategic partnerships can be created among several players when every company sees benefit in cooperating with the other, so that there is a clear win-win situation. An entrepreneur will have ideas about future plans and hence by building future partnerships. This way efficiency is created, operations get more streamlined and risks are reduced. Key partners will complement each other in helping the company create its value proposition. A partnership could be a strategic alliance between competitors, a joint venture or a relationship between buyers and suppliers (https://www.cleverism.com/business-model-canvas-complete-guide/). If they are well established, these partnerships can become the **unfair advantage** of the company.		
Partners Strategic business partnerships		A partnership is seen as an entity that stands between two business models of companies and when there is constant flow from one business model to the other by combining and exchanging value between these partners. This graph illustrates the value exchange between two business models.		
Partners	Let us have now a closer look at the role of R&D			

R&D partnerships	partnerships in the innovation canvas. In fact, you do not only need partners for your key business process, but also partners with R&D resources that are important to innovate your business. To grow further, many companies want to make sure that while they are producing and selling their products, they get also new insights of the market and how the products or services are developing. Partnering			

	can help and lower the costs of innovation. Strategic partnerships can help to get new insights, access to new markets, knowledge or skills.			
Partners R&D partnerships		Partnerships are a way that can be more efficient by outsourcing and purchase of specific R&D services, instead of doing it on your own within the company. A main tend is to stimulate internal teams of intrapreneurs to start their own spin-off with investment money of the mother company, or "corporate venturing". An alternative is to buy a startup as a way of doing R&D. The right moment to buy in the startup can be when it has already a prove of concept. This can be a lower risk than investing in a new in-house R&D activity, which might not even produce any return. It should be clear now that R&D partnerships are all about making		

		decisions about buying, outsourcing or engaging your own company directly.		
Partners Partnership canvas		Let's have a look at another tool that is useful to set up a good partnership. It is called the partnership canvas. It consists of a total of four building blocks. The first block focuses on what your company wants to get out of this partnership: what is the desired value? A company should question on how it can contribute to a better experience for the its customer. This could be related to availability, speed, price, performance etc. The second block is about the what the partner can gain by the cooperation: what is your value offer? Therefore, the company needs to develop a matching offer that connects with the desired value. Only if both companies know what they desire of the other and can give to the other, there is a base to create a partnership. The third block defines how this connection between the desired and offered value will be established. What kind of collaboration activities or via what form will these values be connected? The transfer activity block is the exchange by which synergy between the partnering business models is created.		Show on the screen: Further reading: To learn in more detail how to use the Partnership canvas, please read the following website https://valuechaingeneration.com/2014/10/17/the-partnership-canvas/

		When these three building blocks are defined, the values can get connected and this value engine enables the two partners creating a new form of value that will be utilized to innovate one or several building block of the initial business model. This fourth building block is the created value.		
	(conclusion) In this chapter you have learned that forging good partnerships are vital for your business. It is important to decide for the right type of partnership. It is also important to focus on where you are creating value for your business. A lot of services, for example also R&D services, can be outsourced to a large			

	extent. However, activities that are important components of your value proposition must be outsourced very carefully. They rely on key partnerships for your business, which must be secure and a win-win for all parties. In the next chapter, we will learn about how to combine resources, channels and processes for you business.			

PART8: Resources, channels and processes

Subject	Audio in studio	Voice over	Keywords
Resources, channels and processes	(Intro) Now that we talked about what we can offer to our customer in terms of brand, advantage, the product, and the partners it takes to make it happen, it is time to think what other resources we need to get our business working. In this part of the Canvas we shall look at Resources, Channels and Processes.		
Resources, channels and processes *What resources do we need to produce and deliver the products or services?*	What resources do we need to produce and deliver the products or services? The bigger the company, the more resources are needed. Unless you outsource work to partners. Self-employed business owners and smaller companies won't need much material, whereas large corporates will need huge resources to run their business.		
Resources, channels and processes Intellectual resources Human resources Financial resources Digital resources		Key resources are required for internal processes. In function of the processes you aim to do yourself, you will need physical-, intellectual-, human-, financial-, digital resources: Physical resources are all the logistics you might need. F.ex. equiment, buildings, vehicles, machines, hardware, servers, sales- and distribution networks. These	

		resources are rather capital intensive. **Intellectual resources** are intangible resources like patents, copyrights, brands, IP, inhouse knowledge including expertise and experience, and customer data. **Human resources** are employees which are the human capital within companies. For specific businesses specific experts are needed, in a physical intensive company labor force is important in case the core business is focusing on utilizing these resources. **Financial resources** includes own available cash or credit lines the company can work with. Since more and more processes get digitized, this implies having **digital resources** available like software, internet connection, webhosting, databases.	
Resources, channels and processes Processes		**Which (internal) key processes do we need to produce and deliver the products or service?** In order to build the value proposition or have an unfair advantage compared to competitors it can be important to run some key processes in-house or to have a very close cooperation with 1 or more strategic partners. We than speak about the core business of the company. Especially in periods	

		of 'cost efficiency' it's important to focus on that core business. Some key processes might be outsourced to partners, when it seems to be more efficient not doing it in-house. A lot of companies outsource processes like accountancy, marketing, HR, ICT or sales. Whereas these sometimes are key processes within the business. The type of partnership or contract can then be crucial in order still making it a strength. F.ex. it can be important not to rely too much on 1 partner, to have a stake in the partners' company or vice versa or to have good clauses negotiated. Mapping out the processes can visually describe the flow of work (in-house and outsourced).	
Resources, channels and processes Channels	To make partnerships work efficiently, communication and logistics need to run fluent. Drawing the process flows (as in the figure below) helps to overview the interactions and help to select or match the necessary channels. For that reason it is not bad to take a bit of time checking these valuable flows, negotiating the processes behind it and calculating the cost-benefit analysis of it. When this is taken seriously and the partnership is really seen as a win-win situation, taking time in this can lead to creating an unfair advantage.		

PART 9: Value Creation: how do we make money from innovation?

Subject	**Audio in studio**	**Voice over**	**Keywords**
Value Channels	(intro) Now we've run through all blocks of the business model most important question is how to make money? **How, when and how often are we generating revenue?** What financial model are we running? Are we relying on customer payments (only)? Or do we have other revenue streams? Are customers paying cash, via debit/credit card, online, via bank transfer? When do we receive the money compared to the deadlines for all costs we are making and how often do they pay us?		
Value Channels	Revenue streams are directly related to the customer segments, since the revenue strategy is directly associated with the question how much cash a company can generate from each customer segment: in order to find an	The basics of understanding the customer segments are: Who is the user and who is the buyer: as stated before, a person can be the user, but there can be another person who is really paying for it (*F.ex.* your boss pays the	

What are our revenue streams?	answer, a deep understanding of the target customer(s) is needed.	wooden desk in the office, the employee is using it, but not paying for it) How is the target customer purchasing the good / services and are there equivalent products in the market? How much does the customer want to pay for value versus lowest cost (does he want to pay less for less quality or more for more quality?) What is the total budget the customer wants to spend for your type of product?	
Value Channels Cost vs. value-based price		Generally speaking, there is one main question to ask in the revenue strategy: "Should the company offer a cost-based price or a value-based price?	
		Cost based pricing means that the price of a product is determined by adding a profit element (percentage) in addition to the cost of making the product. Either a fixed amount or percentage of the total product manufacturing cost is added as profit to the cost of the product to arrive at its selling price. The floor and ceiling prices are determined as shown here.	
		Value based pricing is the strategy of setting the price based on the customer's perceived value of a product or service: how much does the customer believe a product is worth? Companies can work with a value based pricing strategy when the product or service is unique or has a high value, and this way positioned better in the market than other comparable products or services. This way the customer shows others he / she has a higher self-image or an unparalleled life	

		experience. The product or service should differentiate itself from competitors by added features or improvements based on the customer's wants or needs. Open communication channels and strong customer relationships are primordial for this strategy.	
Value Channels	Via sophisticated marketing strategies, the perceived value of an associated brand can suddenly skyrocket, but when the brand's image diminishes for any reason, the perceived value can lower very quickly as well. Once the main revenue strategy is established, the pricing tactics follow, asking the following question: "how much can I charge for the product using the selected revenue strategy?" For each cohort of customers, it could be there is a different price setting ranging from the skimming the market to penetrating the market (even as a loss leader).		
Value Channels Pricing strategies		In the end a company has many pricing strategies, referring to the ideal tactic: - Competition-based pricing - Cost-plus pricing - Dynamic pricing - Freemium pricing - Skimming pricing - Penetration pricing - Project-based pricing - Value-based pricing - Leasing - Hourly pricing Depending on the chosen pricing strategy there can be a pattern in revenue streams.	

Value Channels Pricing strategies		In a nutshell, important questions to ask are: What are my customers paying for (value)? How much will they pay for it (price)? In what form will they pay (currency)? How will they receive it (purchase, subscription, rent)? When will they pay (time)?	
Value Channels		And here is a nice picture showing all kinds of things you might want to consider to diversify your revenue streams – that gives you an idea how to embrace the digital age and find new values for customers.	
Value Channels Cost structure	The building block Cost structure includes all costs and expenses a company will have while operating the business model. After putting all costs together, a company will know if they can proceed or need to pivot. Just like in the revenue streams, there are two main categories of cost structures: • the cost-driven structures • the value driven structures. Cost driven structures focus on minimizing the costs of the product or		**Cost structure** Cost driven structure

	service as much as possible (e.g. Walmart), while value driven structures create more value in the product itself (e.g. Prada). Hypotheses need to be created in order to consider the most important costs and expenses. Fixed (e.g. startup and acquisition costs) and variable (monthly operating costs) costs need to be estimated.		Walmart logo Value driven structure Prada logo Fixed costs Variable costs
Value Channels Cost structure	.	In the end the costs need to be less than the revenue streams, otherwise pivoting and making adjustments is the only option	
Value Channels Cost structure		A cost structure can have following attributes and these imply directly the main questions a company should answer before proceeding: What are the fixed costs (costs that remain the same over a period of time)? What are the variable costs (these costs vary according to a variance in production)? What are the economies of scale (can costs decrease as production increases)?	

		What are the economies of scope (can costs decrease by investing in businesses related to the core product)? After identification of all costs, they can be integrated in the business model. For every cost the company can consider alternatives which increase or decrease the costs. This way the company can decide to proceed with the business or to pivot towards another solution.	
Value Channels Investments		When starting a new business or unit there is no capital available and before receiving revenue we need to invest time and/or money for all pre-sales activities. But even when sales starts running it's possible that the generated revenue is not enough to cover costs. In order to know, if cash is available to pay all costs we are having daily/monthly the cashflow should be calculated. Cashflow is the net difference between cash coming in and the cash going out of the company. Using own money, lending from friends/family/fools, using a credit card, having a credit line of the bank, getting a long-term loan, getting investment money and especially when you need to bridge a longer period because of a new start/new innovation. Then you might need external investment or having to invest a lot of own capital. In high-tech sectors it can even take years and years till revenues can cover all costs. Another reason of attracting external funding may be	

		to grow faster than it is possible without the investment.	
Value Channels Break-even point		Another important figure to calculate is the break-even point, which is the predicted moment when total revenues will cover all costs. Until that moment is reached, there is a loss that has to be covered. After that moment, it is expected to get profit. At least if all predicted costs and revenues are what they were assumed to be. Knowing the break-even point can help you finding out till what time investment is needed. And since in the pre-start phase it is advised to both look at the normal scenario (of profit and loss predictions) and the worst-case scenario, it is even foreseen to have a margin of safety.	
Value Channels Return on investment (ROI)		External investors willing to take high risks, will also like to see the best-case scenario, since for them this could be a reason to invest more than needed to reach the break-even point, or to reach it faster than expected. In return they expect to get interests on their investment. The more risk there is, the higher the expected return on investment.	
	Conclusion Now you have been introduced to the main concepts behind pricing of your products and services and to many possible ways that you can choose to		

	take to generate additional revenue streams. Remember specially to build it around your customer target group and the values that you can provide to your client.		
	You have now completed this important lesson about the Innovation Canvas and how it can help you develop your innovation process in a company. We recommend you to go back to the different lessons when you are applying these tools. You can also have a look at additional resources and exercises, which provide a lot of helpful additional insights.		

1.3 Unit 3_DESIGN, TREND & INNOVATION RESEARCH

TRAINING PILL TITLE	Unit 3 DESIGN, TREND & INNOVATION RESEARCH**. Block Technology and Competitive Surveillance.** Topic *1. Introduction to the conceptual framework for technology and competitiveness surveillance*
PARTNER RESPONSIBLE	**AIDIMME**
CONCEPT FORMAT	*The conceptual framework for technology and competitiveness surveillance* is the first theme of block **Technology and Competitive surveillance** of the Unit 3 DESIGN, TREND & INNOVATION RESEARCH. The role of Topic *1. Introduction to the conceptual framework for technology and competitiveness surveillance* is to share with the learner of the existence a very important tool that has increased its complexity and development to become a key factor of success for innovation in organizations. The mixture of technological and competitive issues in a systematic way allows organizations a raise in survival and growing in a competitive market. Initially the concepts of surveillance and competitive intelligence were introduced and developed independently, but lately the tendency is to adopt a unified approach, considering that competitive surveillance encompasses concepts such as the study of the technological evolution of products, processes, etc. and the market, focusing on the competition of the organization. Introduction to the conceptual framework for technology and competitiveness surveillance are presented by the Trainer who explains the topic with the help of graphics and keywords that appear on the screen (about 20-30 minutes), followed by some examples of such as the database of innovative materials, a product of MIMWOOD ERASMUS+ project, or the application of key concepts for developing a technological surveillance system. We show some examples of technology or competitiveness surveillance systems as a link to YouTube video or external website. The Theme has a quick activity for the student reviewing basic elements Quiz and can conclude with an Exercise Trigger Questions.
3D SETTING	

SUBJECT	AUDIO IN STUDIO	VOICE OVER	KEYWORDS
Elements that will be indicated to clarify the flow of the text and the topics covered and that can also be shown on screen in the form of sensitive words	**Text that will be recited by the character in a 3D virtual environment (trainer)**	**Text that will be recited by the characters as users scroll through the elements in Motion Graphic**	**Keywords that will appear on the screen through which the user can interact with a simple click, accessing the in-depth materials provided for consultation**
TECHNOLOGY AND COMPETITIVENESS SURVEILLANCE FRAMEWORK			
	If we examine good or brilliant results of a particular enterprise, the main reason is that they are the outcome of correct management decisions in the past. If we want to keep this succes sustainable in future, it is necessary to secure the correctly decisions in a challenging business environment. With the globalization of markets and the development of the digital era, the value that companies attributed to the information has been evoluting, becoming more strategic than ever.		
	Technology Surveillance (TS) and Competitive Intelligence (CI) are two disciplines that seek to obtain accurate and up-to-date information in a complex environment for organisations, new products or services, to define strategies, to enhance the capabilities of the organization, to improve customer service, etc.		

TOPICS TO LEARN		Before going into the topics of this theme, just check your initial knowledge by answering two basic questions: Have you ever heard about Technology Surveillance and Competitive Intelligence? Have you ever worked in relation to a surveillance or strategic watch system?	
		The objectives of this theme are: • To know the conceptual framework of Technology Surveillance and Competitive Intelligence systems in organizations. • Purpose and benefits of the technology and competitive surveillance activities. • To introduce the concept of KIT (Key Intelligence Topics) and the layers of analysis of the business environment. • To be aware of basic existing tools for Technology Surveillance and Competitive Intelligence.	
PURPOSE AND BENEFIT OF SURVEILLANCE AND INTELLIGENCE	In the following minutes, we'll explain the purpose and benefits of conducting surveillance activities in an organisation.		
	In first instance, it's necessary to understand that our firm or organization operates in a business environment that affects its activities and results. As part of the business environment we may find other players, such as competitors, clients, suppliers, regulatory bodies, and so on. We may also find new materials, technologies, processes, etc.		
	Hence, the main purpose of surveillance systems is to be aware and to understand on what is going on in our business environment beyond the limits of our firm or organization.		
	While Technology Surveillance focus on technical innovation related to new materials, processes, techniques and so on, Competitive Intelligence monitors the market aspects such as competition, new products or end-user preferences, to name but a few.		

	Finally, the main benefit of the surveillance and intelligence activity will be getting valuable information that will support the decision-making process in the firm or organization.		
THE VUCA ENVIRONMENT	The main reason for conducting surveillance and intelligence activities is the frantic and unpredictable business environment and technological change at present. This factor hinders our ability to understand changes and makes more difficult the decision-making process.		
		Nowadays, the business context is said to be a VUCA environment. VUCA is an acronym that stands for Volatility, Uncertainty, Complexity and Ambiguity, a combination of qualities that characterize difficult conditions and situations. Volatility implies fast and unexpected changes; Uncertainty relates to the difficulty to predict and adapt; Complexity refers to the existence of multiple factors acting at the same time; and Ambiguity is about the blurring knowledge for making the correct decisions.	VUCA concept (link to video) Velocity of change (link to video on Moore's Law)
	The VUCA concept was first introduced at the U.S. Army War College to describe the world after the Cold War. At present, the concept has gained new relevance for business management and leadership.		
	In order to compete in a VUCA world, organisations need to be agile, less hierarchical, communication frictionless, facilitate flow of information at all levels, and make swift rather than perfect decisions.		
	In sum, the best response to the VUCA context is what is known as agile organisation. Being agile is the way for competing in the market. As Lewis Carroll's *Alice in wonderland* quote says: "My dear, here we must run as fast as we can, just to stay in place. And if you wish to go anywhere you must run twice as fast as that."		
STRATEGIC WATCH	There is not a unique way of conducting and structuring a surveillance or intelligence system. Indeed, each organisation should create and adapt the existing tools to its particular needs and objectives.		

	Strategic watch, being technological or competitive, refers to the internal process of gathering information and generating valuable input for the organization. This input may result in new product development, services, efficiency improvements, and so on.		
		Strategic watch involves different areas or the firm and requires several tasks. Basically, any surveillance system must conduct monitoring tasks for searching and collecting data and information; filtering and selecting relevant data for the organisation; distribution of the information to different technical levels in order to validate; and supporting decision-makers.	
	A comprehensive approach must combine several modes of strategic watch. The main ones are the technological (monitoring available and emerging technologies), the competitive environment (competitors in the market), commercial (products, markets and suppliers) and the global environment (socioeconomics, policy, environmental, legislation, etc.).		
	Passive surveillance or scanning consists on discovering information in different sources. Usually, it is based on secondary information, which is information generated by others outside our organisation.		
	A common trouble for strategic watch at present is the infoxication effect. Infoxication occurs when the organization faces to an immeasurable amount of information, so it is difficult to discriminate its relevancy. In the digital era where many tools are available for information monitoring, quality and relevance should be preferred rather than quantity and distraction.		Infoxication (link to video about Infoxicatin)
SURVEILLANCE FACTORS	The surveillance factors are the thematic domains or areas that will be the focus of the monitoring and analysing activity. Critical factors help to identify information needs and formulate priorities, so the monitoring activity is selective, accurate and effective.		
	An author called Rovira defined in 2008 the surveillance factors as "external factors to the organisation that critically affect competitiveness". Activities within the		

	value chain of the firm may shape a factor. Each factors must be monitored by descriptors, keywords, priority level, time horizon, etc.		
	From an Anglo-Saxon perspective, Herring defined in 1990 the Key Intelligence Topics (KIT). The KIT dives into the information needs and interests of the organization, and gives structure to manage with trends, regulatory issues, competitors movements, and any issue of the business environment.		
		The KIT can be classified as: • KIT for strategic decisions regarding strategic planning and implementation. R&D policy, investment or internationalization decisions are good examples. • KIT for early warnings of potential threats and future opportunities. Emerging trends, recent patents and legislative changes are good examples. • KIT for key players such as game changers, market leaders or just pure competitors. This includes suppliers, customers, influencers and regulatory bodies as well.	
BUSINESS ENVIRONMENT LAYERS	We can consider the existence of levels on which to carry out the monitoring of the business environment. These layers categorise the complex business world into four basic levels: 1. The macro-environment 2. The industry or sector 3. Competitors 4. The organization or firm		BUSINESS ENVIRONMENT LAYERS AND TOOLS
	Each layer of the business environment requires particular tools for analysis. Common methods for analysis are the PESTEL scheme for the macroenvironment, Porter's Five Forces for understaning the industry, maps of strategic competitors and SWOT analysis at firm level.		

SCANNING THE MACRO-ENVIRONMENT: THE PESTLE FRAMEWORK	The macro-enviroment ranks the highest level, consisting of the general and global (or national) factors which might influence the lower layers in the economic activities.		
	A usual tool for monitoring what happens in the macro-environment level is the so-called PESTLE analysis. PESTLE is a mnemonic of P for Political, E for Economic, S for Social, T for Technological, L for Legal and E for Environmental. The PESTLE framework is favored in this condition to grasp a whole picture of the business environment.		
		PESTLE analysis comprises six critical areas of the macro-environment, to be known: 1. Political factors which determine the extent governments influences the business activity. For example, tax policies, Fiscal policy, trade tariffs, etc. 2**.** Economic factors which are determinants of an economy's performance. For example, the growth of the inflation rate, the rate of interest, foreign exchange rates, etc. 3. Social factors which shape the social environment and cultural trends. For example, demographics, changes in householders and lifestyles. 4. Technological factors that may affect the operations of the industry and the market. For example, new machinery, automation, research and development, technological awareness. 5. Legal factors that affect the business environment. For example, consumer laws, sustainability regulation and safety standards. 6. Environmental factors that are related to the use and care of natural resources. For example, resources accesibility, climate, pollution, waste management, etc.	

	The PESTLE framework may be found with certain alterations, as focusing only the first four areas, this is the so-called PEST version, or claiming an E for Ethics.		
	In the Internet, there are many videos, templates and cases available for conducting a PESTLE analysis. Here you have just some good examples you could use.		Links to PESTLE video, templates and case
KNOWING THE INDUSTRY: THE FIVE FORCES ANALYSIS	The second level of surveillance is the industry in which the firm operates. The industry can be analyzed with Porter's Five Forces Framework. Through this analysis, it is likely to generate an overview of the existing and potential competitors, the bargaining power of the firm or the level of entry and exit barriers.		
		Porter's Five Forces are: 1. The threat of entry. 2. The threat of substitutes. 3. The power of customers. 4. The power of suppliers. 5. The rivalry between competitors.	
TOOLS FOR MONITORING COMPETITION	The immediate competition is the third level of surveillance. It refers to the firm's competitors and markets and it takes into consideration two major issues: the strategic group of competitors and the market segments of the firm.		
	Strategic groups are sets of firms within an industry that follow similar business models or strategic characteristics. A common tool in strategic management is mapping the strategic groups of competitors around the firm. If you want to conduct a strategic group mapping you can watch this video.		Link to video on Strategic Group Mapping
	On the other hand, market segment focuses on the customers' side, referring to groups of customers who share similar needs. Specifically, customer profiles can be constructed based on certain indicators such as demographic information (age, gender, and ethnicity), consumption power (disposable income), lifestyle etc.		
		In the last years, the concept of Blue Ocean has been used for referring to emergent markets with no competition. The Blue Ocean Strategy focus on innovating, differentiating	

		and out-performing other firms in the competitive "red ocean" market. The success of Blue Oceans is based on developing new markets with no competition, capturing new demand, and breaking the value-cost trade-off through more differentiation at affordable cost.	
THE FIRM FACING THE ENVIRONMENT: THE SWOT ANALYSIS TOOL	Finally, the four layer that must be analysed is the firm itself facing its business environment. The SWOT analysis reflects the Strengths, Weaknesses, Opportunities, and Threats for the firm. While Strengths and Weaknesses refer to internal features of the firm, Opportunities and Threats are external to the business. The SWOT analysis is usually presented in a simple two-by-two grid. Here you can find some templates, videos and cases.		Links to SWOT video, templates and case
HOW TO ESTABLISH A TECHNOLOGICAL AND COMPETITIVE SURVEILLANCE SYSTEM	Once we know the four layers of the environment that must be monitored, we will focus on the basic elements of a surveillance system. Depending on the firm's interests and objectives, the surveillance system will adopt a specific format. However, any system will have the following elements.		
		Variables that define the focus and scope of the surveillance. Strategic players and stakeholders affecting the business. Information sources that will be needed in the system, as well as their features (name, availability, affordability, quality, etc.). Digital tools and platforms that will be used in the automation of the research activity. Researchers of the work team who will be responsible for developing and conducting the surveillance for all the variables. A researcher checks information, filters signals, and reports main trends in its area. Steering committee that will pool together the surveillance results from the researchers and induct to actions. It may be a innovation committee, scientific committee, etc.	
SECTORIAL EXAMPLES	Let's have a quick look at two examples of surveillance systems created for the furniture industry.		

	Firstly, in Example 1, we will give some basic concepts of Technology Surveillance for the Spanish furniture sector, from AIDIMME. After, we will know, in example 2, some basic ideas of Database of innovative Materials, one of the intellectual outputs of Erasmus+ MIMWOOD project		
		The Technology Surveillance system for the Spanish furniture industry of AIDIMME (Technology Instiute) is based in the digital platform Factiva, provided by Dow Jones. Factiva's global news database of nearly 33,000 premium sources, includes licensed publications, influential websites, blogs, images and videos. 74% of Factiva's news sources are not available on the free web and thousands more are available via Factiva on or before the date of publication by the source. AIDIMME is subscribed to this service, and there are a series of alerts for certain descriptors of such as: • Digital technologies and connectivity • Advanced industrial technologies • Environmental challenge • New materials • Smart equipment	
		A coordinator filters the output of Factiva and distributes the signals (artciles, news, etc.) to other researchers. Once a year a Technology Flash is ellaborated and send to furniture firms with information on: • Technological context • Main technological indicators • Keys to understanding demand • R+D+I guidelines • AIDIMME's portfolio of projects	
	And what about the MIMWOOD project?	The MIMWOOD Project was funded by the ERASMUS+ programme. It aimed to generate study methodologies and tools that facilitate	Links to open guide and platform

		centres of vocational training in wood and furniture choosing and selecting innovative materials. Many of these new materials can be used in the furniture sector, but were not included in the current curricula of vocational education and training for wood and furniture. The goal is to have a kind of assessment and determination of the existing innovative materials in our international market. It also gives information which may have a useful application in the furniture sector at European level.	
	Integration of technological and competitive monitoring systems in R+D and innovation management systems		
Normative (standards) context	As you must know, there are a number of management systems implemented in organizations of all types, such as quality management systems (for example, ISO 9001), or environmental management systems, which are widely accepted among organizations that want to show excellence in these aspects.		
	Recent developments in management systems focused on R&D&I, consider Competitive Intelligence and Technological Vigilance as one of the instruments available to organizations when they decide to undertake the implementation of this type of systems, especially in those organizations with a high component of R&D&I.		
		One example is the Spanish standard UNE 166.606 "R&D&I Management: Surveillance and Intelligence System", which articulates a management system with the most recent approach and structure adopted by ISO (High Level Structure) for management systems. This standard has a very close relationship with the UNE 166002 tandard called "Requirements for an R&D&I management system", as point 7.9 of this standard indicates the need for a process of technological vigilance and competitive intelligence for the proper functioning of the R&D&I management system	

		The High Level Structure (HLS) is a standardized way of drafting future ISO management system standards. All the standards should respect and share a common consistent core: A common general structure (table of contents): identical chapters, article numbers, and chapter, article or clause titles, etc. • Introductory texts for identical articles • Identical wording for identical requirements • Common terms and core definitions The characteristics and requirements specific to each standard are inserted into this structure in the appropriate chapters.
		This standardization aims to foster compatibility among various management system such as quality, environmental management, etc.. to facilitate their integration and implementation by certified organizations. In the following scheme you can see the main points covered by this standard. We can see that many of the concepts discussed in this topic are directly applicable to some of the requirements of the standard shown
Wrap-up	In this topic we've seen the ….	In this topic we have lay down the basics and definition of technological and competitive surveillance: • Definition of Technological and Competitive Surveillance • Explanation of the PESTLE analytic tool for monitoring main areas of the firm's environment. • Practical cases development:

		Example 1: Technology Surveillance for the Spanish furniture sector Example 2: Materials Surveillance from Erasmus+ MIMWOOD project • Integration in the management of the R+D+i , that mention the existence and need to carry out a surveillance and intelligence
Examples and additional sources		

TRAINING PILL TITLE	Unit 3 DESIGN, TREND & INNOVATION RESEARCH. **Block "Technology and Competitive Surveillance"** Topic *2. Creation of a Technology Surveillance system in the company.*
PARTNER RESPONSIBLE	**AIDIMME**
CONCEPT FORMAT	*The Creation of a Technology Surveillance system in the company* is the second topic of the **Technology and Competitive Surveillance** block of Unit 3 DESIGN, TREND & INNOVATION RESEARCH. The role of Topic *2* is to provide the learner with knowledge about the main characteristics, concepts and tools for developing a Technologic Surveillance system. The general definition of this kind of systems is this one: "Observation and analysis of the scientific and technological environment and of present and future economic impacts, in order to identify threats and opportunities for development" The information generated by this systematic process, properly used, may be key for detecting new business opportunities, learn the market evolution, avoid possible risks and/or threats, track the activity of competition and reach new ideas. With this

	information, the company can make strategic decisions. The ultimate objective of the Technological and Competitive Surveillance system is to improve business competitiveness. The topic is completed by providing a set of concepts, tools, and experiences all about the Technology Surveillance system. Alerts, Search Engines, Specialized Databases (magazines, patents, theses,), and Technology Surveillance Software are introduced and showed in a more detailed way
3D SETTING	

SUBJECT	AUDIO IN STUDIO	VOICE OVER	KEYWORDS
Elements that will be indicated to clarify the flow of the text and the topics covered and that can also be shown on screen in the form of sensitive words	**Text that will be recited by the character in a 3D virtual environment (trainer)**	**Text that will be recited by the characters as users scroll through the elements in Motion Graphic**	**Keywords that will appear on the screen through which the user can interact with a simple click, accessing the in-depth materials provided for consultation**
TECHNOLOGY SURVEILLANCE SYSTEM CONCEPT	It is well acepted that technology knowledge and management is a crucial part in innovation and business strategy, whether for achieving scientific excellence, participating in collaborative research projects, increasing technological adoption capability or investing in internationalization. In this topic, the overall objective is to define what a technology surveillance system is, and the main steps		

	for implementing this kind of systems. A secondary objective is to know a set of tools that are helpful for the implementation of these systems.		
DEFINITION	Technological Surveillance is a methodology that helps to strategically address the processes of research and technological development (R&D) in different productive sectors. It is based on the fact that technology is a key factor in the competitiveness of enterprises. Knowledge of technological advances, in all their components, is an imperative condition for advancing with greater certainty in the identification of gaps and challenges.		
	Strategic science and technology information management is increasingly important to innovate and survive in a complex and changing environment. Thus, Technological Surveillance is an essential tool to detect opportunities for technological innovation and new ideas that would facilitate an improvement of processes, products and services in the organization.		
Technology Surveillance as a process		**Technology Surveillance can be defined** as a process to organize, capture and select **information** about **technology,** and analyze and turn it into knowledge for decision-making with less risk and anticipating changes. As an example, you may find here also a brief scheme on a Technology Information surveillance process.	Link to:

Technology Monitoring		Within the Technology Surveillance framework, a critical activity is **Technology Monitoring**, which is defined as the identification of opportunities and anticipating changes derived from scientific and technological information, such as: • New materials • Challenging technologies • Machinery • Digital innovation • Processes • Technological products • Key players such as researchers, ongoing projects, developers, leading firms, etc..	
TECHNOLOGY SCOUTING	To introduce us further to the concept of Technological Surveillance, let's talk about the concept of Technological Scouting. Technology Scouting is another term used in Technology Surveillance which is related to the search of early warnings for relevant technological changes. Technology Scouting main activities include supporting the acquisition of technologies with examples and cases, the identification of emerging technologies, and the dissemination of technology related information to the rest of the organization.		
	Technology Scouting matches external technologies and internal requirements for strategic purposes. The technology scout profile is either an employee of the company or an external consultant who engages in boundary spanning processes to tap into novel knowledge and span internal boundaries. In the following links you will find more information about what Technology		Links to: TRIZ APPROACH theory of the resolution of invention-related tasks":

	Scouting is, as well as methods and interesting case studies.		What is Technology Scouting: <u>Case studies:</u> SPRINT <u>Kodak, Nokia and GM case</u>
		Within the Technology Surveillance framework, the technology scouts works on: - The identification and assessment of new technologies.	

		- Facilitating the sourcing of technologies. - Building and using a network of experts.	
Differences with Competitive Intelligence.	While Technology Surveillance focuses on technical innovation, intelligence activities are related to business information such as products, prices, competitor strategies, and so on. Competitive Intelligence is the observation of the business environment for making strategic decisions in the firm. Technology Surveillance and Competitive Intelligence may be complementary, although each one has its own purpose and even its own resources and teams. Ideally, synergies between the two activities should be sought-after.		
TECHNOLOGY AND INNOVATION MANAGEMENT	There are different models of technology and innovation management, which can be classified according to the original source of innovation, the origin of technological need, etc. These may include:		
		• *Closed innovation:* Emerging technology is fully developed by the organization, without interference from any other external agents. • *Open innovation*: Technology is developed in collaboration with external agents, opening processes and distributing networking benefits among all the parties involved.	
		• *Technology-push*: The organization needs to market its	

		innovations resulting from its technological research and development activity. • *Market-pull:* The market demands technological innovations and the organization works to satisfy this need with innovative solutions.	
¿Do surveillance means foresight?	As a final consideration, Technology Surveillance should not be confused with the concepts of prospective or foresight also focused on the fields of technology and innovation. Technology forecasting analyses medium and long term evolution of technologies, based on the logical expectations of technological experts and technical studies of projection of the present towards the future.		
	Furthermore, foresight is related to the definition of possible scenarios in the long term (for example, energy scenarios in 2050). On the contrary, surveillance encompasses short and medium terms. Although surveillance is a common word and it is used for several purposes, we shouldn't use it when talking about future scenarios.		

	According to the OECD, foresight consists in"systematic attempts to observe the long-term future of science, technology, economics and society in order to identify emerging technologies likely to produce the greatest economic and social benefits."		
		Technology foresight is based on the opinions of experts and includes a set of methods and tools that facilitate and systematize collective reflection on the future and the construction of possible scenarios to design strategic actions. It does not try to predict the future, but to help building it. Among the most used methodologies are: the Delphi Method, Scanning, panels of experts, wild cards, etc.	
		At this point, let's have a look into some interesting foresight and prospective cases. The Institute for Prospective Technological Studies (IPTS) is one of the seven research institutes of the Joint Research Centre of the European Commission. The IPTS is based in Seville, Spain. Since 1994 the IPTS promotes a better understanding of the relationship between technology, economy and society. The mission of the IPTS is to provide scientific and technical support for the formulation of Community policies with a socio-economic as well as a scientific-technological dimension. In the following link you may check more information on the IPTS case.	Link to case: IPTS

		Other interesting case is the Key Enabling Technologies observatory, focused on the evolution of a group of six technologies: micro and nanoelectronics, nanotechnology, industrial biotechnology, advanced materials, photonics, and advanced manufacturing technologies. Please click on the following links for knowing more about the KETS Observatory.	Links to case: Key Enabling Technologies (KETs)
		A third interesting case is GOSPIN, the UNESCO´s Global Observatory on Science, Technology and Innovation Policy Instruments. In the following link you will find more information about this case.	Link to case: GOSPIN (UNESCO)
Results	Results of the Technology Surveillance activity may support internal processes, such as decisions related to productive improvement, technological investments and identification of business opportunities.		
		Here, we present some output that can be generated by means of the Technology Surveillance: - Documental alerts - Innovative materials and processes - R+D and innovation guidelines and roadmaps	
Documental alerts	A documental alerts system allows users to receive information about new documents, changes of interest, etc. with the help of key terms or specific descriptors.		

Innovative materials and processes	Innovative materials are all those materials that incorporate new properties improved with respect to the existing ones, from a functionalization point of view, physicochemical properties, less environmental impact, etc. Sometimes these materials may be used in other industrial sectors.		
		Besides materials, innovating processess are also part of a Technology Surveillance system output. For example, there is a great interest at present in automation and digitization manufacturing technologies and processes for the so-called "Industry 4.0", the fourth industrial revolution, such as the following ones: - Product R&D democratization - Artificial Intelligence - Augmented reality - Virtual reality - Decentralized Resource Planning & Sourcing - Blockchain - Operations Technology Monitoring & Machine Data - Labor Augmentation & Management - Machining, Production & Assembly with high degree of personalization - Quality Assurance with computer-aided vision - Warehousing systems - Transport & Supply Chain Management with telematics, Internet of Things, and autonomous vehicles.	Link of interest

Contribution to research guidelines (R+D)	Technology Surveillance results may also shred light into strategic R+D activities of the organization. Being updated on disruptive technologies might lead to the reformulation of current firm's strategies. Innovation is also a key issue as new technologies might be important for launching products into the market.		
Strategic Technology Management & Roadmapping	The results of a Technology Surveillance system will feed technology roadmaps that will guide the firm's actions. Although we are not going deeper into this point, here you have some interesting links that show technology management charts in Faunhofer, Europe's largest application-oriented research organization.		Links to case: Fraunhofer
SOURCES OF INFORMATION FOR TECHNOLOGICAL SURVEILLANCE		If we want to look for information to carry out a Technology Watch process, we can access a range of sources of interest. P**atents** are one of the main sources of information on the practice of **Surveillance Technology**. 70% of the literature on technology is done only through patents. They provide to the organization relevant, detailed information and anticipatory on the emergence of new products or technologies on the market. In addition, they are documents standardized, internationally.	Links to Patents database, information and examples PATENSCOPE GLOBALBRAND DATABASE Frequently Asked Questions About the Patent Cooperation Treaty (PCT) Directory of Intellectual Property Offices (world) Introduction video for PCT Training on patent search:
Tools classification and Examples Alerts, Search Engines, Specialized Databases (magazines, patents, theses,)	Technology Surveillance tools are essential to capture process and transform the large amount of data and information available into useful knowledge for decision making in an organization. There are multiple types of technological tools, diverse according to		

Technology Surveillance Software	their characteristics and the casuistic, the sources of information on which they work and the surveillance processes they support, among other characteristics		
		Alerts are personalized services of current information on specific aspects of a sector or subject (e.g.: legislation, regulations, calls, events, scientific articles, patents, technological offers, etc.). Today, many institutions and organisations are beginning to offer these on-demand information services, subject to subscription or unionisation (RSS), which help to monitor and detect informative signals	
		Specialised search engines focus on retrieving exhaustive information from a specific type of source (e.g. patents, scientific articles, theses, etc.), a particular area of knowledge (e.g. medicine, engineering, biotechnology, etc.) or a specific type of information (e.g. academic, technological, etc.). Good examples of these specialized search tools are:	Links to : CREATIVE COMMONS SEARCH, search engine specialized in digital resources with creative commons license. WIKIPEDIA page with lot of referencies to Data bases and Searh engines. GOOGLE SCHOLAR. Search engine for scientific publications of the search engine.
		Meta search engines allow to launch a single search in multiple search engines simultaneously, offering the results on a single screen and, in many cases, in an organized and hierarchical way.	Links to Meta search engines:

		1. Mamma: This is a great website to get the web, news, image and video search result. 2. Vroosh: This is yet another nice metasearch engine that can be used by anyone. Although you cannot find web or image search, yet, you will get country-based search. 3] Search: Very popular because of simplicity and a great number of features. 4] Unabot: This is a consolidation of all meta search engines.	
	Databases are a source of structured information essential to know the most relevant data that happen in a specific thematic area, hence it is essential to know in detail the most appropriate databases for each information strategy. They can be generalists or specialized.		
		You may want to check the functionalities of some specialised data bases. As a sample, you may access to: • Patent databases, such as ESP@CENET or PATENTSCOPE. • Databases of journals and scientific articles, such as ISI Web of Knowledge or DART-Europe.	

	.	Marketplaces are increasingly useful tools for the dissemination of research and exploitation of capacities and research results, by offering access to public technology offers and demands, as well as partner search processes. T**echnology marketplaces** are online platforms for **technological mediation**. ***Marketplaces*** find technological **cooperation opportunities** through the publication and dissemination of **technological supply and demands** from inventors, researchers, businessmen, entrepreneurs and institutions that give support in the technology promotion and marketing processes. Here, you may find access to the most important ***marketplaces***	Links to:
	Technology Surveillance software is a computer tool for the comprehensive and systematic management of technology surveillance practices in their different processes. There is a multitude of offers, free or paid, according to different sources of information and functionalities.		

	Open Analytics addresses the development of innovative technologies open source, big data, business intelligence, data mining andopen data. Numerous experts and technology leaders are involved in the distributed development of free software tools applied to data processing. Here to may find an interesting link related to this topic.		
Existing Tools: The Technology Radar	Every six months or so, ThoughtWorks publishes its Technology Radar. What started as an interesting experiment has turned into quite a notable publication, which gets lots of attention from their clients and other netizens.		
Case: Enterprise Europe Network - EEN		The **Enterprise Europe Network** was launched in February 2008 by the European Commission. It is co-financed under COSME (Competitiveness of Small and Medium-sized Enterprises) — an EU funding programme designed to encourage the **competitiveness of European enterprises.**	
		Enterprise Europe Network (EEN) is is the world's largest support network for small and medium sized businesses (SMEs) with international ambitions. It has 3,000 experts across 600 member organisations in more than 60 countries. Member organisations include chambers of commerce and industry, technology centres, and research institutes	Links to Enterprise Europe Network - EEN
	The Network helps ambitious SMEs innovate and grow internationally. It provides international business expertise		

	with local knowledge across a range of targeted services: • Partnership • Advisory • Innovation support		
	Network experts from EEN recognise innovation potential and can help SMEs shape it into commercial success. Its innovation support services include: • Advice and help for innovative SME to access R&I funding (for example, European Fundsand SME focused Instruments) • Dedicated support services for SME European grants beneficiaries. • A very interesting help in finding the right technology to improve itsinnovation.		
Wrap-up (summary on what was presented and what you have learnt)	Throughout this topic we have seen in greater depth the concept of Technological Surveillance, as a key element to consider within business intelligence. We have dealt with the key concepts and that there are different models of technology and innovation management, which can be classified according to the original source of innovation, the origin of technological need, etc. We have also seen concepts of interest such as technology scouting, and all the tools that exist to have access to the information needed to operate and maintain these systems and we presented some output		

	that can be generated by means of the Technology Surveillance, predominantly • Documental alerts • Innovative materials and processes R+D and innovation guidelines and roadmaps. Finally we reviewed the main sources of information and tools that we can use to implement and maintain our Technology Surveillance system		
Additional sources			
			ARTICLES AND REPORTS: Technology Intelligence: A systematic approach to competitive advantage Competitive, sustainable and resilient european manufacturing report from manufuture high-level group, december 2018.

TRAINING PILL TITLE	Unit 3 DESIGN, TREND & INNOVATION RESEARCH**. Block "Technology and Competitive surveillance"**. *Topic 3. Creation of a system of Competitive Intelligence in the company.*
PARTNER RESPONSIBLE	**AIDIMME**
CONCEPT FORMAT	The creation of Competitive Intelligence system in the companies belongs to the block "Technology and competitive surveillance" Unit 3 DESIGN, TREND & INNOVATION RESEARCH. The aim of this topic is to provide clear information about the objectives of a Competitive Intelligence system, and its related processes and elements for running it through teamwork. The Intelligence Cycle and its main elements are introduced, as well as existing tools for collecting and storing the necessary data and signals. Another issue of interest is how to elaborate and report information in a clear and useful way. The topic offers examples of platforms for data aggregation, web scraping and interactive data visualization for decision-makers. The creation of a Competitive Intelligence system for a firm is presented by the Trainer, who explains the topic with the help of graphics and useful links that appear on the screen. Other resources are links to YouTube videos or websites. The topic has a testing quiz for the trainee.
3D SETTING	The scenario for the Trainer videos could be a managerial meeting room as a representation of the decisions that Competitive Intelligence will support.

SUBJECT	AUDIO IN STUDIO	VOICE OVER	KEYWORDS
Elements that will be indicated to clarify the flow of the text and the topics covered and that can also be shown on screen in the form of sensitive words	**Text that will be recited by the character in a 3D virtual environment (trainer)**	**Text that will be recited by the characters as users scroll through the elements in Motion Graphic**	**Keywords that will appear on the screen through which the user can interact with a simple click, accessing the in-depth materials provided for consultation**
CREATION OF A SYSTEM OF COMPETITIVE INTELLIGENCE IN THE COMPANY			
Objectives of topic on Competitive Intelligence systems	Competitive Intelligence is basic if a firm or organization wants to monitor the business environment and make the correct strategic decisions. In this topic you will learn the fundamentals for creating a Competitive Intelligence System, as well as the existing set of tools available at present.		

	Another issue of interest is how to elaborate and offer the generated information in a clear and useful way for decision-makers. In this topic, you will also be told about digital tools and platforms for the aggregation of the data and its visualization in an interactive way.		
DEFINITON OF A COMPETITIVE INTELLIGENCE SYSTEM AND THE INTELLIGENCE CYCLE		Competitive Intelligence was defined in 1996 by Gibbons and Prescott as the "*process of obtaining, analyzing, interpreting and disseminating strategically valuable information about industry and consumers that is transmitted to decision-makers in a timely manner*".	
Definition	Technology Surveillance is related to Competitive Intelligence, but they are two different concepts. Surveillance has the role of detection and focuses on monitoring the evolution of technology and its implications, while intelligence connects the information of the market to the business knowledge and then into actions, looking for an efficient exploitation of the information.		
The Intelligence Cycle	The Intelligence Cycle is a participative and iterative process that controls the scope and pace of the intelligence activities. Although any organization may follow its own approach for information management, a basic scheme will follow Demig's continuous improvement cycle or PDCA cycle, where P stands for Planning, D for Doing, C, for Checking and A for Acting.		
		Following this idea, the Intelligence Cycle consists of five primary steps:	

		• Planning and Direction, where the senior management informs the intelligence team about the objectives and what is needed. • Collection by means of a devised plan for data acquisition and information retrieval. • Information processing for validation and evaluation of the collected data and information. • Analysis and Production, where the intelligence team will analyze and filter relevant and accurate information according to management requirements. • Dissemination and feedback in a understandable format, a correct recipient, at the right time, and by the right means in order to facilitate decision-making processes.	
RUNNING THE COMPETITITVE INTELLIGENCE SYSTEM: ELEMENTS, TOOLS AND DYNAMICS	The Intelligence Cycle will allow the firm to conduct and active watch of the business environment. An active watch establishes basic procedures for collecting regular information. These procedures will necessarily indicate the elements that take part in the monitoring activities.		
Key elements of a Competitive Intelligence System	Thus, the key elements of a Competitive Intelligence System will be the domains or focus of observation, the variables and keywords for the search, the critical sources that may be digital and analogic ones, the software platforms and digital tools to be used, and finally the teamwork indicating who the coordinator, the researchers and users are.		
		The elements of the Competitive Intelligence System give answer to some fundamental questions, to be known: 1. What is the purpose of our intelligence system? That is, the domains and focus on research.	

		2. What information should we look for? These are the variables and keywords that guide the research. 3. Where is the information? These are the relevant sources we need to monitor. 4. How to capture and process the information? This is related to the digital tools we'll use for storing and processing the signals we collect. 5. Who should coordinate the system? We need a coordinator and a research team. 6. How to involve key personnel in the review and analysis of the information? This is the dynamics of interaction for drawing implications and conclusions based on the information retrieval. 7. Who are the decision-makers for which the information will be reported? This is, the end-users of the system.	
	Teamwork is crucial for a good performance of the Competitive Intelligence System. As no one can be an expert for everything, collaboration is needed amongst researchers. The coordinator must assist the team for an efficient handling of computer tools, as well as learning and developing digital skills to support the management of infoxication or overinformation that emerges with the Internet and it is not useful for decision-makers.		
Current data collection and processing tools	At present, there are several tools for data collection, processing, visualization and sharing. Basic ones are RSS readers and web scrapers of online sources, panels of informants such as market or trends observatories, and platforms for data analysis.		
Nethunting	Nethunting is the term we use for conducting online coolhunting research. This means searching for valuable information about trends, weak signals, alerts, and so on for a Competitive		Link to Feedly, a free tool for RSS aggregation.

	Intelligence system. Information in Internet is widely available and the researcher hardly can cope with huge amounts of information. Due to this, nethunting tools assist the researcher in downloading information (articles, posts, etc.) about keywords and essential electronic sources (blogs, etc.). Aggregation platforms for RSS/Feeds are normally used for following areas of interest and collecting online information. RSS allow the researcher to collect large amount of information, while organizing it. A good example of this is the Feedly tool, which will let you classify your sources on Internet and collect their signals.		
Web scrapping	Related to this, other tools are addressed to download all kind of online hidden-data in a website or social network. This kind of tools is known as web scrapping. For example, a web scrapper may download data on the number of "likes" a comment about a brand receives in Facebook. As an example, you can have a look at the Web Scraper tool.		Link to a video about the Web Scraper tool.
Observatories	As we can see in the Market Observatory topic, the observatories are a helpful tool for adding value-added information in Competitive Intelligence systems. Observatories are panels of informants that mat be firms, users, consumers, and so on that send periodically information or data for analysis. There are several types of observatories, being market, trends, social and technology observatories the most common ones.		Relational information for the trainee: See **Market Observatory Topic 1** for going in depth into this.
Business Intelligence tools		Business Intelligence or just BI tools are a new generation of digital solutions for Competitive Intelligence. Business Intelligence tools are based on digital technologies, so data and text access, processing and sharing is faster than even. Main features of current BI tools is that they are self-serving (the user him or herself	Useful links and videos about BI.

		may perform analysis and data visualization) and real-time (output is permanently updated). BI tools also provide interactive and online information. The user may interact with the data or text, so he or she becomes part of the analyst team. Hence, interactive dashboards and KPI, Key Performance Indicators, offer new ways of data visualization, instead of static charts.	
BI and knowledge management	Once the researcher has created the structure for the monitoring activity, the software and digital tools detect alerts and store signals that can be news, articles, reports, and so on. BI software is a powerful support for knowledge management in a firm, but it must be aligned with an innovation or knowledge sharing culture. Software makes the process easy by automation, but it needs teamwork for filtering, selecting and giving value to the information. Hence, BI platforms are just a basic element of a Competitive Intelligence system, but teamwork is the keystone for converting information into knowledge within the organization. Furthermore, Agile BI is the next step towards making-decisions based on Intelligence Competitive systems.		Links to Agile BI practices:
Risk management	Finally, it is important to know and investigate all those regulatory documents that may be of interest to our organization. As an example we can cite the ISO standard that applies to risk management in general for organizations. With the revisions of the standards iso 14001 and iso 9000, both standards emphasize the consideration of risk management within the framework of both		

	management systems. ISO 31000 specifically addresses risk management.		
Wrap-up		In this topic we tried to give an answer to the question: • What is a CI system? An also to introduce some key concepts, such as: • The Intelligence Cycle and Process • Firm's culture - Key elements for CI System • How to run the IC system It has been also introduced some of most useful and current data collection and processing tools • Nethunting • Web scrapping • Observatories • Business Intelligence tools • BI and knowledge management	
Additional resources			

TRAINING PILL TITLE	Unit 3 DESIGN, TREND& INNOVATION RESEARCH. Topic *1. **Market observatory**. Concept and how does it works?*
PARTNER RESPONSIBLE	**AIDIMME**
CONCEPT FORMAT	The market observatory is a topic inside the Unit 3 DESIGN, TREND& INNOVATION RESEARCH. The role of Theme.*Market observatory is to give information about this subject and pro*vide. The objective of this topic is to provide the student with information about Observatory concepts in general, the types of existing observatories, and more specifically, how a market observatory works, from the collection of information, its processing and the final results with high added value. The contents worked on in this subject are reinforced with the help of the presentation of some specific cases, such as the Spanish Furniture Market Observatory.
3D SETTING	

SUBJECT	**AUDIO IN STUDIO**	**VOICE OVER**	**KEYWORDS**
Elements that will be indicated to clarify the flow of the text and the topics covered and that can also be shown on screen in the form of sensitive words	**Text that will be recited by the character in a 3D virtual environment (trainer)**	**Text that will be recited by the characters as users scroll through the elements in Motion Graphic**	**Keywords that will appear on the screen through which the user can interact with a simple click, accessing the in-depth materials provided for consultation**
WHAT IS A MARKET OBSERVATORY? SECTORAL INFORMATION			

GENERATION SYSTEMS IN THE SHORT TERM			
Intro: objectives of the topic	The objective of this topic is to provide the student with information about observatory concept in general, the types of existing observatories, and more specifically, how a market observatory works, from the collection of information, its processing and the final results with high added value. The contents worked on in this subject are reinforced with the help of the presentation of some specific cases, such as the Spanish Furniture Market Observatory.		
Context: of market observatory (antecedent, history)	One of the first images that can come to mind when listening to the term **Observatory** is that of astronomical observatories as a tool in astronomy, The term market observatory is used at present for referring to the **monitoring activity** on a specific market (energy, furniture, crops, processed food, etc.) and its main **performance variables.** As extension, other conceptual observatories may cover prices, social trends, labour, gender equality, etc. A market observatory **assists decision-makers** in order to detect trends and anticipate changes of the market.		The Business Innovation Observatory Capgemini Energy market observatory Example of available information

What is a observatory?		In a more specific way, a marketing observatory is the **collection, analysis and interpretation of information relevant** to the knowledge of a market. The characteristics common to most market observatories are the following ones:	Short term Medium term Long term
	An observatory focuses on a **specific product/service category or sector of activity**. It aims to obtain information of some of the factors involved in the market: **production, import-export, distribution, logistics, legislation, consumers, designers, architects, etc**		
		Observatories tend to combine information obtained from different sources: **official bodies, market studies, sector associations, etc.** The collection of information is of a **periodic nature**: unlike an ad hoc market study (information at a given time), the observatory focuses on the evolution of the data. So, it must respond **to a systematic design of information collection,** which guarantees the comparability of the indicators obtained in different waves.	
How does a market observatory work?	The first step in the design of an observatory is the determination of the contents of the information it will provide, which will normally be reflected in the results in the form of indicators.		

		Some examples of basic indicators for an observatory in a category **of consumption products** would be:	
		INDICATORS ON MARKET STRUCTURE: • Number of companies and brands • Market shares • Total market value and volume in units. • Prices segments • Etc. **INDICATORS ON DISTRIBUTION AND MARKETING CHANNELS:** • Number of stores. • Sales per channel (online, brick & mortar, etc.) • Interannual growth rate • Etc. **INDICATORS ON CONSUMERS:** • Segments according to sociodemographics or psychographics • Attitudes towards the product category o brand • Purchase and consumption behaviour • Etc.	
LOOKING FOR INFORMATION SOURCES INFORMATION	Once the contents of the observatory have been defined, it is necessary to look for sources that can contribute with data to the observatory. Information sources must be accessible, consistent with the goals of the observatory and frequently updated.		
	Information sources usually include official bodies, statistical yearbooks, and reports of professional/sectorial associations, etc. Nowadays, Internet has become an immeasurable repository for all kind of reports and data sources. Accessible sources may cover a part of the aimed indicators for the observatory, so specialized information providers, such as consumer or business panels, are also needed.		

DO WE START? THE PILOT WAVE	As a dynamic system, a critical phase of the market observatory is the generation of the first set of planned indicators. We call this "The pilot wave". Normally, the first edition of the observatory serves to adjust and validate both the sources of information and the resulting indicators. So, in this initial stage, we deal with the statistical treatment will be given to the information, the consistency of data between different sources, the formats for reporting the results, etc.		
		Periodic monitoring is a fundamental feature of the market observatory. Information collection is conducted in the so-called waves. The periodicity in updating indicators, this is, the waves, will normally be determined by two factors: - The availability of the data on indicators so it may be collected. - The greater or lesser dynamism of the market, which may delimit the realization of the tracking waves, which may be diary, weekly, monthly, quarterly, etc.	
Types of observatories: markets, trends, social, etc...			
Types of observatory	As we have seen above, an observatory focuses on a specific category of product/service or sector. For this reason, we can find several types of observatories such as these ones. Business observatories, focused on indicators such as sales, production, exports, investment, productivity, etc. Here you can check some examples:		Links to examples: INTERNATIONAL RAW MATERIALS OBSERVATORY (INTRAW) ACTIVE & ASSISTED LIVING (AAL) MARKET OBSERVATORY VIDEO ON BUSINESS INNOVATION OBSERVATORY

	Trends observatories, focused on products, technology, etc. Examples of this type of observatories are the European Business Innovation Observatory, The Key Enabling Technologies Observatory and the Observatory of Public Sector Innovation. A detailed study of the contents and compiled information of these observatories is recommended.		Links to examples: BUSINESS INNOVATION OBSERVATORY KEY ENABLING TECHNOLOGIES (KETs) OBSERVATORY OBSERVATORY OF PUBLIC SECTOR INNOVATION (OPSI)
	Social observatories, focused on indicators and topics such as employment, life conditions, etc. For this type of category, we have different examples such as the European Social Observatory, and the Social Observatory. In the educational field we can find the Observatory of Educational Innovation, as you can check in the following links.		Links to: EUROPEAN SOCIAL OBSERVATORY (OSE) THE SOCIAL OBSERVATORY (THE WORLD BANK) OBSERVATORY OF EDUCATIONAL INNOVATION GLOBAL ETHICS OBSERVATORY (GEObs)
USE AND AIMS OF AN OBSERVATORY	Compared to a standard sector study, the observatory aims to give a broader and - above all - more evolving view of the market situation. In this sense, in addition to the knowledge of		Link to case : European Construction Sector Observatory

	the market at each moment, it provides a series of utilities such as:		
		1. **Monitor market variables**: detecting trends allows the design of strategies for future scenarios. 2. **Anticipate market changes**: the observatory's indicators function as an early warning system against harmful changes in the competitive environment. 3. **Benchmarking:** the observatory makes it possible to create a bank of experience on different events that occurred in the past.	
RELATION BETWEEN OBSERVATORY AND TS/CI	A market observatory may be part of a surveillance system, where other intelligence tools complete the information given by the observatory. In a surveillance system, market information may be combined with technology surveillance, trends identification or other market surveys.		
How a business panel works			
What is a business research panel ?	As we have commented before in order for a Market Observatory to work properly we must obtain reliable information and in a systematic way. One of the ways to get reliable information is the use of a panel based on firms.		

		Panel can be defined as the fixed and relatively permanent sample or group of respondents to obtain information continuously or on a periodically basis.	
	In an industrial panel participants are informants from manufacturing and the related supply chain firms. Informants are normally managers who have access to critical data in organisations. Building a quality research panel is important because the data validity depends on it. The research panel ensures that your reporting provides good quality responses. Additionally, a well-managed panel of pre-recruited respondents allows for a faster response rate, as the participants have shown interest in participating by joining the panel.		Links to: What Is A Research Panel & Should We Have One? Panel Research and Market Research Panel Recruitment
		The research panel presents some desired advantages as a research instrument: • The response rate and the quality of the responses is high. • Different aspects of a particular topic can be discussed with panel members. This makes panel research more effective and less costly. • It makes it easier to track changes in the segments of participants. • Panel members usually have a better understanding of the topic. • Qualitative methods of market research such as focus groups and discussions can be much more effective if conducted with a well selected panel.	

		• Quantitative market research can be also based on the panel for statistical representativeness.	
		On the contrary, the research panel present some disadvantages: • There are panel members with spurious intentions so they do not provide true data. In these cases, the observatory managers should detect them an invite to leave the panel. • The response rates decrease over time so corrective actions are needed for renovating some members. • Attrition must be managed as well.	
SAMPLING AND STATISTIC REPRESENTATIVENESS	**Now we're going to look in a little more detail at a number of key concepts about these panels:**		
	The first of them refer to the concept of sampling and statistical representativeness. **Although it is not necesarilly compulsory in a research panel, sampling** is a statistical procedure that is concerned with the selection of the individual observation so statistical inferences may be carried out about the total population that we are studying.		

		In **statistics**, **sampling** is the selection of a subset or **sample** of individuals from within a population in order to estimate characteristics of the whole population. Results from probability theory and **statistical** theory are employed to guide the practice. The main **types** of probability **sampling** methods are simple random **sampling**, stratified **sampling**, cluster **sampling**, , and systematic random **sampling**.	
	In order to create a research panel we need a preliminary study of the business, so we get figures on the number of companies operating in the market, total industry turnover and employment level, for instance. Once we have characterized the main features of the business, we could calculate the sample size needed for conducting quantitative research (panel, market research, etc.).		
	Representativeness - means that the characteristics of the population and the sample are congruent - that the sample is a good representation of the population		
FREQUENCY OF DATA COLLECTION	Frequency of data collection is a key decision in a market observatory. Depending on the market nature, frequency will be shorter or longer For example, it may be appropriate to monitor prices for consumer goods (i.e. the dairy industry) on a daily basis, while for real state markets the basis may be monthly or quarterly.	.	
QUESTIONNAIRES (DATA QUALITY)	Data collection is normally conducted with surveys. The informants are the participants in the panel of the market observatory, who give data about their business activity periodically.		

	Data is collected on the key variables that have been selected for the market observatory. Normally, data will refer to performance variables (i.e. evolution of turnover or investment). Besides, data may refer to expectations of the informants about the future of the variables. In this sense, the market observatory collects data based on facts (what has happened in the last period) and opinions (expectations and so on). Surveys should be parsimonious and easy to understand and fill, so informants agree to give the data about their firms. Surveys may be conducted by the observatory managers through several ways: e-mail, phone, web, etc.		
		Some interesting digital tools for online surveying at present are: Typeform JotForm Survey Monkey Google Forms	Links to examples
DATA EXPLOITATION AND RESULTS	Statistics is basically a science for analysis of data. It applies to: - data collection - data exploitation - results interpretation - results validation. Data analysis is a process of inspection, cleaning, transformation and modeling of data in order to discover useful information, report conclusions and support decision making.		
	Two main statistical methods are used in data analysis: descriptive statistics, which summarize data from a sample using indices,		

	and inferential statistics, which draw conclusions from data that are subject to random variations (e.g., observation errors, sampling variations).		
REPORTING BUSINESS INDICATORS	An indicator is a specific, observable and measurable characteristic that can be used to show changes or progress a variable is making toward achieving a specific outcome. There should be at least one indicator for each outcome. The indicator should be focused, clear and specific.		
	.	Indicators are used ofr reporting the results of a business panel in market research. There are three types of indicators related to economic or business variables: Leading, Lagging and Coincident. • Leading indicators help to predict what the variable will do in the future. • Lagging indicators confirm what leading indicators predict. • Coincident indicators mirror what the data is saying.	
Case : OECD indexes	As an example, the OECD calculates a series of indicators of all kinds. In the "economic" category, there are 69 indicators. Of these, we will focus on three of them, related to the possible results of a Market Observatory, as in the following examples:		Link to case:
		This Composite Leading Indicator (CLI) is designed to provide early signals of turning points in business cycles showing fluctuation of the economic activity around its long term potential level. CLI show short-term economic movements in qualitative rather than quantitative terms.	**Link to:** **Composite leading indicator (CLI)**

		This Business Confidence Indicator provides information on future developments, based upon opinion surveys on developments in production, orders and stocks of finished goods in the industry sector. It can be used to monitor output growth and to anticipate turning points in economic activity. Numbers above 100 suggest an increased confidence in near future business performance, and numbers below 100 indicate pessimism towards future performance.	**Link to: Business confidence index (BCI)**
		This Consumer Confidence Indicator provides an indication of future developments of households' consumption and saving, based upon answers regarding their expected financial situation, their sentiment about the general economic situation, unemployment and capability of savings.	**Link to: Consumer confidence index (CCI)**
Data visualisation tools	Data visualization is the graphic representation of data. It involves producing picture that communicate relationships among the represented data. This communication is achieved through the use of a systematic mapping between graphic marks and data values in the creation of the visualization.		
		At present, there are some quite a lot of available data visualization platforms and tools in Internet. PowerBI, Tableau and Knime are some of the most used and we invite you to have a look at them.	
Results, dissemination and decision making in the company.			
Informants and decision-makers	There may be different kind of participants in a panel of a market observatory, depending		

	wether the panel is based on end-users, consumers, firms, professionals, etc. Two main roles in a market observatory are: 1) Informants: people who give data to the observatory managers through research methods such as surveys. In a consumption panel, informants send somehow their consumption data (fulfilling periodic surveys, sharing online data, etc.). 2) Decision-makers: a second kind of participants in the panel is the people who will use the information generated by the market observatory for making their business decisions.		
Dissemination actions		Once results are obtained from the market observatory, dissemination may be done with several formats: - Reports through online dashboards, written reports, published guides, etc. - Blog and websites with videoblogs, infographics, expert interviews, etc. - Workshops and meetings with a group of firms or decision-makers for explaining the results qualitatively.	
Decisions	.	The final aim of a market observatory is to assisst decision-makers in their challenges and problems Thus, a market observatory may give information for: Strategic decisions on exports, target selection, business model innovation, policy-makers, and so on. Commercial decisions on setting annual objectives, prioritizing market segments, etc. Product decisions on new product lines, R+D projects, search of alliances, etc.	

		Marketing decisions on segments comparison, identification of trends, etc.	
Example: Furniture Market Observatory in Spain.			
	Now we will see an example in a more detailed way: The Spanish Furniture Market Observatory of AIDIMME. This Market Observatory is an information and knowledge management system in the furniture and related sectors. It is based on a panel formed by industrial and commercial companies belonging to the sector, which systematically and quarterly provide information on the evolution of various variables in the field of business management (sales, exports, etc.). Likewise, the panel provides information on the expectations of the managers regarding the immediate evolution of these variables. Let's look at some of its main features:		
		As we can see they include different kind of firms, all of them within the furniture supply chain: SUPPLIERS, MANUFACTURERS of different types of furniture, and CLIENTS (B2B).	
Composition of the Panel	The panel is formed by around 250 firms from the supply chain in the Spanish furniture industry		
Quarterly questionnaire	Surveys are conducted with quarterly questionnaires which can be answered online. There is a spontaneous period for collecting answers and then a telephonic contact is done for completing the wave.		
	Quarterly reports show graphically indicators on sales growth, sales expectations for the next quarter and industrial confidence on the market momentum. Indicators are usually estimated in comparison to the same period of the previous year.		

Report	The results of the report are presented in various ways. We can observe two graphs, generated by this observatory:		
		In the first one, the quarterly evolution of the sector's sales is shown, together with the sales forecasts for the following quarter. In both cases the indicator is the interannual grow rate.In the second case we can observe the indicator known as Industrial Confidence Indicator. This indicator gives us a general idea of the optimism or pessimism at a sectoral level, based on a greater or lesser expectation of sales	
Wrap-up		In this part we have learnt about what is a market observatory concept in general, the types of existing observatories, and more specifically, how a market observatory works, from the collection of information, its processing and the final results with high added value. • What is a observatory? • How does a market observatory work? • Looking for sources of information: • Starting. The pilot wave concept We have also seen that there are different types of observatories, depending on the type of activity they focus on: market, trends, social… The way of working and the results vary from one type to another In order to provide information to the market observers, we have seen with a little more detail the concept of PANEL and how it works works Panels are one of the most important and reliable instruments for obtaining high value-added information, and are key if an observatory is established. • What is a panel?	

		• Who takes part in the panel? • Periodicity • Confidenciality issues • Questionnaires • Reports Finally we have seen an Example: Spanish Furniture Market Observatory and some indicators generated in a graphical way. These graphs have allowed us to know how the information is presented and its usefulness	

TRAINING PILL TITLE	DESIGN, TREND AND INNOVATION RESEARCH Theme *3. Brand and Brand management*
PARTNER RESPONSIBLE	**Hungarian Furniture Association**
CONCEPT FORMAT	The Brand and brand management is one of six topics of the Unit DESIGN, TREND AND INNOVATION RESEARCH . The role of theme *3 Brand and brand management* is to understand the importance of service, values, appearance which a well-built, branded company has to give in order stand out from its competitors. This chapter is going to provide the learner a brief insight of what does branding means in practice, what are the core pillars of it and how to integrate a brand-related strategy to use it on a daily basis.
3D SETTING	

SUJBJECT	AUDIO IN STUDIO	VOICE OVER	KEYWORDS
Elements that will be indicated to clarify the flow of the text and the topics covered and that can also be shown on screen in the form of sensitive words	**Text that will be recited by the character in a 3D virtual environment (trainer)**	**Text that will be recited by the characters as users scroll through the elements in Motion Graphic**	**Keywords that will appear on the screen through which the user can interact with a simple click, accessing the in-depth materials provided for consultation**
Introduction. Branding			
Intro	So you are working a lot, putting a tons of thoughts into your service/product, created your own micro world of business. That is a lots of value, but the outer world - or let's say your future customers haven't been experienced your processes, so they don't understand the idea, quality and purpose of your work. That's where branding comes in. Branding is not marketing, let's start with that. Marketing is a strategy on selling ready concepts, products which are already suitable for a certain market needs. So it researches to whom and on what channels it should be sold. Branding has a different purpose: Brands are highlighting a company's or products core ideology, creates the very essence of it and by that, find a way to customers heart.		Why do you need branding? How to start from scratch? How to make your brand work?
Why do you need branding?	When it comes to the competitive market , there are already so many options, that it is almost impossible to be seen without highlighting		

	something which can help the customer decide on which to choose.	Imagine yourself in any customers shoes: when they go on the internet, thousands of ads are attacking them which are accustomed to their online habits. Pretty scary, also a lots of information. If they are going to the store to buy - let's put an example: shampoo- in an average grocery store usually there are more than 35 options they can choose from, similar price and ingredients. At this point, the choice has to be sentimental: "which brand I can relate the most, what message is the most likeable for me?" Now the thing is, that your product or service is a bottle of shampoo. Might be unique, but pretty sure it is not 100%-ly able to differentiate itself from other already well established products. What you have to keep in mind is when your product is out on the market, you can't always be there to explain what it is, what advantages does it have and so on. Branding has to do this job.	
Create the basics of your brand			
How to start from scratch?		First of all, you have to find your businesses core values. Try to collect all the words that comes into your mind: that explains what you are doing and how you are doing it. You can write them on post-its as a visual help.	

		You will experience that it is not so easy as it seems. It's because you are very attached to your project and thinking about the whole process you've been gone through until you got to this point. This is just okay. Keep in mind, that although you are capable of doing many, many type of work or product, you have to choose just those services which are the most important to you and your customers. Try only sell what you are best at. Now try to think about what are the most important parts you want to show to your customers. Do not forget to keep it simple and short. Good! Now try to explain your business in 3 sentences. Add a part which explains why is it especially valuable to your customers: like a mindset what your business is stands for. It should be something which makes you different from your competitors. What makes you stand out from the crowd. This task is to show you that most of the times, people only have the availability and capacity to understand your brand in 20 short seconds. You have to build most parts of your communication on that.	
How to make your brand work?	If you have developed the idea of what is your business and the value behind it, you and all of your coworkers have to be very true to that idea. Branding only works if every small details of your		"the four vectors trough which a brand emerges"

	organisation stands for your previously set up values: - the verbal communication - the visual communication (like your logo, packaging, workplace appaeareance and atmosphere The fundamental idea behind the brand is that in everything the organisation does, everything it owns and everything it produces, it should project a clear idea of what it is and what its aims are. The most significant way in which this can be done is by making everything in and around the organisation - its products, environment, communication and behaviour and performance - consistent in purpose and performance and , where this is appropiate, in appeareance too.		
		According to the tasks you went trough, answer these 4 questions for yourself before you enter to the next level of branding experience: 1. Does your organisation have a clear core idea? 2. Can you explain what your company does and what makes it different from its competitors? 3. Do most of your colleagues in the company share similar feelings about what the organiztaion is , what it does and how it does it? 4. Does the outside world understand what your company stands for , and how it differs from its competitors?	
Making your brand ready to introduce			[Blend in titlte]
Step-by-step guide to make your brand visible,	In this chapter, we will go through how to: - set up your brand's visual identity and communication	On the first chapter, you have created your company's core idea.	

understandable and likeable	- how to integrate your communication so it will become a daily routine, - how to reach out to your customers	These statements you just made, will be the guidelines in the future for every decision you make at or about your brand. But you also have to keep in mind, that whatever you do or would like to convey to the outer world (your customers, partners, etc..) you have to communicate it very carefully and well built up, so everyone understands what you want to tell about a product, idea or action you make.	
Visualization	*Why is visualization is one of the most important part of your business?* *People more than ever are keen on to adopt information throughout images. Our brain tends to understand an image way much faster than any words.* *Also images are more likely give similar understanding on things amongst people, while words usually have different meaning to one another.* *This doesn't mean we have to start communicate in images, but combining the two can win you a lots of attention.* *Try to grab the attention by an image and set and clear your message trough short, but well placed texts.*		

	At this point, you are creating something what will be the identification of your company. The very first thing people will recognize you with: your logo. If you already have one, go through this chapter and consider according to the learnt material if you should rebrand your existing visuals.	First of all, you have to find someone, who is a professional: a graphic designer. This work is very delicate and will predestinate your future appearance. When you chose your partner in design, always decide according the skills and the common understanding and try to rather invest more in this project, than having a midrange branding you will be stuck with for years. Trough the designing process, keep in mind that a professionals advice is trustworthy if it comes to esthetics and usability, always pay attention to it, but also you are the founder behind the core idea of your business, so the outcome always has to project your idea of the company and your sence of style and design.	

	It is always nice to have different opinions on a project, but this time, to keep your methods on the right track, if you feel unsure while you are in a developing process, always ask advice from those who has the professional knowledge about the topic. Before you meet your graphic designer, collect all your previously prepared materials of the core idea. Go on Pinterest, Behance or just research some company's example, whose logos and branding you are fond of. Collect at least 8 brands visual communication and make comments on it why you like it. The aim is to give an idea to your designer what style and ideas are close to your company's ideology. Now you are ready to settle a meeting and give a brief explanation trough your materials what basic messages should your visual identity tell about you. On the rest, the designer will guide you. When you are ready and accepted the final form of the logo, the following package you should get, so you can use your identity on a daily basis: - logo with black, white and the original versions in different formats (vectorial, png, jpg,psd.)		

	save them for the future, you will need all of them - logo placed on your daily used forms (bills, documents, emails, packaging, website, apps, etc..) - logo usage instructions : smallest size it can be used, what colors can you match it with, etc..) - fonts you should use for emails, website and your documents		
Integration	We have mentioned previously how important is that your company is communicating the very same messages internally and externally every time someone interacts with it. The built up visualization is going to be shown in all the offline and online surface you are using. It is time to introduce all the branding materials you have been worked on to your colleagues. Show them all the processes and ideologies you went through, make them understand how important is that they share the same visions and values.		

	When you call for the meeting, make sure you invite everyone, even if they are not in direct contact with your customers. Make the integration process their project too.		
		First step is to make your new identity into your atmosphere. Meaning: decorate your office according to your new visuals. Discuss with your colleagues what you have to change: billboards, store signs, wall decorations, everything that can strongly convey your new messages and look.	
	If you are ready with your office interior, everyone will feel the urge to make the big change with their working materials too. You have to change your email signatures, bills, contracts, stamps, everything you use according to your new brand identity. That will also make a strong change towards your colleagues behavior: if you built up your core idea correctly and introduced them to it, they will feel they are the face behind a great cause and stand up for it.		
		It is time to test everything you've been worked on. Don't start to use your new materials externally, until you are not 100%-ly sure, all the platforms are working according to plan.	

	If your testing phase is done, you have to carefully introduce it to your customers. You have to be very careful to explain that the changes are not a result of bankruptcy, change of ownership or values. It is an evolution in order to be more effective and self-conscious about what your company does. This communication has to go out on all the platforms you are already using: newsletters, posts, websites, social media whatever tools you have previously used.		
Keep your brand alive	Whenever you are creating your whole brand concept, it shouldn't be in a static state. Your brand has to constantly reinvent itself. As the market is developing itself , you have to observe the incoming information and adopt those parts which are compatible with your values. Branding is about always filling up your name, logo and actions with meaningful content and personality. Keep your values, but develop your core idea from time to time! And don't forget: whatever you think and develop, it is meaningless to your audience unless you show it, communicate it, brand it. It is		

	a lots of energy and hard work, but nothing compare to the job you have done so fare with your products and company, so it worth the effort. If you don't have the time for this sort of communication, try to find someone within your colleagues who has the skill and time to convey your messages to your followers, subscribers, etc… If you don't have such resource, find a freelancer or external agency whom you share common views of communication and values.		
	That was the basics of branding. No matter if you have a startup, an ongoing small, middle size or big company, a family business or just being yourself alone, these guidelines will be helpful to make your enterprise a brand which is likeable, understandable and marketable. Don't forget the goal: share your thoughts, values, sense of design with your audience, so they can decide to choose you. Stand out from the crowd and find people who has similar idea on a product or service. That will make your brand and communication true to itself and easy to invent, it will come from your mind and your heart.		
Wrap up advantage quiz			
	Now that you are ready to step up your game and brand your activity, let's set back, relax and play a little game before you start on your own.	Use the game from this link, or we can make our own.	

		https://www.businessinsider.com/logo-quiz-can-you-identify-these-brands-when-their-names-are-stripped-out-2012-7#ford-26	
Additional reading			

TRAINING PILL TITLE	**Life cycle of a product**
PARTNER RESPONSIBLE	**BBCWFI**
CONCEPT FORMAT	The topic "Life cycle of a product" is part of the course "Design, trend and innovation research". The role of the topic is to provide the learner with knowledge about what is the life cycle of a product, what materials are used, stages and to introduce him/her with an example of it. In the video there will be shown some pictures and diagrams in order to be easy understandable.
3D SETTING	

SUJBJECT	AUDIO IN STUDIO	VOICE OVER	KEYWORDS
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Definitions			
Definition of a product	A product is an item, or a service offered to be sold. It can be physical or in other form like virtual or cyber. Every product is made at a cost and each is sold at a price. The price that can be define depends on the market, the quality, the marketing and the targeted segment. Each product goes to its end of life afterwards it needs replacement. Also, each product has a life cycle after which it has to be re-invented.		
Definition of a life cycle of a product	What is **product lifecycle management also known as PLM?** In industry the PLM is associated with the process of managing the entire lifecycle of a product from inception, through engineering design and manufacture, to service and disposal of manufactured products. PLM combines people, data, processes and business systems and provides a product information for companies and their extended enterprise.		

Types of materials	An important part of the process of creating a product is the material. What is a material? A material could be a substance or mixture of substances that constitutes an object. Materials can be pure or impure, living or non-living matter. They can be classified based on their physical and chemical properties or based on their geological origin or biological function. In the industry, materials are used in the manufacturing processes to produce products or complex materials. The classification by structure is Microstructure and Larger-scale structure. In engineering, materials are categorised according to their microscopic structure as:		
Types of materials		• Ceramics: non-metal, inorganic solids • Glasses: amorphous solids • Metals: pure or combined chemical elements with specific chemical bonding behavior • Polymers: materials based on long carbon or silicon chains • Hybrids: combinations of multiple materials, for example composites.	
Types of materials		**Examples of Larger-scale structure are** foams and textiles	
Stages of life cycle of a product			
Life cycle of a product determined by the life of the product.	The life cycle of a product could be determined by 2 aspects. One is the life of the product and the other one is associated with marketing and management decisions within businesses.		
Life cycle of a product determined by the life of the product.	Life cycle of a product determined by the life of the product has the following stages:		

Life cycle of a product determined by the life of the product.		● Stage 1 - Material studies In order to create a product first you must have an idea of what it should be and what kind of materials you should use. This is the stage where you make researches. ● Stage 2 – Product forming – this is the stage where the product is built and tested. ● Stage 3 – Manufacturing the product – after the product is complete it is ready to be put in production. ● Stage 4 – Use of the product – the product is being used for its purpose by the client. ● Stage 5 - End of life of the product – this stage is indicating that the product is in the end of its useful life and it can't be used anymore. The product could be recycled (all or some parts of it) or discarded.	
Life cycle of a product associated with marketing and management decisions within businesses	The Life cycle of a product associated with marketing and management decisions within businesses, and all products go through five primary stages:		
Life cycle of a product associated with marketing and management decisions within businesses		1. research and development, 2. introduction, 3. growth, 4. maturity, 5. decline.	
Life cycle of a product associated with marketing and management decisions within businesses	Each stage has its costs, opportunities, and risks, and individual products differ in how long they remain at any of the life cycle stages.		
Life cycle of a product associated with marketing and management decisions within businesses	Life cycle of a product associated with marketing and management decisions within businesses has the following stages:		

Life cycle of a product associated with marketing and management decisions within businesses		Stage 1 - research and development - The Product development stage is the first part of the Product Life Cycle. This stage is not only about building the product, it includes carrying out research and testing too. Market research and competitor analysis are the main part of the research for the development stage. These are done to get an idea of the potential growth for the product, and to build a business case to validate the product. Gathering feedback from test users and testing the product are also vital to the development of the product. Once the development of the product is complete it is ready for the introduction stage. Stage 2 - introduction - This is the stage in which the product is initially promoted. Public awareness is very important to the success of a product. If people don't know about the product they won't go out and buy it. The sales begin and grow. Stage 3 - Growth –when sales are increasing at their fastest rate. The Growth stage is where the market share of product starts to grow. Often at this stage a large amount of money is spent on advertising. You want to focus your advertising campaigns at your target audience and existing customers and sell the benefits of your products to them. If you are successful with your advertising strategy, then you will see an increase in sales. After a period of an ongoing increase in sales, eventually your share of the market will stabilize. Once you get to this point you will reach the Maturity stage of the product. Stage 4 - Maturity - The third stage in the Product Life Cycle is the maturity stage. If your product completes the Introduction and Growth stages, then it is likely to spend a great	

		deal of time in the Maturity stage. During this stage sales begin to stabilize. The key to surviving this stage is differentiating your product from the similar products offered by your competitors. When sales start to stabilize you will need to go back to the development stage, analyse your product and sales performance, to be able to innovate new features and services to help your company stay competitive in the market. If you do not restart the product life cycle here, you are more than likely to reach the decline stage. Stage 5 Decline - This is the stage in which sales of your product begin to fall. Either everyone that wants to have bought your product or new, more innovative products have been created that replace yours. To stay competitive, and keep your market share, you will need to reassess your existing product and iterate on its features. Ideally between the maturity and decline stage you would restart the product development cycle, to continue the success of your business. Some companies decide to withdraw their products completely from the market due to the downturn.	
			Full information

TRAINING PILL TITLE	**Strategic Perspective**
PARTNER RESPONSIBLE	**BBCWFI and HUAFW**
CONCEPT FORMAT	The topic "Strategic Perspective" is part of the course "Design, trend and innovation research". Deploying an organizational change initiative can be challenging. Strategy Perspective can give you tools to engage your employees in implementing a change initiative. Whether it is to improve quality, streamline your supply chain, increase customer satisfaction, decrease product development time, or implement another initiative, our tools can make a difference.
3D SETTING	

SUJBJECT	AUDIO IN STUDIO	VOICE OVER	KEYWORDS
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Definitions			
What Is Strategic Perspective?	What is the definition of perspective? What does it mean to the companies? A perspective is a manner of viewing things, and every business should use many different		

	perspectives to form a overall vision of the company.		
What Is Strategic Perspective?		The strategic perspective is very important as it develops the competitive mindset. The strategic perspective could help the company to develop a range of new products, marketing tools, or finding new markets and business partners. The strategic prospective thinking helps the companies to improve their business.	
Strategy and Structure of an Organization	Creating of the strategic perspective is not easy job at all. Because of the busy daily routine of the employees and owners sometimes it is hard to focus on the big picture. The developing of strategic perspective demand to take a step back and look closer at the business atmosphere - inside the company and the surrounding. It is important to be aware that the developing of the strategy is continuous process, as the business is growing so the strategies should also evolve.		

Strategy and Structure of an Organization		The nature of the good strategy can be defined by the following three questions: 1. What happened and why? 2. What will happened next? 3. How do we make it happen?	
4 Approaches to Strategy Formulation	The best way to create a successful strategy is to use the cooperation between the different levels of the business structure. Their collaboration helps to improve the process. Every position in the company have their own point of view, different challenges and obligations, that can contribute to strategy formulation. There are four approaches to collect these perspectives:		
4 Approaches to Strategy Formulation		Executive meetings Department meetings Employee surveys All-hands meetings	
4 Approaches to Strategy Formulation	Using these four methods for formulation brings a diverse field of valuable input to the table.		

	When the company identify the disadvantages, inefficiencies or opportunities that could be missed, strategies are developed to remove them.		
7 reasons why strategy perspective fail?	Developing good strategic perspective contributes to effective implementation of the strategy. Although, organizations often fail to develop sound strategic management perspectives for a variety of reasons. Some of which are:		
7 reasons why strategy perspective fail?		1. Lack of awareness of the top management about the real situation of the organization.	
7 reasons why strategy perspective fail?		2. "Kidding themselves" syndrome. This is a situation when the managers delude themselvs about the condition of the organization.	
7 reasons why strategy perspective fail?		3. Vested interests of the managers also bring damage to the strategic planning.	
7 reasons why strategy perspective fail?		4. Exaggerated interference of senior managers in dayly tasks also leads to inefficient of the strategic plans.	
7 reasons why strategy perspective fail?		5. Sometimes after some initial sucsesses the top management of the organization become complacent.	
7 reasons why strategy perspective fail?		6. If the company is taking into the different direction it is often misinterpreted as	

		an admission that the actions what was one done in the past were a mistake.	
7 reasons why strategy perspective fail?		7. Disability on the part of the top management to detect its competitive edge may also lead to its ignoring strategy planning altogether.	
Short-Term Strategies	Short-term strategies are often easier to identify and address. A lot of these strategies are developed in the departmental meetings by simply listening to employee feedback. For example, the accounting department might conclude that if the company buy once a month from one material than twice a month this will reduce the expanse for delivery. Other general short-term strategies appear by identifying simple inefficiencies in the way employees communicate. A manufacturing company may find they are ordering too much raw material because of a simple disconnect between the order managers and the floor managers. Based on this feedback, a strategy will be formed to close the loop and build a more effective system. Short-term strategies are especially widespread in the world of sales. Every single sale offers the opportunity to form a short-term strategic perspective. In a scripted sales environment like cold-calling, this is less common. But if you are working on sales that require unique proposals that address the particular needs of potential buyers requires strategy.		

	The sellers must consider and address the pain points commonly experienced by the buyer so that you can create a personalized approach and close the sale.		
Long-Term Strategic Planning	The long-term Strategic Planning is more complex, and strategies are based on a combination of big-picture ideas and actionable plans. The long-term strategic approach may also incorporate a various of short-term strategies that work together for a single result. The first thing to do when you are long-term planning is to put specific aims. The aims are often set according to revenue, but establishment of the goals for brand recognition, brand identity and finding new markets.		
Long-Term Strategic Planning		For example, if you want to penetrate the market as a luxury brand with a higher price than the competition, the strategies formed will reflect that goal. The business will focus on brand identity and will build a pricing strategy that tops the market and will work to drive sales in that specific market.	Detailed information
Summary of Strategic Perspective	After all, strategic perspective is something that all company should rely on. The very core point of the technique is that the organisation has to collect objective information from all the level it is possible: - inner and outer interviews and surveys can help. But most importantly, the objective information has to lead to an objective decision a well. The communication between departments has to be clear and flawless, so any market or inner		

	system changes can be responded by the right strategy. Short term strategies are meant to give quick solution to the upcoming tasks, but if the organization meant to have a stable place on the market, a long-term strategy has to prepare it's way to success. Do not forget, the strategies are guidelines for the future, but has to be flexible and responsive for the unforeseen events at a company's lifecycle. All the strategies has to collaborate with the company's brand identity too. Use strategic perspective's tools to always see a bigger picture. With better understanding, you will always have the chance to create something big, something useful, something special. Think outside the box!		
Quizz	Take the following quiz, bring up your most honest version when filling it. These questions are to highlight if whether your organisation is ready for strategic perspective or yet there is a lot to work on the future.	There is a common understanding of what strategy is across the organization. Yes No 1. The majority of managers can clearly define and differentiate strategy from other planning terms. Yes No	

		2. We have mission, vision and value statements that influence people's daily behavior. Yes No 3. People do not engage in multitasking when in meetings and teleconferences. Yes No 4. Fire drills and reactivity are not common characteristics of our culture. Yes No 5. Our products and services have differentiated strategies that lead to competitive advantage. Yes No 6. Our culture rewards risk taking in the pursuit of differentiated strategies, even when it results in failure. Yes No 7. People are always willing to push out of the status quo to evolve and change when it's in the best interest of the business. Yes No 8. We make modifications to our business model on a regular basis to stay ahead of the curve. Yes No	

		9. Meetings and teleconferences in our organization are both effective and efficient. Yes No 10. Different functional groups meet on a regular basis to discuss each other's strategies. Yes No 11. We seek different perspectives and challenge assumptions when making decisions. Yes No 12. We have a plan that is no more than 1-2 pages in length and drives our daily activities. Yes No 13. Our team focuses on the most important 1-3 priorities and deprioritizes everything else. Yes No 14. Each group's strategies are aligned with the other functional areas on a regular basis. Yes No 15. When we use SWOT Analysis as a planning tool, it produces actionable strategies.	

		Yes No 16. Each team in the organization creates its' own distinctive strategies. Yes No 17. We are effective and efficient when it comes to strategy execution and communication. Yes No 18. Strategy conversations occur on a regular basis and are effective in gaining buy-in. Yes No 19. Our culture supports strategic trade-offs and saying "no" to non-essential tasks. Yes No	

1.4 Unit 4_PROJECT MANAGEMENT

TRAINING PILL TITLE	**Project Management**
PARTNER RESPONSIBLE	**CONFORM S.c.a.r.l.**
CONCEPT FORMAT	A Training video pill in which a teacher, placed in a 3D virtual environment, deals with the subject consisting of the following six learning areas: Introduction, 4 thematic topics, final recommendations and learning assessment tests. In the introduction, in the first and third topics, and in the final recommendations the teacher will explain the concepts that will be shown on screen that are engaging thanks to virtual settings, motion graphics and keywords that appear on the screen, through which the user can interact with a simple click, to consult the additional in-depth materials provided in different formats (PDF, links to videos or external websites, etc.), which will always be presented by an introductory text. Topics two and four, on the other hand, will be developed by creating two branched scenarios, which, thanks to the use of short films shot in the first and third person (the first person will be used when you want to leverage involvement and the third when you want to show behaviour/s implemented by the actors), will allow users to make choices that will influence the story (branching narration). If the user gives an incorrect answer he/she will see a negative scene and will receive feedback indicating why the choice made is inexact or partially exact, then return to the choice options that will allow him/her to make a new choice until the right one has been made, which will allow him/her to continue with the story. In this way, the branching experience becomes formative. Therefore, it will have to focus on concepts and notions explained to the user in the previous topics and in the introduction, thanks to what the trainer has said, and with the additional in-depth materials provided so as to evaluate actual use made during the learning process. In the last section dedicated to recommendations, the last notions that must be taken into account will be transferred to the user, formulated in the form of "rules" to be respected, "guidelines" to follow, etc. The interactive, educational, video pill with branched scenarios will end presenting the user with an assessment test, aiming to assess learning levels.
3D SETTING	

SUBJECT	AUDIO IN STUDIO	VOICE OVER	KEYWORDS
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BASICS OF PROJECT MANAGEMENT			
	Globalization of markets, internationalization of businesses, reduction of production life cycles, acceleration of technologies: these are just some of the phenomena that create the need for permanent innovation, indispensable to be successful and to remain competitive on the market.		
PROJECT MANAGEMENT	For this reason, in recent years, **Project Management** has assumed a fundamental role, so much so as to induce many companies to envisage a specific function dedicated to project management in their organizational structures.		
	Working by projects has, therefore, become fundamental not only for companies, but in general, for all those organizations that have to fulfil certain objectives and intend to effectively deal with change management.		

CHANGE MANAGEMENT	In this regard, it is important to specify that forces can be found in every organization that promote change and others that, instead, tend to curb it due to a conflict of interests, a reduced propensity to innovation, a different evaluation of the need for change or due to lack of trust.		
	For this reason, the project must be structured so as to minimize the restraining forces and at the same time develop favorable ones, setting goals that maximize innovation and are able to produce not only an organizational change, but also a cultural one.		
	Planning project times, determining costs and defining quality standards, as well as periodic monitoring of compliance with what was planned represent the fundamental aspects of project management.		
WHAT IS A PROJECT? WHAT ARE ITS MAIN FEATURES?	Now let's try to understand what a project and its main features are.		
	Constructing a building, a piece of furniture, developing new software are all examples of projects.		
		Let's take the example of furniture. Its construction requires a whole series of activities, from the choice, to the procurement of materials to the assembly of the pieces, to name but a few.	
		This simple example allows us to define a project as a set of activities aimed at achieving a clear and predefined objective.	
	All this, having defined a specific time period, with a start and finish date, the precise allocation of limited and differentiated resources, respecting established times, the		

	quality of the expected result and of the budget allocated, also taking into account any unforeseen events and the economic risks that could arise.		
THE PROJECT AND ITS MAIN CONSTRAINTS/VARIABLES		Schematically, each project has **5 main,** interdependent **constraints or variables**: 1. **the scope**, which represents the confines of the project, or rather what is part of it (and must be done), and also what is not part of it (and therefore, should not be done) 2. the **quality**, referring both to the final product of the project and to the process that allows its realization 3. **the cost**, i.e a budget to which project management must always refer 4. **the resources**, both human and instrumental, necessary to achieve the project objectives 5. **the time,** refering to the completion date to be respected to complete the project. These constraints form a system that must be managed to keep the project balanced.	
THE PROJECT MANAGEMENT TRIANGLE		The **management triangle** (scope triangle) shows how the scope and quality of the project must be determined and managed in the time frame within which the project must be completed, with the budget and resources available.	
DIFFERENCE BETWEEN PROJECT AND PROCESS	A project has a set of activities that make changes in organizations, which can relate to infrastructure, machinery, internal organization, personnel and any other aspect.		

	These changes often involve the revision of internal operational processes, to adapt them to new situations generated by projects. These processes represent the set of activities continuously carried out to repeatedly produce the same product or service.		
DIFFERENCE BETWEEN PROJECT AND PROCESS	When the operational processes are no longer adequate to the business needs and and when profound revision is required with organizational intervention, then we are talking about redesigning business processes or Business Process Reengineering (BPR). Reviewing a process usually requires a series of specific activities that can only be carried out through a specific project.		
DIFFERENCE BETWEEN PROJECT AND PROCESS	The border line between design and process can be marked by different elements that vary according to the company. For example: • the frequency with which a certain activity is repeated and whether it is routine or not; • the level of risk associated with its implementation; • the amount of investment or the number of days necessary for realization.		
DIFFERENCE BETWEEN PROJECT AND PROCESS		Furthermore, a project has at least some of the following features: • implies a complex change in the organization; • has a defined goal to fulfil and ends once it has been fulfilled; • deals with the solution of situations or cases; • activates new processes needed to pursue corporate objectives; • has a significantly higher risk component than daily processes, which are generally reliable because tested and consolidated over time.	

DIFFERENCE BETWEEN PROJECT AND PROCESS	It should not be forgotten that the same activity can be a process for one organization and a project for another. Take, for example, the construction of a new building. This will be a process for a large construction company and a project for those who want to build a new home for personal use or a new home for their business.		
DIFFERENCE BETWEEN PROJECT AND PROGRAMME	You should also bear in mind the difference that exists between project and **programme**, often improperly used as synonyms		
DEFINITION OF PROGRAMME	A programme, in fact, represents a set of related and coordinated company projects, carried out simultaneously or in rapid succession.		
PORTFOLIO	The case of a **portfolio**, i.e. a set of corporate projects (or programmes) designed to achieve the company's strategic objectives is different.		
	In the case of a portfolio or programme, the failure of a project can also compromise the business benefits deriving from dependent projects.		
	The realization of project activities is facilitated by the use of a set of processes and techniques called **Project Management** that allow you to oversee and manage the project throughout its life cycle.		**PROJECT MANAGEMENT**
PROJECT LIFE CYCLE		A project life cycle has the following five phases: • project or specific **start** or launch phase; • **planning**, management of the activities needed to complete a project;	

		• **implementation** of all the activities described in the planning document; • **monitoring and control** of compliance with time, budget and resources, in order to evaluate and monitor the work of the project team; • **closure**, the conclusion of the project.	
INITIATION PHASE	The project **initation** phase is activated when the opportunity for a new initiative is recognized in the organization.		
PROJECT SPONSOR	This opportunity, whatever it may be, is brought to the attention of the management by the **Project Sponsor**, i.e. by the manager who is most interested in the project or who has the corporate responsibility to initiate it.		
PROJECT CHARTER	The Project Sponsor is the project referee for company management and, in general, prepares the **project launch document**, also called **Project Charter** or Project Brief.		**PROJECT CHARTER**
	The objective of the start-up phase is to gather all the preliminary information to confirm the feasibility and the economic and strategic convenience of the project.		
	This information is contained in the project initiation document, which serves to provide a rough indication of what the project will produce, the strategy to produce it and the associated responsibilities.		
	As a rule, the most complete structure of a Project Charter includes a series of sections regarding:		

		• the **scope of application,** i.e. what is included in the project • the project **objectives** • the expected **deliverables,** that is, the products and services to be implemented to achieve the project objectives • any **restrictions and risks** related to the project that must be taken into consideration • the **stakeholders**, or the internal and external parties interested in the project • **benefits** for the company that carries out the project and for the client • the **human resources** involved • **dependence** on other projects, initiatives, activities • preliminary **estimates** regarding **times and costs**, where available or obtainable from similar or previously implemented projects.	
	The contents of the Project Charter will clearly depend on the specific characteristics of the company and the project.		
	For example, for small companies and projects it could be a short document with brief information for each section.		
	The more complete it is, the more the work of the subsequent planning phase and of the **Project Manager** will be facilitated.		

PLANNING PHASE	**Planning** represents a decisive phase for project success because, if tackled in a timely manner, it allows us to reflect on what needs to be done before acting and to identify any problems in advance that will be much more expensive and difficult to solve when work has already begun.		
	During the planning phase, the Project Charter is reviewed and a more precise definition is given of both the project objectives and the deliverables, allocating all the resources - human, technical, financial - at the right time and for the duration necessary to achieve the objectives defined in the start-up phase.		
BASELINE DOCUMENTS	The key output of this phase is the **project management plan**, consisting of a series of **detailed plans**, also called **baseline documents**, or reference documents against which it is possible to calculate the deviations of the main variables involved in managing a project. These plans, in fact, relate to all areas of the project to be managed, namely: time, resources, costs, quality, risks, communication and procurement.		
REALIZATION PHASE	The **realization** is the longest phase of a project where all the resources required to complete the initiative are mobilized for the practical realization of activities and the results expected from the project.		
	In this phase, collaboration between the different vocational profiles involved has a		

	decisive role for project success with the resources and times planned.		
MONITORING AND CONTROLLING PHASE	**Monitoring** allows you to highlight any deviations from what was planned in terms of costs, time, quality and resources and to foresee any possible corrective actions to be implemented, before the project runs aground or it becomes impossible to implement it.		
	The **control** of the project allows you to constantly evaluate progress, to measure the performance of work groups and to verify that the set objectives are realistic and achievable.		
CLOSING PHASE	Once all the planned activities and deliverables have been completed, the **closing** phase takes place in which the final project output is transferred to the end user or customer.		
	In this phase, the degree of achievement of objectives is verified and the results and project progress are analyzed also in a perspective of capitalizing on the lessons learned to realize future projects.		
	It is clear that, to realize all the activities foreseen in the individual project phases, a team, or a group of people with diverse skills, in charge of carrying out the work foreseen by the project is required.		
	The success of a project requires the presence of someone to guide the work of the team, that is a Project Manager.		

	So let's look at a Project Manager and what he/she does.		
THE PROJECT MANAGER	The Project Manager is the **person in charge of managing the project**, who manages all the processes aimed at producing the expected outputs and results, guaranteeing the implementation of the planned activities in compliance with the times, costs and quality agreed with the client.		
PROJECT ORGANISATIONAL STRUCTURE		This image represents the fundamental link of a chain that includes people and/or organizational structures inside the company, such as, in particular: - the **Programme Board** represents company management and has the final decision-making power on the implementation of the project and its financing - the **Project Sponsor**, that we have already mentioned, acts as an intermediary between the company and the project, avoiding involving the Programme Board in every aspect of project supervision and decision making. The Project Sponsor is also the Project Manager's direct manager -the **Quality Manager** operates on behalf of the Sponsor, in parallel with the Project Manager, but without depending on him/her, intervening in all activities and for the entire duration of the project to guarantee compliance and quality of the outputs and processes - **the Project Management Office** is a support and coordination office, which works on one or more company projects, if the	

		company operates with active programmes or portfolio of projects. In the case of a single project, the Project Management Office is made up of team members who, in addition to working for the office, can also perform other technical project activities	
PROJECT ORGANISATIONAL STRUCTURE		At the bottom of this structure is the **Project Team,** consisting of professionals who carry out the activities and technical tasks to realize the outputs. The profiles of these resources differ according to the organization and the sector to which they belong. For example, in the ICT sector the organization usually includes the following profiles in descending order of skills and responsibilities: - team manager or team leader; - designer; - analyst; - specialist.	
INTERNAL STAKEHOLDERS	These profiles and structures, including the project team, represent the **internal stakeholders** that the Project Manager must take into account throughout the project management.		

EXTERNAL STAKEHOLDERS	Almost all projects, especially those to order, are characterized by the presence of **external stakeholders**, who are people or groups operating outside the organization, who are in various ways impacted by the project or who may have some direct or indirect form of interest in the result or in some of the expected deliverables, verifying in some cases the correspondence to their needs.		
EXTERNAL STAKEHOLDERS		This type of stakeholder includes: • external clients or customers; • the client's staff assigned to the project; • the end users of the products of a project; • the funders; • the suppliers, sub-suppliers and distributors of the project products; • external consultants; • officials of government bodies (for example, who have to provide project authorizations); • representatives of local communities (e.g. municipalities and associations of citizens); • media and political actors interested in the project in various ways.	
	It is clear that each project will have different internal and external **stakeholders**, each with their own needs and expectations to be met. Therefore, from the initial phases of the project, one of the first tasks of the Project Manager consists precisely in defining the list of stakeholders and the strategy that he/she intends to adopt to manage them.		**STAKEHOLDERS**
	The work of the Project Manager, in fact, can vary depending on the work situation in which he/she works and the type of project.		

	However, it is possible to identify some typical activities of this vocational profile and, these surely include: • coordination and organization of the team to make work progress quickly; • management of time and financial, human and technological resources • oversight of internal relations with the team and external relations with the client and the various project stakeholders.		
	Well, before going any further, check if some concepts of project management are clear for you		

ORGANIZING THE PROJECT	Knowing how to organize a project is a fundamental skill of the project manager, whose skills have become increasingly complex and articulated over the last few decades, in order to be able to monitor the progress of a project, involve management and resources, avoid the emergence of conflicts, prevent and/or reduce risks, manage time, costs and quality of work, as well as human resources, equipment and materials.		

		The project manager should know how to: 1. Identify the project objectives and how to achieve them 2. Plan the detailed aspects of the project 3. Have the project implemented 4. Monitor the progress and performance obtained with respect to what was planned 5. Close the project checking the delivery plans and the documentation produced assuming responsible, credible and ethically correct behaviour.	
	The project manager must report to his/her company on how the project is progressing, highlighting both the positive as well as negative aspects, so as to allow the management to make the best possible decisions.		
	This requires: - maximum **transparency** in communication, transferring all information without distorting it; - **respect of compliance,** that is with the company rules, standards and procedures.		
TRASPARENCY	Transparent management facilitates everyone's work, speeds up the decision-making process and promotes success by allowing problems to be addressed and overcome.		
RESPECT OF COMPLIANCE	There are numerous circumstances in which the project manager must make decisions that may have ethical implications, such as: - the presence of any conflict of interest - working in cultural contexts different from one's own		

	- situations where it is mandatory to comply with government standards - management of negotiations with stakeholders located in different geographical areas.		
	The Project Manager must, therefore, comply with the company's code of ethics, divided into areas of responsibility, with evidence of conduct to be respected, "personalized" in order to make him/her adhere to the operational and cultural context characteristic of the organization.		
	Social responsibility constitutes an area of transversal competence, which influences all project management processes and conditions the work of every project manager.		
	A Project Manager must manage the entire process aimed at producing certain products or results expected from the project.		
	To this effect, he/she must be able to organize and coordinate the work of a number of resources who possess the necessary technical skills to carry out activities, mediating inevitable conflicts of competence and role and balancing times and costs, especially when projects are big and economic impacts are significant.		
		A Project Manager should know and apply: a) project management techniques, with particular reference to the management of: - the integration and coordination of all life cycle phases - deliverables - costs and the financial plan - quality, in terms of quality assurance and quality control	

		- communications - project risks - procurement and relationships with suppliers - stakeholders b) time management techniques, to manage times, the people involved in the project and relative workloads, in order to orient priority, urgent and important issues. Furthermore, he/she should acquire and consolidate the skills required: a) in Management Techniques, with particular reference to: - Analysis techniques and Organisational Project design - Business Improvement techniques b) In Organisational Behaviour, particularly: - Team Building - Negotiation and Structured Conflict Management techniques - Management of Work Groups - Organization and management of work meetings - Problem Solving & Decision Making - Motivation and Empowerment	
		The integration of methodological skills with managerial **skills** strengthens the role of the **Project Manager**, who must be aware of the fact that the organization does not easily adapt to the specific needs of the project and that it is important to know how to positively influence the events that can favour the success of a project knowing how to: • create the right motivation in the project team; • manage conflicts; • identify and promptly understand the dynamics in the team and the organizational ones that influence project development; • have a guidance and leadership role in the project team;	**PROJECT MANAGER SKILLS**

		• use all communication channels and tools available in the organization; • set up and manage meeting activities; • involve the stakeholders that can influence project activities	
CREATE AND ORGANISE THE PROJECT TEAM	One of the main tasks of a Project Manager is to create the project team, which is a temporary, organizational unit consisting of people nominally assigned to the project full-time or part-time with specific tasks.		
	In order for people to be able to work together, it is necessary to take into account different aspects, to avoid being faced with individuals who find it difficult to work as a project group.		
	Let's see, then, what the aspects that should not be underestimated in the construction and organization of a team are.		
SELECTION OF PROJECT TEAM	The first aspect concerns the **selection of the project team.**		**PROJECT TEAM**
	The Project Manager should always consider the skills necessary to carry out the activities foreseen in the project.		
	It is, therefore, important to know the vocational profile of the team members and their experience in activities similar to those they will be asked to perform.		
	However, it may be that the project team has been pre-assigned and that, therefore, it is necessary to distribute planned activities to the resources available.		

	In these cases, it could also be that you are working with human resources who do not have exactly the required skills.		
TRAINING ACTIVITIES	In these cases, preparing specific **training activities** for some or all of the team members represents an option that the Project Manager should bear in mind to allow the team to operate, which also applies if the resources in the team do not have a full understanding of project management logics.		

	The organization and management of a good project team entails:
	
	- the team should consider the project its own, working together to face and overcome the difficulties as a "group"
	- the team members avoid destructive attitudes regarding the project aims and the work of others (due to personal beliefs and/or due to external provocations by those who have been excluded)
	- the valorisation of the work undertaken and the results obtained motivates the team members and facilitates the taking on of responsibilities and risks
	- the people involved in the team are trained to clearly and correctly communicate and negotiate, to facilitate constructive debate and resolve any conflicts, so that they do not turn into personal clashes, but are instead an opportunity for further study:
	  • immediately and openly recognize their mistakes
	  • avoid placing responsibility for failures on others
	  • create a good level of mutual esteem, encouraging collaboration and the use of all team members' skills		

RULES OF TEAM WORK IN PROJECTS		The construction of the project team should be based on the indication, by the Project Manager, of the objectives and tasks needed	

		to realize the project, so that it is clear to everyone what must be done, who must do it and with what role and responsibility.	
KICK-OFF MEETING		To this end, the Project Manager can also organize a **kick-off meeting** during which he/she presents the Project Management Plan and the distribution of roles to the team, i.e. the part of a project assigned to a person, … and responsibilities i.e. the work that must be undertaken by the team member to complete project activities and which is usually explained in a document called RAM - Responsibility Assigment Matrix.	
	Informing all the team members of their role in the project, the individual and group objectives and the criteria to measure their achievement, allows the creation of homogenousness and avoids the onset of difficulties due to the circulation of partial information that could: - maximize individual performance at the expense of the group (with an excess of individualism) - generate doubts and frustrations in individuals, so as not to allow people to give their utmost.		
OPERATIONAL MANDATE **DECISION-MAKING MANDATE**	Once the roles of each of the team members have been established, the related technical skills and group integration skills defined, the Project Manager must define responsibilities, assigning: - **operational mandate**, that is the assignment of tasks to one or more resources and the control of activities		

	carried out by the Project Manager. This mode is particularly suited to the management of inexperienced resources needing supervision or support. - **decision-making mandate**, with the assignment of objectives to one or more resources and the verification by the Project Manager of relative achievement, intervening in the event of any deviations that have occurred, without entering into the merits of the methods chosen to achieve them except in exceptional cases. This method can only be applied in case of use of expert resources in the work to be carried out.		
MOTIVATE THE TEAM	Effective team work also depends on the Project Manager's ability to pay attention to the interpersonal dynamics that develop between the members of the work group and between each of them and the team leader, as well as his/her ability to constantly **motivate the team**, leveraging on individual characteristics and team spirit.		
	Of course, this is an extremely arduous task for a Project Manager, also because motivation to perform a certain action is something that people can find only in themselves and that depends on their own cultural structures, experiences and individual histories.		
		However, there are actions and behaviours that a good Project Manager can activate to motivate a team. He/she should, for example • Be very clear and transparent in communicating goals, tasks and results • Guarantee his/her support to team members	

		• Give people symbolic recognition and rewards based on the results achieved • Define goals that meet the professional characteristics of the various team members • Give people the opportunity to progress in their role.	
		During the project, the Project Manager has to know how to capture the signals that come from the team and that can be indicators of negative cooperation, such as: • poor communication and sharing of information in the group; • lack of attention to the project timeline and quality; • tendency to work independently even when faced with activities that could benefit from the skills of other team members; • tendency to attribute responsibility for failures to others; • repeated absences at work meetings that cause shifts and delays in the completion of the work of others.	
	In these cases, he/she will have to resort to further motivation actions, to look for other possible person/role combinations to improve the functioning of the group and to better clarify the roles and responsibilities of each person.		
	The Project Manager must also carry out periodic **assessments of the work group's performance**, with respect to the objectives set, and at the same time **check the progress of the work** to identify and remove the main obstacles to group work.		

	Also in this case, project meetings are important opportunities to evaluate project performance and check the agreed work.		
ORGANIZE AND HOLD PROJECT MEETINGS	During project implementation, opportunities for meetings between team members are numerous and do not only concern the evaluation of performance and work progress.		
	In addition to these, there are also purely operational meetings and periodic meetings to manage project critical issues, to name but a few.		
	Managing a meeting is an important communication activity, useful for promoting cohesion, motivation and control.		
	Meetings are often difficult to organize because the participants are not always available at the same time and can result in a loss of time and enthusiasm, if they are confused, long and unproductive.		
	In order for these meetings to produce results and facilitate decision-making processes, certain organizational and management aspects must be taken into account.		
	In fact, it is often the case that the right people do not participate in these meetings, or that the contributions expected by each person are not clear, or that no preliminary indications have been given so that people arrive prepared for the meetings.		

	To avoid these setbacks and maximize the effectiveness and efficiency of meetings, it is advisable to **undertake careful preparation, define a structured meeting agenda and formalize** the **outcome of the meeting** in a document.		
		The Project Manager is responsible for: - Defining the subject of the meeting and the agenda - Identifying and convening participants in advance - Providing the necessary documentation - Choosing the meeting room - Preparing a plan for holding the meeting - Coordinating the meeting and drawing up the minutes	
	In particular, it is important for the team to know how to hold the meeting, e.g. in presence or in videoconference, the documents to be used and the frequency of the meetings, which must be detailed in the **Project communication plan.**		
	Furthermore, for each meeting, the team members must receive, at least two days before the planned date, detailed documentation that highlights, in relation to the subject of the meeting and the agenda, the main issues and any critical issues on which to concentrate during the meeting.		
		It is, therefore, important that project meetings take place following a structure that allows the team to: • analyze critical issues that have arisen • analyze the solutions proposed • choose a solution strategy • define the roles and responsibilities in implementing the strategy	

		• prepare an action plan • reschedule project activities where necessary • minute decisions taken.	
	At the end of a project meeting, the Project Manager or the meeting coordinator should send participants, as well as the management, a copy of the minutes of the meeting, a summary of decisions taken and the responsibilities assigned, the action plan to be implemented and the recommendations in preparation for the next meeting.		
	This will allow the PM to keep everyone, including those people who were not at the meeting, informed.		

TOPIC 2 – GAMIFIED SCENARIO ON THEMES OF TOPIC 1 (PLEASE SEE THE RELATIVE DEVELOPMENT MODEL)

TOPIC	2
PARTNER RESPONSIBLE	CONFORM S.c.a.r.l.
SUBJECTS TACKLED	project budget; conflict management; time management, importance of training activities; transparency; communication tools; team motivation, meeting management. In the synopsis the training contents that are transferred to the users are highlighted in red: - because they are present in the topic that precedes the scenario - because transcribed in the lines of the script

	In the round brackets the topic dealt with from the point of view of training is indicated
SYNOPSIS	In the Project Management scenario, the student/user will be able to see how the Project Manager of a company that produces furniture and is working on the production of a supply of bookcases for a foreign customer Manages the Team to manage a problem that has emerged during the phase of delivery to the client. The production phase is in a very advanced state and the first hundred pieces, having formerly considered shipping times, must necessarily be shipped in the ten days following the meeting. The team assigned to the project consists of: - Virginia, a very individualistic 32-year-old woman who is the Project Supervisor - Maria, a 37-year-old woman who deals with shipping logistics - Valeria, a 32- year-old woman, who is responsible for supervising the progress of the actual production of the bookcases - Angela, a 35-year-old woman who is responsible for internal communication with the team and with companies, partners and customers. At the beginning of the scenario, Chris assures the group that from a production point of view the first hundred pieces have been completed. At the same time, however, he informs them that: - Valeria is ill and, therefore, will not be at the meeting - Maria has not been able to organize the logistics of shipments, since their partner company changed the order management panel a few days before and Karen has been off-site for personal reasons until the day before the meeting. Virginia suggests, passing the blame to Maria, using a consultant external to the company who has a direct connection with the company that deals with shipments and with which the company is in partnership, which, with an average economic outlay, that could resolve the matter. She also suggests not advising the Management of what has happened, given the possible solution, and to proceed speedily to deliver the product. The choices that the user will have to make will be:

	- Call Valeria on the phone to make her participate in the meeting anyway (team building and use of communication tools) - Reject Virginia's proposal regarding contacting the Consultant and ask the Team if they have any proposals regarding the logistics issue, to learn that Karen has already found a training solution (management of the project Budget, conflict management, time management, team building, training activities, team motivation) - Decide to inform Management about what has happened (transparency) - Propose to Virginia to supervise and support Ellen on the progress as regards logistics (conflict management and team building) - Ask Angela to send an e-mail with the minutes of the meeting (meeting management) For each of the choices, the user can choose from the three answers and have as a fourth option seeing the last scene of the video again.
SET	Meeting room.
PROTAGONIST (ONLY VOICE WITH A POINT OF VIEW SHOT (IN THE FIRST PERSON)	In this topic 2, not using the first-person view, we do not have the voiceover, but the PM is interpreted by an actor on stage
ACTORS	Susan (PM – Brunella Maio) Virginia (Virginia Rosania) Maria (Mariagiovanna Silvestri) Valeria (Valeria Bottino - in vivavoce dal telefono) Angela (Mariangela Romito)
SCENARIO DATA SHEET - To be given to the student in slide form prior to the start of the Topic	**You are a Project Manager working for a multinational that has recently bought an Italian company that produces furniture.** **Recently you have been assigned to a project of the Italian company responsible for producing a large supply of bookshops for a foreign customer.** **You have called a meeting with the Italian team.** **The production phase is in a very advanced stage.** **Bearing in mind shipping times, the first hundred pieces have to be shipped in the next ten days.** **You have called a meeting that is about to begin to receive feedback on the progress of the project.**

TEAM DATA SHEET - To be given to the student in slide form prior to beginning the Topic	**SUSAN** – PM A highly experienced woman who has been a PM for years, with considerable experience in managing complex projects **VIRGINIA** – Supervisor She has worked in the company for eight years and, although an individualist, she considers herself the PM's right-hand woman, above all in project management. She is responsible for supervising project progress. **MARIA** – Logistics A shy, introverse woman who has joined the company for this project. She is responsible for the logistics as regards packaging and shipping **VALERIA** – Production Supervisor She is responsible for supervising the effective production of the furniture and for supporting Maria, who is a new recruit in the company. She is a woman with considerable team building and problem solving skills. **ANGELA** – Communications Very precise and careful junior, at one with the team, working on internal team communication
	KEY The colour **powder blue** indicates the main script. The parts in green red and orange represent the **three choices proposed to the user**. The parts in **green** are the correct answer, to which will follow, again in green, the outcome of the choice and then the main script. The parts in **red** show the wrong answer, and the relative lines resulting from the choice. The ones in **orange** indicate the partially correct answer and the relative continuation of the script. **If the user chooses the red option or the orange option, after the result he/she will be taken back to the choice phase.**

CHARACTER	LINE	OPTION TO CHOOSE	SEQUENCE OF LINES SUCCESSIVE TO THE CHOICE	RESULT	NOTES
Who will say the line – Script	What the character will say according to the script	Options on the screen proposed to the user from which he/she needs to make a choice	Sequence of lines that follow the choice	Training report that explains the outcome of the choice and relative errors. The text is displayed on the screen in a specifici table	Possible indications on the character's mood or on particular actions.
		SCENE 1			
PM	Good morning everyone.				Motivated and determined mood.
Tutti	Good morning!				
PM	Thank you for coming. First of all, I'd like to apologise. As you know, I don't speak any Italian at all, so you're going to have to make an effort and speak English. Sorry about that …				
VIRGINIA	Don't worry, Susan. We apologise in advance for our English.The important think is that we manage to work together				
PM	I'm sure you've read the agenda and the				

	documents that I sent you a few days ago regarding the completed tasks, those that are still open and the forthcoming deadlines. In the next 10 days we need to send the customer the first one hundred pieces. I need an update on project activities. How come Valeria is not here?				
VIRGINIA	She is off sick and hasn't come to work today. I'd say that we can continue without her.				Annoyed mood.
BRANCHED SCENES CONNECTED TO SCENE 1 ACCORDING TO THE CHOICES MADE FOR EACH OF THE OPTIONS FORESEEN					
A window will appear on the screen to make the choice of one of the following options □ OPTION No. 1: CALL CARLO ON THE PHONE □ OPTION No. 2: CONTINUE WITH THE MEETING □ OPTION No. 3: SEND CARLO THE MINUTES OF THE MEETING Depending on the choice made, the system will show the related sub-scenes, giving the user a final feedback on the correctness or otherwise of the choice made. In the event of an incorrect or partially correct answer, the system will take the user back to the selection window to select a new option.					
		OPTION N. 1: CALL VALERIA ON THE PHONE			

PM			I don't think that would be appropriate. Knowing Valeria, she'll want to participate even if she's ill. Can we call her?		Positive and accommodating mood.
VIRGINIA			Of course! Angela could you call her?		Annoyed mood.
ANGELA			Sure		
MARIA			Hi Valeria		Obliging mood.
PM, ANGELA, VIrginia			Hi Valeria		
MARIA			Do you feel up to participating?		
VALERIA			(Tel or WhatsApp o Skype) Hi everyone, of course I do. It's only a touch of fever.		
PM			Virginia was about to update us on the progress of the project and your input is very important		Optimistic mood.
				CORRECT ANSWER. The Project Manager must always work on team building and make his/her colleagues feel part of the project by involving them in	

				the different phases of realization.	
		OPTION N. 2: CONTINUE WITH THE MEETING			
PM			I agree. We need to focus on the meeting and on the progress of the project		Annoyed mood.
VIRGINIA			Ok, let's proceed.		Satisfied mood.
MARIA			I think it's important to involve Valeria. She is in charge of supervising the production status ...		Timid attitude
PM			Thanks Maria, I appreciate your good intentions, but I don't think it's necessary to involve Valeria. Let's continue with the meeting ...		Obstinate
MARIA			But, she can give us valuable input if we contact her.		Shy but insistent attitude
PM			I thought I'd made myself clear. Let's continue with the meeting ... I make the decisions. If you don't like it, you can leave		Obstinate
				INCORRECT ANSWER. To be a good Project Manager the team needs to feel an	

				integral part of the activities, especially in the final project stages.	
PM		**OPTION N. 3: SEND VALERIA THE MINUTES OF THE MEETING**			
PM			I agree. We can send her the minutes of the meeting that I'll draw up with the notes that ANGELA is transcribing.		Positive mood.
VIRGINIA			ANGELA make sure you write down all the notes that we'll need to draw up the minutes and please don't forget to send a copy to Valeria as well.		
ANGELA			Yes. Of course.		Propositive
MARIA			Besides the minutes, I think it would be useful to contact Valeria, given the issues we are dealing with. She has been supervising the state of production …		
PM			Maria, I appreciate your good intentions, but we can continue the meeting. We'll send her the minutes once they've been drafted.		Annoyed and resolute
				PARTIALLY CORRECT ANSWER. In the PM's activities, it is	

				important to draft and keep the minutes of the meetings, which can prove very useful on different occasions. However, you shouldn't forget that it is equally important that all Team members feel an integral part of the activities, especially in the final stages of the project.	
SCENE 2					
VIRGINIA	Production finished earlier than expected and we are ready to ship. Unfortunately, there's a problem. Maria, could you explain what's happened?				Mood - first satisfied and then with a hint of disappointment when he says "Unfortunately there is a problem".
MARIA	Ehm …yes, yesterday I came back to work, after a few days off for personal reasons and …				Mood-worried
VIRGINIA	… She found out that our partner, who takes care of the shipments, changed the order management panel. We				

	could have a delay in shipping.				
PM	Any idea as regards possible solutions?				
VIRGINIA	Well, there is a possible solution ... it would allow us to respect delivery times.				Mood- satisfied, but at the same time with an expression of uncertainty
PM	What have you come up with?				
VIRGINIA	We could appoint one of our consultants who also works with the shipping company. I know we've already overrun the budget, but with their contribution we could solve the problem that has arisen with limited economic outlay.				Mood satisfied.

BRANCHED SCENES CONNECTED TO SCENE 2 ACCORDING TO THE CHOICE MADE FOR EACH OF THE OPTIONS FORESEEN

A screen will appear for the user to make the choice from one of the following options

□ OPTION No. 1: CONTACT THE EXTERNAL CONSULTANT

□ OPTION No. 2: FIND OTHER POSSIBLE SOLUTIONS

□ OPTION No. 3: REVIEW THE BUDGET

Depending on the choice made, the system will show the related sub-scenes, giving the user a final feedback on the correctness or otherwise of the choice made.

In the event of an incorrect or partially correct answer, the system will take the user back to the selection window to select a new option.

		OPTION No. 1: CONTACT THE EXTERNAL CONSULTANT			
PM			I think it's risky to involve an external consultant. However, it seems to be the only possible solution.		Doubtful mood.
VIRGINIA			Okay, I'll contact him right away.		Mood satisfied. MARIA looks sad.
MARIA			If that's the case, you don't need me anymore. I don't know why you involved me in the project in the first place.		Annoyed
				INCORRECT ANSWER. When you initiate a project, you set up a defined budget and this kind of choice could invalidate it. Furthermore, choosing an external consultant could demotivate one or more internal resources of the company, as in MARIA's case.	
		OPTION No. 2: FIND OTHER POSSIBLE SOLUTIONS			

PM			Virginia, I understand your concern and I agree, but I think there are other solutions. Does anyone have an idea that won't affect delivery times?		Chris in an annoyed mood.
VALERIA			If I may say something, I have a proposal.		
PM			OK. Go ahead Valeria, tell us how you think we could resolve this situation		
VALERIA			(Tel or WhatsApp or Skype) Yesterday, even though I was off sick, I noticed the change in the management panel and contacted the company. They're available tomorrow for an hour of remote training. I could make an appointment for Maria.		
PM			Certainly Valeria,valuable as ever.		
				CORRECT ANSWER. It is important that the team always remains united and motivated. Calling an external consultant could negatively affect MARIA's performance. Valeria's proposal also highlights the	

				importance of training activities as a useful support tool to facilitate project management.	
		OPTION No. 3: REVIEW THE BUDGET			
PM			We need to review the Budget to assess its feasibility to see if we can adopt your proposal. Can you take care of it, please Virginia?		Worried mood.
VIRGINIA			Yes, sure. I'll immediately check to see if the proposal is feasible		Condescending mood
PM			OK. Please inform me as soon as possible, so that we decide how to proceed.		Resolute
MARIA			Well, a perfect duo. So much for team play …		Sarcastic
				PARTIALLY CORRECT ANSWER. Although you need to constantly monitor the budget to avoid overspending and	

				remodulating the items according to the new needs that have emerged, it is equally important to carefully manage the time required to carry out the activities, involving the team in solving problems.	
SCENE 3					
MARIA	Thanks Valeria, you've solved a big problem for us ...				Optimistic mood.
VALERIA	You’re welcome				Calm mood.
VIRGINIA	Yes, thanks Valeria.				
MARIA	I just hope I can quickly learn how the new panel works.				Optimistic mood.
PM	Maria, I'm sure it will take you no time at all to use the new panel and everything will go to plan.				Reassuring mood.
MARIA	Thanks for your confidence, I’ll do my best ... I also hope that what has happened doesn’t have any repercussions ...				Slightly worried mood.
VIRGINIA	Maria, don't worry.				Sarcastic mood.

	I don’t think that we need to report to Management as regards what has happened.				
BRANCHED SCENES CONNECTED TO SCENE 3 ACCORDING TO THE CHOICES MADE FOR EACH OF THE OPTIONS FORESEEN					
A screen will appear for the user to make the choice from one of the following options □ OPTION No. 1: NOT COMMUNICATING WHAT HAS HAPPENED TO THE MANAGEMENT □ OPTION No. 2: COMMUNICATING WHAT HAS HAPPENED TO THE MANAGEMENT MAKING NO REFERENCE TO ELLEN □ OPTION No. 3: COMMUNICATING WHAT HAS HAPPENED TO THE MANAGEMENT Depending on the choice made, the system will show the related sub-scenes, giving the user a final feedback on the correctness or otherwise of the choice made. In the event of an incorrect or partially correct answer, the system will take the user back to the selection window to select a new option.					
		OPTION No. 1: NOT COMMUNICATING WHAT HAS HAPPENED TO THE MANAGEMENT			
PM			Yes, Maria, don’t worry.		Accommodating mood.
MARIA			Thanks very much, I wouldn’t want the Management to find out. I know they consider transparency as very important		Shy attitude
PM			Don’t worry. What has happened will remain something internal to the Team		Sarcastic and slightly annoyed mood.
				INCORRECT ANSWER.	

				Transparency is very important for a PM.	
		OPTION No. 2: COMMUNICATING WHAT HAS HAPPENED TO THE MANAGEMENT MAKING NO REFERENCE TO MARIA			
PM			I don't agree. I'll inform the Management, but only after the problem has been solved and above all without making any reference to Maria.		Protective mood.
MARIA			Thanks very much, I wouldn't want the Management to find out. I know they consider transparency as very important		Shy attitude.
				PARTIALLY CORRECT ANSWER. Although not blaming MARIA is right, lack of transparency with the company is a wrong behaviour for a PM..	
		OPTION No. 3: COMMUNICATING			

		WHAT HAS HAPPENED TO THE MANAGEMENT			
PM			I don't agree. It's important that the Management knows. Maria will certainly not be blamed and the way in which the group has been able to manage the problems that have arisen will be appreciated.		Certain mood.
VALERIA			I agree. I also think it's a good idea to remind our partners that if they make changes to the management panel without any warning, they risk damaging us.		Calm mood
VIRGINIA			Quite right. Maybe we could avoid problems next time if they warn us in time.		Change of mind mood
PM			Exactly, you've fully understood my reasoning.		Chris and Ellen exchange a smile.
				CORRECT ANSWER. Transparency is a very important value in company dynamics, especially for a PM.	

SCENE 4					
PM	Well, I'd say we can continue with the meeting ...				
VALERIA	If you agree, I'd prefer to end the call, again if it isn't a problem for you to continue without me.				Satisfied mood
PM	Absolutely not, Valeria. Thanks for participating and for helping us solve a big problem				Satisfied mood
VALERIA	My pleasure!				Satisfied mood
VIRGINIA	As the problem's been solved, I'd like to leave too. I'm not needed any more. I've got lots of work to get on with.				Annoyed mood

BRANCHED SCENES CONNECTED TO SCENE 4 ACCORDING TO THE CHOICES MADE FOR EACH OF THE OPTIONS FORESEEN

A screen will appear for the user to make the choice from one of the following options

- OPTION No. 1: ENDING THE MEETING AND EVERYONE GO BACK TO THEIR WORK
- OPTION No. 2: ASSIGNING A NEW TASK BEFORE ENDING THE MEETING
- OPTION No. 3: DISTANCING A RESOURCE FROM THE MEETING

Depending on the choice made, the system will show the related sub-scenes, giving the user a final feedback on the correctness or otherwise of the choice made.

In the event of an incorrect or partially correct answer, the system will take the user back to the selection window to select a new option.

		OPTION No. 1: ENDING THE MEETING AND			

		EVERYONE GO BACK TO THEIR WORK			
PM			Yes, Virginia that's fine. I think we can call the meeting closed for everybody. We've all got lots to do. Let's go back to work		Purposeful mood.
MARIA			Ok		Worried and demotivated
PM			You look a little concerned, Maria ...		
MARIA			Actually I think that, before we go back to work, it would be better to go over what activities need to be carried out. We need to discuss the times needed to complete the order.		
PM			(gets up, goes towards the door and leaves) Okay, go ahead without me but don't waste too much time. We've all got lots to do.		Neutral, superficial attitude
MARIA			(when the PM leaves the room) Surprising ... a really good example of team management		Sarcastic

				PARTIALLY CORRECT ANSWER. Although time management is very important, so is team building, which the PM must strengthen, encouraging collaboration between team members.	
		OPTION No. 2: ASSIGNING A NEW TASK BEFORE ENDING THE MEETING			
PM			Virginia, your supervision is still very important. I'd like to assign you a new task.		Mood
VIRGINIA			Sure. What do you want me to do?		Mildly friendly mood.
PM			You need to monitor the success of Maria's training and inform me of the progress of logistics activities.		Friendly mood.
VIRGINIA			Ok! You can count on me. Maria, I just want to make it clear that I didn't want to blame you. I was only worried about the success of the project.		Slightly regretful mood.

MARIA			Don't wory Virginia, we're all under pressure and we're looking forward to completing this delivery.		Brightened mood.
PM			Maria's right! We're working well. We just need to make a final effort to conclude and reach our objectives		
				CORRECT ANSWER. It's important to manage the onset of possible conflicts and to strengthen the bond between the members of the Team.	
		OPTION No. 3: DISTANCING A RESOURCE FROM THE MEETING			
PM			Sure Virginia, you can go. We'll continue the meeting and finish the job.		
VIRGINIA			Thanks so much.		Neutral mood. (leaves)
MARIA			Bye Virginia.		Worried and demotivated

PM			Maria, you sound a little puzzled ...		
MARIA			Well, actually if we're a team we should stay together, especially in meetings where we have to replan things...		Shy attitude
				INCORRECT ANSWER. Distancing a team member or belittling his/her value can exacerbate internal relationships and undermine achieving the goal.	
SCENE 5					
PM	I'd say we're done for today. Does anyone want to add anything?				Satisfied mood.
Tutti	No				
PM	Ok				
BRANCHED SCENES CONNECTED TO SCENE 5 ACCORDING TO THE CHOICES MADE FOR EACH OF THE OPTIONS FORESEEN					
A screen will appear for the user to make the choice from one of the following options □ OPTION No. 1: ENDING THE MEETING AND DRAWING UP THE MINUTES □ OPTION No. 2: ENDING THE MEETING □ OPTION No. 3: ENDING THE MEETING VALORISING RESOURCES Depending on the choice made, the system will show the related sub-scenes, giving the user a final feedback on the correctness or otherwise of the choice made. In the event of an incorrect or partially correct answer, the system will take the user back to the selection window to select a new option.					
		OPTION No. 1: ENDING THE MEETING AND			

		DRAWING UP THE MINUTES			
PM			Good, I'd like to thank all of you for the effort you'll make to complete the delivery on time. Virginia, could you please inform me how Maria gets on in the training session tomorrow?		Positive mood.
VIRGINIA			Of course, tomorrow I'll send you a report on the results of the training and on Maria's ability to correctly use the new management panel.		Satisfied mood. Benjamin nods his head in agreement.
PM			Thank you. I'll draw up the minutes using the notes Angela has taken. Angela you can work alongside me, so that you can learn how to do them.		Satisfied mood
MARIANGELA			Of course, with pleasure		Enthusiastic mood.
				CORRECT ANSWER Valuing team members and supervising the activities carried out are correct practices for a PM. At the same time, to manage a project	

				correctly and keep track of the activities performed, it is important to prepare summary documents, such as minutes of meetings.	
		OPTION N. 2: ENDING THE MEETING			
PM			Well. Thanks everyone for the effort you'll make to complete everything and to obtain a good result.		Satisfied mood
VIRGINIA			Ok. Let's get straight to work to complete the delivery on time.		Satisfied mood.
MARIANGELA			Excuse me, what about the minutes?		Worried
PM			This time we can make an exception to the rule, we have too many urgent things to do and we're running very behind		Superficial attitude
				INCORRECT ANSWER. You should always prepare the minutes, that	

				contain the decisions that have been adopted by the team during the meeting on the various items, also with the support of tables and data.	
		OPTION N. 3: ENDING THE MEETING VALORISING RESOURCES			
PM			Great job everyone. Thank you all for making the effort to complete the delivery on time! Virginia,I look forward to hearing from you tomorrow regarding the outcome of Maria's training.		Positive mood.
VIRGINIA			Tomorrow I'll send you an information report on the training carried out by Maria and her ability to use the new order management panel correctly without creating any shipping delays.		Positive mood.
MARIANGELA			Excuse me, what about the minutes?		Worried
PM			Our priority now is to re-schedule the activities. We'll think about formalisms later!		Superficial attitude

				PARTIALLY CORRECT ANSWER. Valorisng the team and supervising activities are good practices for a PM. However, there are post meeting tasks that must be fulfilled, especially if activities that are not planned are included in the project planning phase.	

SUBJECT	AUDIO IN STUDIO	VOICE OVER	KEYWORDS
Elements that will be indicated to clarify the flow of the text and the topics covered and that can also be shown on screen in the form of sensitive words	**Text that will be recited by the character in a 3D virtual environment (trainer)**	**Text that will be recited by the characters as users scroll through the elements in Motion Graphic**	**Keywords that will appear on the screen through which the user can interact with a simple click, accessing the in-depth materials provided for consultation**
	We now come to the merits of some of the most relevant aspects of the different phases of a project's life cycle, starting from planning, whose main output, as we have anticipated, is the project management plan.		
DEFINE THE PROJECT OBJECTIVES	At the base of drafting the project plan, it is fundamental that the Project Manager proceeds to review the **objectives** contained in the Project Charter.		**OBJECTIVES**
	A set of well-defined project objectives, in fact, constitutes a prerequisite for these objectives to be "elaborated" and transformed into as many action plans.		
	To make them such, it is important that they are defined in a **SMART** manner and that they are:		

		• **specific** - an objective must not be defined in vague and general terms but possibly linked to smaller and more measurable objectives. In other words, it must be identifiable and tangible; • **measurable** - an objective must not be defined in a subjective or purely qualitative way but refer to parameters and quantitative indicators, which allow measurement; • **feasible** - in order for an objective to make sense it must be within the organization's reach and the ways to achieve it must be clear or at least immaginable in advance; • **relevant -** to determine motivation and commitment, an objective must have characteristics of importance and interest for the organization; • **temporisable** - that is, it must be timable and, therefore, can be placed in a precise period of time from the point of view of its achievement and with precise traceability requirements.	
	The definition of the project objectives in SMART terms will allow them to be used as a reference point for all planning processes, but also for the subsequent phases of monitoring and control of work progress.		**SMART OBJECTIVES**
		An undefined goal in SMART mode may involve: - the inability to produce detailed plans due to insufficient information to understand what must be produced; - the proliferation of alternative plans to seize all the options with a consequent increase in costs; - lack of resources in qualitative and quantitative terms in the face of ambiguously defined requisites; - deliverables that are rejected because they are not correctly defined;	

		- stakeholders' needs not respected with consequent dissatisfaction and negative impact on reputation.	
PROJECT SCOPE	Once the objectives have been specified, it is important to establish the planning work starting from a clear definition of the **project scope**, i.e. what is included in the project and what is not.		**PROJECT SCOPE**
	This means distinguishing between: • **Project scope,** or the work that must be done to reach the final project result and • **Product scope**, or the features and functions of a product, service or result.		
	In defining the project scope, the Project Manager must take care to indicate and describe: • the characteristics that the product must have; • the **deliverables**, i.e. the final/intermediate project products/services/results; • exclusions from the project, or what is not part of it; • project constraints, in terms of costs, time or contractual clauses, if the project is commissioned.		
	The most effective method to define the scope of a project is to identify the deliverable production modes by creating an analytical structure called the project **Work Breakdown Structure** (WBS).		

		The WBS is a hierarchical representation of an "upside-down tree", whose various levels, facing downwards, represent increasingly detailed parts of the project.	
		It, therefore, graphically reproduces the breakdown of the work to be performed into **work packages (WP),** or sets of activities aimed at realizing project deliverables.	
	The **disaggregation** of a **project** can take place, for example, by: • **objectives,** aggregating the activities into macro-blocks linked to the processes to achieve the project objectives and sub-objectives • **phases**, or breaking down activities based on the project life cycle • **work processes** necessary to realize the intermediate tangible or intangible products, deriving from the planned activities • **localization,** in the case of complex projects, i.e disaggregating activities based on the place or country where the project output will be implemented.		**PROJECT DISAGGREGATION**
	Logics and criteria to break down the project also vary depending on the elements that you want to highlight in the structure and on the control that you intend to implement during implementation phase.		
	In any case, these are purely logical criteria, which do not provide information on the chronological order of the WPs and related activities, but only highlight the paths and methods to produce the deliverables.		

CHARACTERISTICS OF A WORK PACKAGE		When creating a project **WBS**, remember that each work package must have specific characteristics and in particular must be: • distinct from any other work package, identifying specific deliverables or homogeneous groups of deliverables • identified by a code that allows you to link it to other planning tools • programmable in terms of time, costs and resources, so that it can be measured and evaluated • attributable to only one responsible person • planned for a defined, limited period of time.	
		In constructing each WP, it may be useful to ask yourself the following questions: • **What should be done?** – this allows you to describe the WPs • **What do you need to be able to implement it**? - this allows you to identify the input products of the single WPs • **What is produced**? - this allows you to identify the outputs of the single WPs • **Who should do it?** – this allows you to identify the person responsible for each WP • **How much does it cost**? – this allows you to assign a cost to each WP • **When should it be realized?** - this allows the WP realization times to be established, in particular the duration • **What needs to be done?** - this allows you to identify tasks and activities necessary to realize the WPs.	

	Thanks to the WBS it is, therefore, possible to : • Minimize the risk of forgetting something • Highlight the project hierarchy • Easily identify work to be done and checkpoints • Facilitate communication between stakeholders • Aggregate data (time, costs, human resources, etc.).		
ORGANIZATION BREAKDOWN STRUCTURE (OBS)	This type of project disaggregation can also be developed with reference to the resources involved through the use of another graphical schematization that is called **Organization Breakdown Structure (OBS).**		**ORGANIZATIONAL BREAKDOWN STRUCTURE**
	The OBS allows the roles of the team to be broken down, according to a "top-down" logic, in order to clearly identify who does what within each WP, thus, outlining the **organizational structure of the project.**		
		It is a useful tool to specify the decision-making process and the ways in which it will take place within the project, indicating how the various roles must be integrated with each other, as well as the levels of coordination, organizational control points and scope of autonomy of roles involved.	
	How do we create an OBS?		
	The process to follow is simple and starts from the work already done to define the project structure.		
		Once the WBS has been created, you need to: 1. identify the activities of each Work Package 2. identify the skills necessary to carry out each activity	

		3. evaluate what and how many resources are involved in the project 4. position the resources in the project organization chart to facilitate its operation and the decision-making process.	
		The creation of the OBS is, therefore, important to: • formalize the resources involved in a project; • define the powers associated with each role; • clarify the reporting methods between the roles involved; • understand the level of integration between internal and external roles in a project (eg sub-contractors, outsourced suppliers); • facilitate the role of the Project Manager with regard to monitoring and control activities; • make management aware of the need to support staff to guarantee project success.	
	In the OBS it is advisable to foresee support roles for the Project Manager for complex projects, to relieve him/her of some coordination tasks.		
RAM Responsibility Assigment Matrix	Another very useful project management tool is the project **RAM**, i.e. the **Responsibility Assigment Matrix,** which integrates the information of the Work Breakdown Structure and the Organization Breakdown Structure, specifying the responsibilities and tasks of the team members.		**RESPONSIBILITY ASSIGNMENT MATRIX**

		The RAM is represented graphically by a **matrix table**, constructed by associating each activity (which comes from analysing the Work Packages of the WBS) with the people who will participate in it, indicating the specific role for each activity. The matrix shows the individual activities in the rows and the names of the people involved in the columns.	
		For better resource planning, the project RAM can be built using the **RACI** coding, by inserting in the corresponding cells of the matrix, one of the four letters of the acronym that indicate the type of involvement of the different people and the different levels of responsibility for each activity, that is: • **RESPONSIBLE (R),** person who operationally performs the activity • **ACCOUNTABLE (A),** person who supervises and approves the work performed by the person Responsible • **CONSULTED** (C), person who will support the Manager in carrying out the activity, providing him/her with useful information to complete the work or to improve the quality of the work itself • **INFORMED** (I), person who must be informed about the work of the person Responsible and who will have to make decisions based on the information received**.**	
		Therefore, RAM contributes to: • immediately highlight what needs to be done, who should do it and with what organizational role; • formalize the role not only of those who must actually do the work but also of those who will have to support them; • promote a better valorisation of the costs of each activity by incorporating not only	

		operational/executive ones but also support ones; • create awareness of the impact of everyone's work on the work of the other team members; • empower the members of the project team; • also foster the commitment of those responsible for the resources involved.	
SCHEDULING THE PROJECT	The creation of the project structure through the WBS is crucial for the subsequent project planning processes in terms of time, resources and costs and to define the relative management plans, whose realization takes place in an almost simultaneous and coordinated way.		
	Now, let's concentrate on **planning times** also called **scheduling.**		**SCHEDULING**
	Time management includes the processes necessary to guarantee the completion of the project within the pre-established time limits and, in particular, the processes aiming to: 1. define the temporal sequence of project activities 2. schedule and plan times 3. monitor project progress.		
	The term project **scheduling** refers to the way in which the work to be carried out is temporally structured and also contains the concept of a time frame as the scheduling of the work also involves defining the deadlines by which each activity must be completed.		

	The general project schedule connects all the activities, tasks and elements of a project in a single time scale and is already established during start-up processes, in the project charter, to be continuously reviewed as the project progresses.		
	Scheduling aims to favour: • compliance with contractual commitments undertaken towards the customer; • optimal use of personnel and other resources; • an understanding of the main events and **milestones** that link different Work Package activities; • evaluation of project progress and final reporting to top management.		
	The first step in structuring a project's schedule is the construction of the network of activities defined in the WBS, which will represent the rational basis to define the time plan and project resources.		
ACTIVITIES AND EVENTS		The grid creation process, in fact, allows you to see the logical relationships between three fundamental elements of the project structure in a schematic and synthetic form, namely the **activities**, **events** and **dependencies**. The **activities** are the tasks, the actions that require a specific time and are generally reproduced graphically with rectangles. **Events** indicate the beginning or completion of one or more activities and are represented with a circle.	

MILESTONES		**Milestones** are significant events in the project schedule that coincide with the delivery of specific deliverables or groups of deliverables, allowing verification. Conventionally, they are considered activities of zero duration, because they serve to establish in the schedule the main moments of control of delivery, such as for example, the signing of a document necessary to continue project activities.	
	-	In this perspective, milestones should be: - described with a SMART logic, as per the objectives - assigned to a manager who takes care of their implementation and verifies their completion - progressive, i.e. the achievement of a milestone should create the conditions to complete the next milestone	
DEPENDENCIES	Finally, **dependencies** represent the logical constraints between events and activities and are represented by arrows. There is a dependency when the beginning or end of an activity depends on the beginning or end of another.		
	The most complex projects can have many activities, events and dependencies.		
	In some cases the complexity of a project can make it extremely difficult to identify the most important tasks, that is those that, if they delay or struggle to start, can jeopardize the success of the whole project and to which, therefore, it is essential to pay the utmost care.		

CPM (CRITICAL PATH METHOD)		To face these problems, the critical path method or **CPM - Critical Path Method** is generally used, i.e. a planning technique that allows you to build a logical network and to identify therein, the sequence of **activities** that determine the duration of the project, highlighting those that prove to be **critical for the purposes of compliance with deadlines**.	
		This means that if one of the activities on the critical path takes more time than the estimated duration, starts or ends later than expected, it will impact the entire project. To avoid the occurrence of these conditions, you need to constantly analyze the duration of critical activities, thus, avoiding neglecting them during implementation and management phases.	
PROJECT MANAGEMENT SOFTWARE	Let's briefly look at the **steps to apply the critical path method and to build the logical framework** of our project, considering that today, its use is widely supported by different project management software, which greatly facilitate planning processes, but also those for monitoring and controlling a project.		
PLANNING OF CAPACITY AND RESOURCES	Let's look at the first step. The essential starting point of the project schedule is the WBS.		
	At this point in the planning process, we should have a clear idea of the products to be delivered, the activities and skills necessary to produce them, as well as the means and materials needed.		

	In essence, we have all the elements to also produce an organic picture of all the different types of resources, both human and material, which must be made available to carry out the project, to produce a plan of project resources.		
	Generally, a series of **techniques** are used to do this, such as **estimation** by analogy, which allows us to compare our project with similar projects aleady completed or listening to the opinion of experts external to the team, thanks to which we can estimate: - all the **human and material resources** (such as equipment, materials, licenses) needed to carry out the various activities of the project; - **the effort, i.e. the man-hours** required to complete each activity, but which, depending on the size of the project, can also be calculated in terms of man/days or man/months commitment; - **the duration** of each activity based on the resources available.		**ESTIMATION TECHNIQUES**
	Estimation of the resources of the activities involves, therefore, determining: a) which resources to use (people, equipment or materials) b) the quantity of each resource to be used c) when each resource will be available to implement project activities.		
COST ESTIMATE	This process is closely linked to that of **cost estimation.** Once the resources and processing times have been quantified, you can proceed to define the		

	final project budget, that is the one that is attached to the project management plan.		
PROJECT BUDGET	The **project budget**, in fact, is processed through an iterative process that requires subsequent controls and redefinition, representing a fundamental tool for the monitoring and control phase, to verify the progress of the project during the implementation of activities.		
INITAL BUDGET	The first budget or **initial budget,** is prepared even before the start of the project, in the feasibility study phase, on the basis of estimates and/or evaluations resulting from previous experiences, companies or the Project Sponsor and the Project Manager, where the latter has been involved from the beginning. Its approval by the Programme Board is essential to start the planning phase, during which the first budget is reworked on the basis of the WBS, the tasks, the effort and any other element that involves an expense in the project.		
DRIECT AND INDIRECT COSTS	The project budget is defined for different types of expenditure divided between **direct and indirect costs**		**COSTS**
DIRECT COSTS		The **direct costs** are the costs directly attributable to a project, identifiable through expense documents, for example: - personnel costs, such as salaries, travel and transfers related to the project for team members to perform their duties	

		-professional consultancy costs for specialists; - costs of material, means and equipment used exclusively for the project related for example to the purchase of hardware and software; - other types of specific direct costs for a project.	
INDIRECT COSTS		Indirect costs include, instead, the business costs not directly charged to the project, as they relate to the functioning of the entire structure, although they are functional to its realization, such as, for example: - management and administration costs - costs of commonly used equipment by multiple departments or shared by multiple projects - rent or depreciation related to the offices where the company staff operates - utility costs (electricity, water, telephone, internet, gas/heating) - financial costs	
	In other words, indirect costs effect all the projects of an organization and may or may not be considered part of project costs. In fact, while the direct costs effect the estimate of the project budget, it is up to management to decide whether the indirect costs must be somehow "spread" on the project budget in percentages proportional to the duration or costs of the activities in relation to the project total budget.		
COST BASELINES	Schematically, the total **budget** of a project can be divided into three components: - labour costs and costs to acquire the means, materials, equipment and capital or, more generally, **the set of costs of the individual**		**PROJECT BUDGET**

	activities scheduled according to the project WPs; - **contingency reserve** set aside to manage known and assessed risks; - **management reserve** (or management reserve), that is set aside to manage risks that may occur but have not been identified. The first two components together constitute the **cost baseline** whose progress over time can be compared with that of revenues and/or loans.		
	For the purposes of project scheduling, once the resources have been estimated, the workload distributed over them and the duration and costs of the activities defined, the second step consists of identifying and **establishing the project intrinsic constraints**.		
PROJECT CONSTRAINTS	Project constraints are represented by a series of conditions that constrain the implementation phase such as, for example, those deriving from contractual clauses, from budgets, from national or international regulations, or imposed by the sponsor, the client or other stakeholders.		
PROJECT ASSUMPTIONS	Just like the constraints, the project assumptions are also very important and must be taken into consideration, meaning the grounds or pre-conditions for starting the project. For example, the availability of funds or infrastructures can be considered as assumptions for many projects.		

		Project assumptions and constraints condition the planning activity that must take this into account in terms of: • effort required to manage them; • impact on project times and costs; • resources required; • effect on external suppliers of goods and services and on personnel • related risks and quality expected	
		Project assumptions and constraints must, therefore, be carefully: • **Identified.** In the project start-up phase, the existing assumptions and constraints must be included in the "project charter", in order to transfer the responsibility for their management to the project manager. It is necessary to evaluate if they are all indispensable and try to eliminate those that are not necessary, so as not to place too many constraints on the project.	
		• **Analyzed.** The objective is to understand how assumptions and constraints impact on the time, costs, resources and overall quality of the project and what organizational effort is required to manage them. This information must be included in the project management plan and usually the project schedule and budget take this information into account.	
		• **Controlled in progress.** It is important to periodically review the validity and compatibility of this information during the course of the project. Some constraints may have been disregarded, new constraints may have emerged. Therefore, constant monitoring is required in order to anticipate possible problems.	

		• **Reviewed in the phase of project closure,** in order to verify whether the conditions set have been met and, therefore, to analyze the effectiveness of any corrective measures implemented. For this reason it is advisable to keep track of how the assumptions and project constraints were managed, including them in the lessons learned described in the final report.	
DEPENDENCIES BETWEEN ACTIVITIES	In a project, it is important to understand which activities are included in the plan and how each of them is linked to the others. **Defining the links between the activities**, also called **logical links** or **dependencies**, is the basis for constructing the schedule, thus, being able to establish when the beginning or end of an activity depends on the beginning or end of another.		
	The rationalization of the links between the activities will allow the project manager to have an overall and integrated view of the work to be carried out, identifying possible "bottlenecks" and the need for optimization.		
	Careful analysis of the project's logical framework allows you to identify the critical path which constrains the duration and which must be managed with particular care to avoid delays in delivery.		
	The definition of the links between the activities should be made involving the team, as the project manager does not necessarily have a global view of the operational details of a project.		

	In this way, everyone can make a contribution and help all the others to realize how the work will be carried out, increasing the level of awareness and responsibility as to how the work of each person impacts on that of others. This will also promote consensus on the decisions that will be taken based on teamwork.		
	To avoid the risk of making errors, it is appropriate to use a specific software to create the links between the activities and analyze the project framework, identifying the possible alternative strategies and options to be adopted to achieve the project objectives in compliance with the constraints agreed with the client.		
		In the critical path method, four possible differences are used between one activity and the other: ➢ **Finish-Start** is the most used mode and indicates that the following activity can start only when the activity that preceded it has ended. For example, the assembly of a piece of furniture can only begin after the production of the individual pieces is finished	
		➢ **Finish-Finish** indicates instead that the two activities must end simultaneously	
		➢ **Start-Start** means that the activities must start simultaneously. It could be the case of the production of the shelves and the doors of the piece of furniture, as a very simple example ... In this case, it will be necessary to pay attention to the division of labour between the resources that will actually create the two deliverables.	

		➢ **Start-Finish** implies that the second activity cannot finish if the first activity has not started. It is the least used among the relationships as it rarely occurs. It is a form of backward planning that makes sense, for example, when it is necessary to link activities that belong to different projects with the need to synchronize their development.	
	In a project all activities depend on other activities, with few exceptions.		
	A simple rule to apply consists, therefore, in verifying that each activity has a predecessor, unless it is linked to the project start date, and a successor, unless it is the last activity of the project.		
	When you have identified the dependencies between activities and connected them with arrows, the logical framework and the various paths leading from the beginning to the end of the project will be displayed.		
	If there are only a few paths, it will be easy to identify the **critical path, that is the one that determines the overall duration of the project.**		
PROJECT PLANNING METHODS	There are mainly two techniques and tools for framework construction that are most commonly used.		

PRECEDENCE DIAGRAM METHOD - PDM		➢ The first tool is the **precedence diagram (Precedence Diagram Method - PDM), typical of the Critical Path Method (CPM),** in which the activities are represented by rectangular nodes connected by arrows indicating their logical links. This representation is also called "Activity on Node (AON)".	
PERT - Project Evaluation and Review Technique		➢ The second, instead is **an arrow diagram, referable to the Project Evaluation and Review Technique (PERT),** with which the activities are described by arrows connecting circular nodes, which represent their duration. This representation is also called "Activity on Arrow (AOA)". In this diagram, unlike the previous one, which allows you to highlight all the types of dependencies between the project activities, the only possible relationship between one activity and another is FINISH-START	
GANTT CHART	Regardless of the method used, the results of these diagrams can be converted into a clearer and more manageable graphic form, namely the **Gantt chart**.		**GANTT CHART**
	The project Gantt chart or Gantt diagram is a very useful tool that allows you to represent, visualize and track the timing and progress of a project, providing all interested parties with knowledge of the tasks performed and/or to be carried out, with the respective deadlines.		
	It is a Cartesian diagram in which, on the x-axis, or the horizontal axis, the temporal variable is shown, usually expressed in days, while along the y- axis, or the vertical axis, the WPs and the activities into which the project has been broken down are displayed.		

		Through the Gantt, you can view: 1. The start and finish dates of the project 2. The activities and the sub-activities that make up the project, in order to keep track of them so as not to forget or have to postpone anything 3. The resources assigned to each activity 4. The dates scheduled for the start and end of each activity and sub-activity 5. An estimate of how long each activity will last 6. How activities overlap and/or are linked together. Some activities can be performed at any time, while others **must be completed before or after the start or end of another activity**. 7. The progress of the project, showing the activities that have already been carried out and what remains to be done, is very useful information to realize if the project is to be completed on time.	
	The project manager can also use the Gantt chart to show stakeholders how the tasks have been organized and what resources have been assigned, providing a clear picture of the project progress and showing whether it will be completed within the terms agreed.		
	Furthermore, it is a useful tool to share with the members of the work team to provide updates on the project progress, helping them to have a clear overview of the progress of activities, to better understand their performance and therefore, the impact that they could have on any project delays, in order to foster closer collaboration and better organization of tasks.		

	Projects with a large number of activities and resources generate very complex Gantt charts. Displaying hundreds of activities on a Gantt chart can prove to be a difficult task and, therefore, it is essential to have an idea of the final result and the steps to be taken before even starting, thinking ahead about the different tasks and sub-tasks.		
	Furthermore, you should not forget that projects can change in progress and that, therefore, the Gantt chart must be frequently updated.		
	Once prepared, the project Gantt should be attached to the Project Management Plan together with the other **planning documents** (resource management plans, costs, quality, risks, communication, procurement) to then be used and updated along the whole project life span, as a tool to monitor and check the progress of the project, calculate deviations and the re-planning necessary to re-align the project to the objectives and the times set during **planning** phase.		**PLANNING DOCUMENTS**
	The path defined in the project plan can, in fact, take different directions from the one envisaged for different reasons, from the absence of some team resources, to delays of sub-contractors, to the presence of non-conformities or defects in the production of some deliverables, to name but a few.		
	In these cases, therefore, you need to review the initial hypotheses, through management of deviations that may also include corrective actions that serve to reduce the incidence of the problem that has occurred in the future.		

	Since not everyone in a project team is able to handle the unexpected, it is important to know what to do in these situations to avoid being overwhelmed by events and not adopting solutions appropriate to cases that may arise.		
	The first thing to do is to check if the delayed activity is part of the critical path, or if it is an activity that has no margin of splippage in the project schedule because it would lead to a general delay.		
	In the case of a critical activity, therefore, this will have to be managed at the highest priority level to contain the impact on the entire project.		
	Activities that are not part of the critical path, on the other hand, can be managed at a lower level of priority, at least until they too become critical.		
	Of course, the best way to handle delays is to prevent them by anticipating their occurrence through project monitoring and control.		

PROJECT MONITORING AND CONTROL	The monitoring and control of a project are extremely critical activities since they allow you to constantly evaluate progress, measure the performance of the work groups and verify that the set objectives are realistic.		
	The purpose of monitoring and controlling a project is not only to highlight, in the implementation phase, **the deviations from the Project Management Plan, but also to identify possible corrective actions** and to proceed with re-planning, before the situation becomes irretrievable.		
	This implies a methodical and structured collection of information relating to the resources involved in the project, which generally takes place through specific **time sheets**, in which each resource periodically indicates the time spent on the activities assigned, any costs incurred and the percentage of completion of the deliverables associated with the corresponding activities.		
	This is information on which the Project Manager can carry out specific checks through audits and random checks.		
	Clearly, in order to be able to collect the data and information necessary to monitor the correct progress of the project, you need to define both the frequency of collection and the models of the documents that the team will have to use in the Project Communication Plan.		

	In general, the frequency of monitoring activities is closely linked to the level of depth with which you want to keep track of the project, which in turn depends on the size, the cost of the project or the possible connected risks.		
	Basically, however, it is a good idea to keep in mind that overly frequent data collection can be unproductive and provide unreliable information.		
	In the same way, infrequent collection can lead to a lack of useful information to monitor and control the regular progress of the project, thus, exposing it to potential risks.		
	The Project Manager must, therefore, identify the right mix between level of detail, frequency and commitment required by those who should provide this information, so as not to hinder or slow down the team's operations, but also not to expose the project to any risks due to insufficient monitoring and control activity.		
	The control activity must not be considered by the Project Manager and the team as a mere final activity. In particular, the Project Manager must be clear that the processes envisaged by this phase require careful monitoring to prevent and manage any crises.		
		In the project monitoring and control phase, in parallel with project implementation, the role of the project manager, in fact, is not limited to the mere collection of information on the progress of work and on the progress in development of deliverables, but also concerns the timely identification and	

		implementation of any corrective actions that, in turn, suppose: **- the management of project issues**, also to ensure that the quality of deliverables produced is acceptable and consistent with the standards set in the Quality Plan, as well as - the creation of a **periodic report to the Project Sponsor and to the Management**, in order to favour the decision-making process.	
ESCALATION PROCEDURE	These two processes can also be directly connected, because the management of particularly complex issues can determine the need for the Project Manager to transfer responsibility to Management, in what is called the escalation procedure.		
	Aside from this procedure, which is only activated in execptional circumstances, such as when you need to change the contract with the customer, all projects during implementation can face the emergence of errors, unavailability of key resources, the need to re-plan and to make changes to the Project Management Plan and/or to the expected deliverables.		
ISSUE	Each of these examples represents an issue, that is an **unplanned and unexpected problem, which arises during the life of a project and prevents or slows its progress**, impacting in terms of time, costs, resources and quality.		
	An issue is obviously different from a risk, since it constitutes a fact that has occurred, while a		

	risk represents an event that may or may not occur.		
	Issues, therefore, require additional work from the Project Manager, the project team and/or any external experts, to contain their impact and find a solution that allows you to overcome or solve the problem.		
	For this to happen, every problem must be documented and formalized in the **issue register**, which contains all the elements necessary to start the problem solving process.		**ISSUE REGISTER**
	This, in fact, involves re-planning that part of the project where the problem has emerged.		
	Therefore, you will need to identify the team members to whom to assign the analysis of the problem and to identify tailored solutions.		
	Once approved, these solutions will need to be planned, implemented and, of course, also subsequently monitored and controlled.		
	At this point, it is clear that the monitoring and control of a project imply the systematic collection of data emerging from implementing the work, information processing and report production.		
	The need to periodically produce a snapshot of the situation cannot and must not be limited only to measuring the progress of the project and the progress of the work, also called Project Progress Report.		

MEASUREMENT OF TOTAL PERFORMANCE OF A PROJECT	It is also important to measure the overall performance of the project, which implies formerly defining the metrics and indicators to be used, the so-called **KPIs - Key Performance Indicators.**		
	A correct definition of these indicators is fundamental to allow the Project Manager to have a global vision of the project situation and to intervene promptly in the face of drawbacks, above all of a financial nature.		
	The monitoring and control of a project, in fact, does not only concern tracking time.		
	For example, the fact that timesheets show that the hours spent on certain activities are in line with what was expected at a certain date of the project does not provide any information on the progress of the deliverables produced by those activities.		
	You could be in a situation where many hours of work have been spent, but the products are still all at sea.		
	In this way, by dint of only the final figures, you may find yourself acknowledging late that almost all the budget has been spent, but the project is still very behind.		
EVALUATIONS	So, if you want to be proactive and anticipate the onset of possible problems, you also need to add the periodic **evaluation** of the actual status of the expected deliverables and the expenses incurred to time tracking.		

EARNED VALUE	The **Earned Value** technique is one of the main tools for the financial analysis of a project during all the phases of its life cycle, allowing for an integrated assessment of its performance able to take into account the project scope, costs and times.		
EARNED VALUE		Starting from the cost baseline, the Earned Value technique implies, for each scheduled activity, WP or control point, the determination of the following key values: • **Planned value** (Planned Value - PV): is the **estimated cost** of the work scheduled to complete an activity or WP by a specific point of time • **Earned Value** (EV): is the **budgeted value of the work actually completed** on a scheduled activity or a WP in a given period of time • **Actual cost** (Actual Cost - AC): is **the total cost incurred** to perform the work of a scheduled activity or a WP during a specific period of time. The technique involves the combined use of the three values, PV, EV and AC to provide performance measurements. It allows you to check, at a specific time point, if work is proceeding as planned or not.	
EARNED VALUE		The cost management plan can establish acceptable threshold values for the degree of project completion. The most commonly used measures are cost variance (Cost Variance - CV) and schedule variance (Schedule Variance SV).	

		Cost variance (Cost Variance - CV) is given by the **Earned Value minus the actual Cost** (CV = EV - AC) At the end of the project, the cost difference will be the difference between the budget at completion (Budget at Completion BAC) and the actual amount spent. The **Schedule Variance** (SV) is given by the **Earned Value minus the planned Value** (SV = EV - PV). At the end of the project, the time difference will be zero, since all the planned work will have been completed.	
		This method, also known as Earned Value Analysis (EVA), allows the project manager to measure the amount of work actually performed on a project during work, or the trend of real costs compared to those planned and to evaluate, in particular, if: - you are spending more than you are actually earning (Cost Variance - CV) - you are earning less than expected and, therefore, you are late in delivering the deliverables (Schedule Variance - SV) - there is a tendency to spend more than necessary (Cost Performance Index - CPI) - there is a tendency to deliver on schedule as expected (Schedule Performance Index - SPI).	
	The evaluation of all these values, measured from time to time, allows you to determine the trends that might be appropriate to correct in order to realign the project with expectations.		

CLOSING OF THE PROJECT	Evaluation is a continuous process that is carried out throughout the project life cycle and, consequently, it is also carried out during the project closure phase, i.e. the one in which all the work included in the project management plan has been completed and all the deliverables have been delivered.		
	In fact, during the closing phase, the Project Manager must proceed to: - evaluate the performance of the individual team members, also to motivate professional development paths and/or to document the expertise acquired in light of their possible involvement in new projects - assess the overall results obtained in relation to the set objectives, also in terms of quality - assess the level of satisfaction of the stakeholders and the final customers of the project.		
FINAL REPORT	This analysis, which generally flows into the **final report** that the project manager will present to the management, the client or the funding body for approval, can give rise to possible integrations or extensions of the project and, therefore, can also have an important commercial value.		
	Moreover, it can allow you to formalize the positive or negative matters that have been learned during project development so that it can be reused in future projects.		
	Once the actual completion of the work has been verified, it is possible to proceed with the filing of all the documents, the closing of the order and the release of the resources allocated to the project.		

TOPIC 5

SUBJECTS TACKLED	Definition of SMART objectives, WBS, WP, OBS, RAM, milestones, cost constraints, critical path, precedence diagram, monitoring and control, issues, earned value In the synopsis the training contents that are transferred to the users are highlighted in red: - because they are present in the topic that precedes the scenario - because they are transcribed in the lines of the script In the round brackets the topic dealt with from the point of view of training is indicated
SYNOPSIS	In this scenario on Project Management, the student/user will be in the shoes, experienced in first person view, of Paula, a trainee at her first week of internship in a multinational company that deals with the production and supply of stocked pallets for industrial use. Her goal is to shadow and learn from Susan, PM of the company currently dealing with a large order for a Chinese customer and who has been entrusted with Paula, to assess its potential in order to hire her with a junior profile. Susan, at a one-to-one meeting, explains the main aspects of the project to Paula to test the trainee's preparation and behaviour. Susan has to prepare the project end report and go through all the phases of the project with Paula. In the branched scenario, Susan will take advantage of the recap to ask Paula questions. The choices/questions that the user has to make will be related to: - Definition of SMART objectives - WBS - OBS - RAM - MILESTONES - GANTT
SET	PM office
PROTAGONIST (ONLY VOICE WITH A POINT	In topic 5, having a first-person view, we have the voice over of the intern Paula (the voice is that of Virginia Rosania)

OF VIEW SHOT (IN THE FIRST PERSON)	
ACTORS	The PM Susan is played by an actress on stage (Brunella Maio)
SCENARIO DATA SHEET- To be given to the student in slide form prior to the start of the Topic	Your name is Paula and you are a trainee in your first week of internship at a multinational company that deals with the production and supply of stocked pallets for industrial use. The company has assigned you Susan Parker as Tutor, PM of the company, who is currently dealing with a large order for a Chinese customer and who has to evaluate your skills and your potential. The company has also informed you that it intends to hire you if the internship is successful, being a growing company and in a phase of expansion of its workforce. In this scenario you will get both positive and negative feedback on the choices you make, so be very careful.
TEAM DATA SHEET- To be given to the student in slide form prior to beginning the Topic	She is the company's PM. She has gained significant experience in managing the most important projects of the company. Susan is responsible for managing Paula's training and her possible joining the company.

	KEY The colour **powder blue** indicates the main script. The parts in green red and orange represent the **three choices proposed to the user**. The parts in **green** are the correct answer, to which will follow, again in green, the outcome of the choice and then the main script. The parts in **red** show the wrong answer, and the relative lines resulting from the choice. In this topic whether you choose the incorrect answer or the correct one you will proceed and at the end of all the videos you will have a positive ending (5 or 6 correct answers), a neutral one (3 or 4 correct answers) and a negative one (1 or 2 correct answers).

CHARACTER	LINE	OPTION TO CHOOSE	SEQUENCE OF LINES SUCCESSIVE TO THE CHOICE	RESULT	NOTES
Who will say the line – Script	What the character will say according to the script	Options on the screen proposed to the user from which he/she needs to make a choice	Sequence of lines that follow the choice	Training report that explains the outcome of the choice and relative errors. The text is displayed on the screen in a specifici table	Possible indications on the character's mood or on particular actions.
SCENE 1					
SUSAN	Hi Paula, welcome to the company. I'm Susan, your tutor.				Cordial mood
INTERN (VOICE OVER)	It's a pleasure to meet you.				Cordial mood
SUSAN	I'm one of the company's Project Managers and I am responsible for an important international order for China, involving the production of twenty thousand wooden pallets. I'm preparing a detailed project report to be kept on file and also sent to the customer. Can you help me?				Serious and professional mood
INTERN (VOICE OVER)	My pleasure, Miss Parker.				Cordial mood
SUSAN	Just Susan will be fine.				Cordial mood

INTERN (VOICE OVER)	I can't wait to start.				Operative mood
SUSAN	Great! This is the Project Plan. Do you know what a Project Plan is?				Serious and professional mood While the PM is speaking, the camera should frame the document
INTERN (VOICE OVER)	Yes. It's the document that defines everything that needs to be done to achieve the project goals.				Serious and professional mood While the PM is speaking, the camera should frame the document
SUSAN	Correct. Let's look at it together. That way you can get an overview of the project before working on the report with me.				Serious and professional mood While the PM is speaking, the camera should frame the document
INTERN (VOICE OVER))	Ok, that would be great.				Serious and professional mood While the PM is speaking, the camera should frame the document

SUSAN	If you browse through the document, on the fifth page you'll find a list of the objectives that have been established with the Chinese partner, stating for each of them the purpose, timing of realization and indicators to measure results. In short, they are a perfect example of SMART ojbectives! You know the meaning of this acronym, don't you?				Serious and professional mood While the PM is speaking, the camera should frame the document
INTERN (VOICE OVER)	Yes, of course, specific, measurable, feasible and timable				Certain mood
SUSAN	You forgot the letter R. Do you know what it refers to?				Questioning mood

BRANCHED SCENES CONNECTED TO SCENE 1 ACCORDING TO THE CHOICES MADE FOR EACH OF THE OPTIONS FORESEEN
A screen will appear for the user to make the choice from one of the following options □ **OPTION N. 1: RELEVANT** □ **OPTION N. 2: RELATIVE** Depending on the choice made, the system will show the related sub-scenes, giving the user a final feedback on the correctness or otherwise of the choice made. In the event of an incorrect or partially correct answer, the system will proceed and allow the user to access the next scene and so on until the end of all the videos, where it will provide a final result that can be "positive" (if the user obtained 5 or 6 correct answers), "sufficient" "(If the user obtained 4 correct answers) and "negative" (if the user obtained 1, 2 or 3 correct answers).

		OPTION N. 1: RELEVANT			
INTERN (VOICE OVER)			Relevant.		Certain mood
SUSAN			Correct Paula	**CORRECT ANSWER.** In the acronym SMART, the R stands for Relevant. To determine the motivation and commitment, an objective must have important characteristics and interest for the organization	Satisfied mood
		OPTION N. 2: RELATIVE			
INTERN (VOICE OVER)			Relative		Uncertain/sly mood
SUSAN			Relative to what?		Annoyed mood
INTERN (VOICE OVER)			To the company		Sly mood
SUSAN			In the sense of relative to company relevance?		Annoyed mood
INTERN (VOICE OVER)			Yes, that's exactly what I meant!		Sly mood
				INCORRECT ANSWER In the acronym SMART, the R stands for Relevant. To determine motivation and	

				commitment an objective must have important characteristics and interest for the organization	
SCENE 2					
SUSAN	Ok, let’s go on. In the document, you’ll find a series of graphic representations. Let's start with the WBS ... Do you know what it is?				*The Intern browses the document* *It would be appropriate to frame a WBS*
BRANCHED SCENES CONNECTED TO SCENE 2 ACCORDING TO THE CHOICES MADE FOR EACH OF THE OPTIONS FORESEEN					
A screen will appear for the user to make the choice from one of the following options □ **OPTION N. 1: THE WBS IS A HIERARCHICAL REPRESENTATION OF "AN UPSIDE DOWN TREE" OF THE TEAM'S ROLES IN THE PROJECT** □ **OPTION N. 2: THE WBS IS A HIERARCHICAL REPRESENTATION OF "AN UPSIDE DOWN TREE" OF THE WORK TO BE REALIZED IN THE PROJECT** Depending on the choice made, the system will show the related sub-scenes, giving the user a final feedback on the correctness or otherwise of the choice made. In the event of an incorrect or partially correct answer, the system will proceed and allow the user to access the next scene and so on until the end of all the videos, where it will provide a final result that can be "positive" (if the user obtained 5 or 6 correct answers), "sufficient" "(If the user obtained 4 correct answers) and "negative" (if the user obtained 1, 2 or 3 correct answers).					
		OPTION N. 1: The WBS is a hierarchical representation of "an upside down tree" of the team's roles in the project			
INTERN (VOICE OVER)			The WBS allows you to break down the roles of the team to		Confident mood

			clearly identify who does what…		
SUSAN			That's the OBS Paula.		Resigned mood.
INTERN (VOICE OVER)			Oh, yes of course…		Anxious mood.
SUSAN			Hmm, I admit that it isn't easy to get around all the acronyms of project management … you can get confused … Come on, don't worry, let's move on		Perplexed but reassuring
				INCORRECT ANSWER. The WBS graphically reproduces the breakdown of the work to be undertaken in work packages (WP), or rather sets of activities aimed at realizing the project deliverables	
		OPTION N. 2: The WBS is a hierarchical representation of "an upside down tree" of the work to be realized in the project			
INTERN (VOICE OVER)			The WBS is a hierarchical representation of an "upside-down tree", whose various levels that face downwards, represent increasingly detailed parts of the project.		Confident mood

SUSAN			Perfect Paula. I see that you have a certain familiarity with the acronyms of project management!		Satisfied mood
				CORRECT ANSWER. The WBS graphically reproduces the breakdown of the work to be performed in work packages (WP), or rather sets of activities aimed at realizing the project deliverables	
SCENE 3					
SUSAN	T The following graph reproduces the organizational structure of the project…				Satisfied mood
INTERN (VOICE OVER)	Yes, if I remember rightly this is the OBS, the Organization Breakdown Structure, that shows the people involved in the management of the project.				Confident mood
SUSAN	Yes, that's right! As you can see, it indicates who does what for each work package. Do you also remember that you need to bear in mind the company				Satisfied mood

	organigram to be able to prepare the OBS?				
BRANCHED SCENES CONNECTED TO SCENE 3 ACCORDING TO THE CHOICES MADE FOR EACH OF THE OPTIONS FORESEEN					
A screen will appear for the user to make the choice from one of the following options □ **OPTION N. 1: IN THE GRAPHIC REPRESENTATION OF THE OBS YOU MUST TAKE INTO ACCOUNT THE COMPANY'S ORGANIZATION CHART** □ **OPTION N. 2: IN THE GRAPHIC REPRESENTATION OF THE OBS, ONLY THE PROJECT ORGANIZATION MUST BE TAKEN INTO ACCOUNT** Depending on the choice made, the system will show the related sub-scenes, giving the user a final feedback on the correctness or otherwise of the choice made. In the event of an incorrect or partially correct answer, the system will proceed and allow the user to access the next scene and so on until the end of all the videos, where it will provide a final result that can be "positive" (if the user obtained 5 or 6 correct answers), "sufficient" "(If the user obtained 4 correct answers) and "negative" (if the user obtained 1, 2 or 3 correct answers).					
		OPTION N. 1: In the graphic representation of the obs you must take into account the company's organization chart			
INTERN (VOICE OVER)			I think so. It must be constructed taking into account the departments, units, offices or groups in which the company is structured		Certain mood.
SUSAN			No. Paula. The OBS is a hierarchical representation of the project organization and should not be confused with the company organization chart		Unhappy mood.
				INCORRECT ANSWER.	

				The OBS must not reflect the company organization chart, but only contain the roles and responsibilities necessary for the project, so as to represent only and exclusively the project hierarchy and allow: definition of project staff; improvement of communication in the project group; simple and quick identification of project actors; provision of input to define the RAM.	
		OPTION N. 2: In the graphic representation of the obs, only the project organization must be taken into account			
INTERN (VOICE OVER)			No, because the OBS must be organized according to the departments, units, offices or groups in which the project is structured. It hierarchically represents the organization of the project and should not be confused with the company organization chart.		Certain mood.
SUSAN			Correct Paula.		Satisfied mood.

				CORRECT ANSWER. The OBS must not reflect the company organization chart, but only contain the roles and responsibilities necessary for the project, so as to represent only and exclusively the project hierarchy and allow: definition of project staff; improvement of communication in the project group; simple and quick identification of project actors; provision of input to define the RAM.	
SCENE 4					
SUSAN	Um, I'm going to ask you a slightly more challenging question ... If you know the OBS, you'll also know what the RAM is, that is the Responsibility Assignment Matrix ...				Certain mood.
INTERN (VOICE OVER)	Oh, yes, I remember that too.				Serious and professional mood
SUSAN	Good. Can you tell me how it should be constructed?				Interrogative mood

BRANCHED SCENES CONNECTED TO SCENE 4 ACCORDING TO THE CHOICES MADE FOR EACH OF THE OPTIONS FORESEEN					
A screen will appear for the user to make the choice from one of the following options □ **OPTION N. 1: THE OBS AND WBS ARE PLACED NEXT TO EACH OTHER BY CREATING LINKS BETWEEN THE TWO REPRESENTATIONS** □ **OPTION N. 2: ASSOCIATE THE PEOPLE WHO WILL PARTICIPATE WITH YOU, INDICATING THEIR SPECIFIC ROLE IN EACH ACTIVITY** Depending on the choice made, the system will show the related sub-scenes, giving the user a final feedback on the correctness or otherwise of the choice made. In the event of an incorrect or partially correct answer, the system will proceed and allow the user to access the next scene and so on until the end of all the videos, where it will provide a final result that can be "positive" (if the user obtained 5 or 6 correct answers), "sufficient" "(If the user obtained 4 correct answers) and "negative" (if the user obtained 1, 2 or 3 correct answers).					
		OPTION N. 1: The OBS and WBS are placed next to each other by creating links between the two representations			
INTERN (VOICE OVER)			You should place the OBS and the WBS side by side so as to create links between the two representations to link an activity planned in the WBS with the person indicated in the OBS as responsible for its implementation.		Certain mood.
SUSAN			That's not exactly correct. A matrix must be developed which must include the individual activities envisaged by the WBS in the rows and the names of the persons involved in the OBS in the columns, in order to determine who is responsible for its implementation.		Unhappy mood.

				INCORRECT ANSWER. The RAM - Responsibility Assignment Matrix is an important tool to support project planning, which integrates information from the Work Breakdown Structure and the Organization Breakdown Structure, allowing you to highlight what needs to be done, who should do it and with what organizational role, taking into account not only those who will have to do the work, but also those who will have to support them. Moreover, it allows you to: - valorise the costs of each activity, incorporating not only the operational/executive ones, but also the support ones - create awareness of the impact of the work of each team member on that of others; - empower project team members; - foster the commitment also of those responsible for	

				the resources involved.	
		OPTION N. 2: Associate the people who will participate with you, indicating their specific role in each activity			
INTERN (VOICE OVER)			In practice, you need to construct a matrix, reporting the individual activities envisaged by the WBS in the rows, and the names of the people involved in the OBS in the columns. In this way, the people responsible and their role can be associated with each activity		Certain mood.
SUSAN			That's right. Very good Paula. By constructing the project responsibility matrix, you can integrate the information of the Work Breakdown Structure and the Organization Breakdown Structure, thus defining "who does what".		Satisfied mood.
				The RAM - Responsibility Assignment Matrix is an important tool to support project planning, which integrates information from the Work Breakdown Structure and the Organization Breakdown Structure,	

				allowing you to highlight what needs to be done, who should do it and with what organizational role, taking into account not only those who will have to do the work, but also those who will have to support them. Moreover, it allows you to: - valorise the costs of each activity, incorporating not only the operational/executive ones, but also the support ones - create awareness of the impact of the work of each team member on that of others; - empower project team members; - foster the commitment also of those responsible for the resources involved.	
SCENE 5					
SUSAN	If you turn the page, you'll find a representation of the RAM for our project. What we've seen so far are all planning tools but they are also very useful for monitoring the				Vague mood.

	production status of the different project deliverables. For monitoring purposes, however, it is important to include specific control milestones in the schedule. Do you know what they are?				

BRANCHED SCENES CONNECTED TO SCENE 5 ACCORDING TO THE CHOICES MADE FOR EACH OF THE OPTIONS FORESEEN

A screen will appear for the user to make the choice from one of the following options

- **OPTION N. 1: ZERO DURATION ACTIVITIES THAT ARE NEEDED TO ESTABLISH THE MAIN VERIFICATION AND CONTROL MOMENTS IN THE SCHEDULING**
- **OPTION N. 2. MORE CHALLENGING ACTIVITIES OF THE PROJECT TO BE REALIZED.**

Depending on the choice made, the system will show the related sub-scenes, giving the user a final feedback on the correctness or otherwise of the choice made.

In the event of an incorrect or partially correct answer, the system will proceed and allow the user to access the next scene and so on until the end of all the videos, where it will provide a final result that can be "positive" (if the user obtained 5 or 6 correct answers), "sufficient" "(If the user obtained 4 correct answers) and "negative" (if the user obtained 1, 2 or 3 correct answers).

		OPTION N. 1: Zero duration activities that are needed to establish the main verification and control moments in the scheduling			
INTERN (VOICE OVER)			A Milestone is an activity of zero-duration, which represents a "time of verification and control" in the project schedule.		Certain mood.

			For example, the date set for the milestone allows you to check if all the activities planned before it have been completed. If the planned activities at that date have not all been completed, then the project is running late.		
SUSAN			Paula, you're really good. Well done		Forgetful mood. *Here the PM smiles and and winks.*
				CORRECT ANSWER. Milestones are control points in the scheduling of each project phase and coincide with the verification of the delivery of specific deliverables or groups of deliverables. They are normally activities of zero duration that serve to isolate the main moments of delivery verification in the schedule. They may coincide with presentation meetings, signature of acceptance reports, even telephone calls to confirm an agreement. In fact, each of these circumstances	

				serves to approve what has been done prior to the milestone and enable the activities planned after the milestone.	
		OPTION N. 2: More challenging activities of the project to be realized.			
INTERN (VOICE OVER)			Milestones identify the most demanding activities of the project to be carried out.		Certain mood.
SUSAN			No Paula, that's incorrect. A Milestone is a zero-duration activity, that establishes a "moment of verification and control" of the activities carried out and / or the deliverables made in the project schedule.		Doubtful mood.

				INCORRECT ANSWER Milestones are control points in the scheduling of each project phase and coincide with the verification of the delivery of specific deliverables or groups of deliverables. They are normally activities of zero duration that serve to isolate the main moments of delivery verification in the schedule. They may coincide with presentation meetings, signature of acceptance reports, even telephone calls to confirm an agreement. In fact, each of these circumstances serves to approve what has been done prior to the milestone and enable the activities planned after the milestone.	

SCENE 6					
SUSAN	I have to go now… Later, maybe we can analyse our project GANTT. But, before leaving, one last question, then I'll leave you in peace ...				Didactic mood *In this step, you should pay a lot of attention to the PM's behaviour in order to enhance the formative aspect of the experience.*
INTERN (VOICE OVER)	Ok. Go ahead.				Serious and professional mood
SUSAN	Paula, can you tell me what there is on the x-axis and what there is on the y-axis?				Serious and professional mood *While the PM is speakings, the intern's view is lowered to the GANTT and remains on it in order to give the user the opportunity to reflect on what he/she can see.*

BRANCHED SCENES CONNECTED TO SCENE 6 ACCORDING TO THE CHOICES MADE FOR EACH OF THE OPTIONS FORESEEN					
A screen will appear for the user to make the choice from one of the following options □ **OPTION No. 1: THE TIMELINE VARIABLE IS SHOWN ON THE X-AXIS, WHILE ON THE ORDER, THE PROJECT WORK PACKAGES AND ACTIVITIES ARE INDICATED.** □ **OPTION No. 2: THE WORK PACKAGES AND ACTIVITIES IN WHICH THE PROJECT HAS BEEN BROKEN DOWN ARE INDICATED ON THE X-AXIS. ON THE Y-AXIS THE TEMPORAL VARIABLE IS INDICATED.** Depending on the choice made, the system will show the related sub-scenes, giving the user a final feedback on the correctness or otherwise of the choice made. In the event of an incorrect or partially correct answer, the system will proceed and allow the user to access the next scene and so on until the end of all the videos, where it will provide a final result that can be "positive" (if the user obtained 5 or 6 correct answers), "sufficient" "(If the user obtained 4 correct answers) and "negative" (if the user obtained 1, 2 or 3 correct answers).					
		OPTION No. 1: The timeline variable is shown on the x-axis, while on the order, the project work packages and activities are indicated.			
INTERN (VOICE OVER)			The temporal variable is shown, usually expressed in days on the x-axis, while along the y-axis, the WPs and the activities that the project has been broken down into are indicated.		Certain mood.
SUSAN			Perfect.		Satisfied mood
				CORRECT ANSWER The GANTT is a diagram in which on the X-axis, the horizontal axis, the	

				temporal variable is shown, usually expressed in days, while along the y-axis, the vertical axis, the WPs and the activities into which the project has been broken down are indicated. Each task is represented by a coloured bar that goes from the start date to the end date of the activity. Once all the activities have been included, you can see how the project is structured, which tasks come first, which overlap and which occur subsequently. Thanks to the GANTT it is also possible to identify the activities that are on the critical path and that affect the end date of the project, in order to monitor them more carefully. Furthermore, the distribution of the	

				activities allows you to identify the intermediate goals and to understand if the project is in line with the timing or not.	
		OPTION No. 2: The work packages and activities in which the project has been broken down are indicated on the x-axis. On the y-axis the temporal variable is indicated.			
INTERN (VOICE OVER)			The WPs and the activities in which the project has been broken down are indicated on the x-axis, while the temporal variable is shown, usually indicated in days along the y-axis.		Certain mood.
SUSAN			It's the opposite Paula. The opposite…		Resigned mood.
				INCORRECT ANSWER. The GANTT is a diagram in which on the X-axis, the horizontal axis, the temporal variable is shown, usually expressed in days, while along the y-axis, the vertical	

				axis, the WPs and the activities into which the project has been broken down are indicated. Each task is represented by a coloured bar that goes from the start date to the end date of the activity. Once all the activities have been included, you can see how the project is structured, which tasks come first, which overlap and which occur subsequently. Thanks to the GANTT it is also possible to identify the activities that are on the critical path and that affect the end date of the project, in order to monitor them more carefully. Furthermore, the distribution of the activities allows you to identify the intermediate goals and to understand if the project is in line	

				with the timing or not.	
NEGATIVE END – FROM 1 TO 3 CORRECT ANSWERS					
SUSAN	Paula I'm sorry to tell you but you're not skilled enough. This meeting was a way to understand if you could have a future in this company as Junior PM after your Internship course. I think you need to re-evaluate your priorities and maybe consider going into a sector which is more suited to your skills.				Sad mood
INTERN (VOICE OVER)	You're right Susan. I already had doubts about what I'd do after the internship, but at this point I think I'll ask the company to assign me to another department in order to get the most out of this opportunity and understand what my future might be.				Regretful and slightly offended Regretful and slightly offended
SUSAN	That's the spirit. I'm convinced that you'll accomplish great things in the future ...				Accommodating mood
INTERN (VOICE OVER)	I hope so …				Sad mood
SUFFICIENT END– 4 CORRECT ANSWERS					

SUSAN	Paula, I have something to confess. This meeting was a way to see if you could have a future in this company as a Junior PM after your Internship course. Your skills are not the best but I think that with the right commitment and the right dedication you can achieve excellent results.				Accomodating mood
INTERN (VOICE OVER)	Thank you Susan. I'm aware of my current limits, but I'm convinced that if I have you as a mentor and I make a real effort I could improve greatly.				Slightly sorry mood but at the same time motivated
SUSAN	That's the right spirit. Maybe we could postpone our decision to the end of your internship course and in the meantime, we work together on the next project. What do you say?				Positive mood
INTERN (VOICE OVER)	I say, I can't wait to get started!				Decisive mood
POSITIVE END – FROM 5 TO 6 POSITIVE ANSWERS					
SUSAN	Paula, I have something to confess.				Satified mood

	This meeting was a way to see if you could have a future in this company as a Junior PM after your Internship course. Your skills are remarkable and I'm going to ask the management to assign you tasks as if you were already part of the company. Obviously if that's what you want too!				
INTERN (VOICE OVER)	Of course, Susan. That was my goal right from the beginning. I'm glad that so much time dedicated to study is reaping rewards.				Honoured mood
SUSAN	We'll do great things together!				Positive mood

SUBJECT	AUDIO IN STUDIO	VOICE OVER	KEYWORDS
Elements that will be indicated to clarify the flow of the text and the topics covered and that can also be shown on screen in the form of sensitive words	**Text that will be recited by the character in a 3D virtual environment (trainer)**	**Text that will be recited by the characters as users scroll through the elements in Motion Graphic**	**Keywords that will appear on the screen through which the user can interact with a simple click, accessing the in-depth materials provided for consultation**
	Managing a project is a complex activity, which requires great attention from the Project Manager.		
	For example, it is often the case that a project is not completed in time, runs out of budget or fails to achieve the desired results. Many of these failures can be attributed to poor project management.		
	Proactively sharing information and knowledge is essential for the success of any project. For this reason, ineffective communication is one of the main causes for which projects do not fulfil the set objectives or fail.		
	Project planning is often considered as an activity that does not bring added value. However, defining project activities and related responsibilities inadequately can lead to problems. Without a good plan, you risk not only		

	not having enough resources and time available, but also not respecting the deadlines set.		
	Moreover, it is not enough to start the project and create an unassailable diary, if you don't then constantly update the programming, so as to verify that everything proceeds as planned, carrying out regular checks and making any changes, if necessary.		
	Each project is a delicate system in which costs, time, performance, quality and risks are in a precarious balance. To upset this balance means damaging the project and its results. The project manager must safeguard this system and inform those directly involved that any specific requests for changes or additions can jeopardize the balance of the entire operation.		
	Every decision taken can affect quality, time and resources. The management of a successful project, therefore, involves the ability to balance the effects that the modification of one of these components can have on the other two.		
	If, for example, you want to reduce the time frame of a project, you need to increase your budget to have more resources available or to narrow your goals, so that everything can be completed on time.		
	At the same time, as each project has its own well-defined budget to use, if you want to reduce costs, you will need to limit your objectives or increase the time established, in order to look for less expensive resources.		

	The objectives of a project consist of the business results towards which you work and the activities that must be completed. The objectives must be clearly defined from the beginning of the project, as well as being measurable and achievable. Changing the objectives of a project also means increasing the costs and/or time allocated to the project.		
	At this point let's try to simplify this complexity of activities, with a short list of **recommendations** to follow, which can be useful, especially if you are only just beginning to manage projects at work.		
	The Project Manager has an important role for a project's success. In addition to raising team members' awareness about meeting deadlines, they must have and implement adequate skills to complete the job. In particular:		
		1) They should define the **project scope, objectives and deliverables**. If these elements have been examined and clearly agreed with the customer and with the involvement of all stakeholders and if they manage to always keep them in mind, they can see if the project is going off course in order to keep it in check, thus strengthening both its credibility and, at the same time, the sense of belonging of the team members.	
	2) **Different project activities must be identified and estimated.** This means that they need to prepare the project WBS by involving experts or specialists, who are familiar with the processing criteria and the construction processes of each deliverable. Then analyzing the activities, it is possible to		

	identify the skills needed to be able to implement them, in order to define the organizational structure, preparing the OBS and the RAM. Having the work process clear, it will also be possible to identify and evaluate the material resources, such as plants, vehicles and equipment, necessary to realize the project outputs.		
		3) **Activities and resources must be scheduled**, preparing the Gantt Chart, with evidence of the milestones and project control points, together with the other management documents. Of course, the other aspects linked to costs, or budget, quality, communication, project risks and any external supplies should not be underestimated.	
	4) They should **coordinate the day-to-day work of the project team**, not forgetting to observe the group's behaviour and level of motivation. It is important to be clear and transparent during project meetings and, if something goes wrong, to manage any conflicts, even allocating resources differently or trying to re-distribute their workloads.		
		5). They should **constantly monitor the project**, gathering all the information needed to ascertain if the progress of the work is in line with what was planned. Furthermore, they should check the quality of the deliverables, manage the risks, deal with any problems, make a list of things that could go wrong, speedily set up any necessary corrective actions to minimize the impact on the project. In some cases of misalignment with respect to what was planned, they should also evaluate possibly passing responsibility to management, thus activating the escalation procedure.	

	6) Finally, they should **verify the actual completion of the activities and prepare the final report**. Before closing the project, they need to check whether the customer accepts the work performed or requests any additions, project extensions or the start of new projects. Once the completion of work is formalized, they should make an overall assessment of the project's performance and the resources involved, to be included in the final report.		

1.5 Unit 5_ Professional development, networking & intercultural skills

SUJBJECT	AUDIO IN STUDIO	VOICE OVER	KEYWORDS
The key role of competences for business development			
	The faster and faster, more and more complex, digital and interconnected radical changes in markets have significantly transformed the variables that condition the competitiveness of companies.		
	Globalization, the development of new technologies and the widespread application of ICT solutions in all economic sectors and in all professions have changed and are continuing to change the way of doing business, with decisive impacts on the entire value chain.		
		In fact, the following are changing: • production techniques, increasingly geared to Industry 4.0 paradigms of automation, data usage and analysis, digitalization and product/process specialization •companies' logics of communication, marketing and purchasing	

		•methods to manage networks, alliances and collaborations. Finally, the balance of power between companies and those between businesses and consumers are also changing.	
	Today, the latter play a key role in customizing products and, consequently, contribute to a considerable increase in the variability of consumption.		
	Therefore, in this changed and changing context, it is increasingly necessary for businesses to be able to access the largest number of markets in terms of potential demand, which implies not only substantial investments, but also adequate skills and a high degree of flexibility both of organizations and workers to respond effectively to the changes taking place.		
		In the current global competitive scenario, the traditional form of company organization, characterized by vertical structures, with hierarchical functions and formal command-control mechanisms, increasingly gives way to a business model characterized by more flexible structures, precisely, deverticalized and decentralized. A model, therefore, no longer focused on tasks and functional units, but on horizontal activity flows and the achievement of common objectives.	
LEARNING ORGANIZATION			

	It is no coincidence that in this regard we refer to a **horizontal enterprise**, also known as a **learning organization**, or an organization capable of learning from its mistakes, from its experience, from the competition and from the intelligent use of resources available, an aspect of particular importance especially in environmental contexts that change rapidly and that are crammed with problems and opportunities to be seized.		
LEARNING ORGANIZATION	Being able to rely on an organization that facilitates the exchange of information between people means creating a more conscious workforce, where workers are more likely to accept new ideas, changes and requests for adaptation, increasing the capacity at all levels to produce results, in which they have a real interest.		
		This business model is characterized by: • the centrality of continuous employee training • the organizational sharing of human resources in management processes • the use of bonuses based on team performance • strong focus on contacts with suppliers and customers • measurement of company performance using indicators related to customer satisfaction.	

	In the conceptual model of the learning organization, the boundaries between functions are practically eliminated, since teams include members from different areas. Furthermore, the company's operations are characterized by the adoption of extremely collaborative mechanisms based on information sharing and the circulation of organizational knowledge, but also on a culture that encourages the participation of resources and their adaptability to the internal and external environment.		
	A learning organization is, in fact, a learning-oriented enterprise that aims to raise the performance of its members through extensive and effective forms of learning aiming to: • increase interaction between people, developing constant communications and maintaining a high degree of trust among internal employees, • enhance the ability to interact with markets and other organizations not only through the use of ICT but also through active participation in environments and networks, on an external level		
	This model surpasses the concept of business as a mere economic activity producing goods/services in favour of a broader meaning that recognizes the company as a place of excellence for growth, training and development of human resources.		
	In this model, in fact, human capital represents the critical economic variable on which to focus in order to face the increasingly complex challenges and competition that technological, economic, social and demographic dynamics - to name but a few - continually trigger in the microcosm of business.		
	Therefore, the idea of the company is increasingly asserted as an entity with distributed intelligence and high knowledge intensity, aware that learning,		

	also understood as the accumulation and circulation of information, represents one of the main strategic sources of competitive advantage.		
	The growing importance of this model, in fact, is closely linked to the capacity of **<u>learning organizations</u>** to: • operate quickly, anticipating or responding to changes in the environment or in their market sector • accept cultural diversity in agreements and strategic alliances		LEARNING ORGANIZATION
COMPANY AS A SKILL SET	In the new global competitive scenario, therefore, a **winning company** is one that learns before and more quickly than others and that increasingly identifies itself as **a set of distinctive skills**, rather than as a set of activities.		
		The development of workers' skills is, therefore, a decisive objective for business success, of which training is the strategic competitive lever. The concept of **competence** plays a crucial role in strategies and plans for human resource professional development.	
		But what is meant by competence?	
		Competence is acquired through a long course of personal development, to which family, school, social environments and the working sphere contribute, whose stages consist in the progressive acquisition of knowledge and skills, necessary requisites for an individual to be competent in something.	

KNOWLEDGE = KNOW THAT	**Knowledge** is the result of the acquisition, through learning, of principles, rules, theories, procedures and notions related to codified fields.		
ABILITY = KNOW HOW	**Abilities** are about **know-how,** that is knowing how to apply knowledge to complete tasks.		
	Instead, we can define **competence** as the proven ability to use a structured set of knowledge, skills and personal, social and/or methodological abilities, in work, study or professional and personal development situations.		
	Competence, however, does not correspond to the mere possession of the knowledge and skills to be used, but to their use in practice.		
COMPETENCE = KNOW HOW TO ACT	This refers to the **know-how** each of us has, or rather to knowing what to do, when and why, even in new and unforeseen situations.		
	And it is precisely because of this specific connotation that competences must be constantly sought, discovered, preserved, updated, stimulated and developed.		
	The result is the **close link between skills and continuous training** because, in a world in constant transformation like the current one, skills are not acquired "once and for all", but represent a perishable resource that risks quickly becoming obsolete.		
		Companies, on the other hand, increasingly need to use professional skills capable of: - intervening in complex contexts - mastering unpredictable situations - dealing with new and often undefined problems.	
	Furthermore, new digital technologies are influencing both products/services and the operating methods to implement them, thus triggering very rapid **transformation processes**		TRANSFORMATION PROCESSES

	that are affecting the global economy, such as service transformation, digital transformation, the sharing economy, to name but a few.		
	These transformations are changing the economic-productive scenario, modifying tasks and, therefore, people's needs and those of companies for skills.		
	We are experiencing a radical paradigm shift in the way we do business. Not only have the traditional Business 2 Business models evolved, becoming very similar to the Business 2 Consumer models, but more and more companies are working with Business 2 Person (B2P) models, in which the customer is interested only in using and not possessing the product itself.		
	It, therefore, becomes essential for companies to be able to rely on resources who possess relational skills suitable for establishing closer and more lasting relationships with customers. In other words, it is no longer sufficient to possess only technical skills, but you also need to develop more soft skills in order to acquire a more dynamic attitude to change and fully exploit the advantages deriving from new digital technologies		

		Furthermore, there is an increasing need for companies to include **<u>new profiles</u>**, such as the **chief digital officer**, who has the task of supervising and coordinating all the functions of the company that have to do with the world of digital media, from social networks to mobile devices, from e-commerce platforms to internal information systems, or the **chief innovation officer,** who has the task of proposing innovative models for the business of the company, to better exploit the digital revolution, or the **chief information security officer**, who is responsible for protecting the security of the company's information and systems.	NEW PROFILES
	It, therefore, seems clear how the transformations underway are revolutionizing the work environment and, therefore, also require a transformation of sensitivity, attitudes and behaviour, an adaptation of work practices which is by no means superficial. A 360-degree change in the company, where new skills play a crucial role that make the difference between success and failure.		
	It is no coincidence that today, transversal **skills** play an increasingly key role as regards company performance.		

SUJBJECT	AUDIO IN STUDIO	VOICE OVER	KEYWORDS
Elements that will be indicated to clarify the flow of the text and the topics covered and that can also be shown on screen in the form of sensitive words	**Text that will be recited by the character in a 3D virtual environment (trainer)**	**Text that will be recited by the characters as users scroll through the elements in Motion Graphic**	**Keywords that will appear on the screen through which the user can interact with a simple click, accessing the in-depth materials provided for consultation**
TOPIC 2 SOFT SKILLS AND LIFELONG LEARNING AS KEY TO INNOVATION **LEARNING OUTCOMES:** **The students will acquire knowledge of the importance of transversal skills and the foundations needed to develop their professional skills**			
TRANSVERSAL SKILLS	**Transversal or behavioural skills** don't refer to a specific job, but, on the contrary, are considered transferable from one occupation to another. These skills, in fact, concern the general ability of an individual to operate effectively in any profession.		
SOFT Vs. HARD SKILLS		In the world of work they are also known as **soft skills**, to distinguish them from technical ones, the so called	

		hard skills, where in these cases the word skill is generally considered a synonym for competence.	
HARD SKILLS	Hard skills represent the set of knowledge and abilities that a person must possess in order to perform his/her job role, such as mastery of general accounting for an administrative manager or the ability to make a piece of wooden furniture for an operator in the wood and furnishings sector. These skills are easily quantifiable and measurable, for example with an objective test.		
SOFT SKILLS	Soft skills, on the other hand, characterize a person's way of being, representing the sum of knowledge, skills, but also personal qualities, attitudes and motivations used by a person in different operational situations. Because of their complex connotation, soft skills, unlike hard skills, are difficult to quantify.		

What we do **+** **How we do it**	In a nutshell, we could say that while hard skills represent **what** we do, soft skills represent **how** we do it.		
	Recent research conducted by major personnel selection companies and Universities, but also numerous surveys on the demand for training from the world of work, highlight how companies are increasingly interested in and sensitive to the issue of transversal skills. They now recognize them as being of fundamental importance and role, regardless of the level and responsibility of the worker, from "executive" figures to "operational" profiles.		
	Technical skills and strong motivation are no longer enough to guarantee satisfactory professional growth and, indeed, are considered a pre-requisite.		

	To make a difference and to give added value to a person's profile, instead, it is more and more the case that soft skills in many occupations, especially if at high level, are those that discriminate an average performance from an exceptional one.		
	In a world where technological innovation continually creates new business opportunities, requiring companies to update organizational models and intervene on staff performance, soft skills are a decisive factor to accompany change and innovation processes.		
	In fact, these skills allow you to exploit the potential offered by the interaction between 4.0 technologies, production processes and changing corporate roles.		
		Practically speaking, what are soft skills?	

		According to a European study, they can be divided into five macro-categories: - personal efficacy skills - interpersonal and service skills - skills related to impact and influence - realization-oriented skills - cognitive skills. Let's look at them in more detail.	
PERSONAL EFFICACY SKILLS		1) **Personal efficacy skills** reflect some aspects of an individual's maturity with respect to themselves, others and their work. They are linked to a person's ability to continue to perform even under pressure or in difficult environmental conditions. They are: - self-control - resistance to stress - self-confidence - flexibility - creativity - lifelong learning.	
INTERPERSONAL AND SERVICE SKILLS		2) **Interpersonal and service skills** are those that allow people to understand the needs of others and to cooperate with them. These skills include: - interpersonal understanding - customer orientation - cooperation with others - communication Communication skills are actually also linked to all the other clusters, but they are of fundamental importance to create relationships.	

SKILLS RELATED TO IMPACT AND INFLUENCE		3) **Impact and influence skills** reflect an individual's ability to exert influence or have an impact on others. They also include: - organizational awareness - leadership - development of others. Managerial skills are considered a subset of this group.	
REALIZATION-ORIENTED SKILLS		4)**Realization-oriented skills** include: - goal-orientation (or success orientation) - efficiency - attention to order, quality and accuracy - ability to take initiative, adopting a proactive approach - problem solving - planning and organization - information search and management - autonomy.	
COGNITIVE SKILLS		5) Finally, **cognitive skills** refer to the processes and methods through which an individual thinks, analyses, reasons, plans, as well as his/her critical thinking skills, to identify problems and situations, to formulate explanations and hypotheses, to elaborate concepts.	
	These are just some of the many soft skills that an individual can		

	have in his/her personal and work life. In reality, there are many soft skills. More than 50 overall to be precise.		
	The global labour market is destined to be upset by a profound transformation that will take place in the coming years. While on the one hand the new professions of data analysts, data scientists, software and application developers, e-commerce and social media specialists require a good deal of hard skills. On the other hand, there are emerging professions that instead valorise transversal skills to the most. These include, for example, customer service employees, sales and marketing professionals, trainers, innovation managers and all those professions that place greater emphasis on personnel		

	management, corporate culture and organization.		
THE SOFT SKILLS OF THE FUTURE	In this sense, as many as **10 transversal skills** have been identified that it will be useful to keep in your toolbox, because they are considered fundamental to face the new challenges of the world of work, as well as in life in general.		
		These skills are: 1. cognitive flexibility 2. negotiation 3. service orientation 4. ability to judge and make decisions 5. emotional intelligence 6. ability to coordinate with others 7. people management 8. creativity 9. critical thinking 10. problem solving in complex contexts Let's see what is meant by each of them.	SKILLS
Cognitive flexibility		**Cognitive flexibility** This is one of the executive functions, or the ability to juggle and move between different systems or methods of thinking. It comes into play when you need to respond to unusual	

		situations, allowing different behaviours to be implemented based on changing rules or the type of task. Specifically, this soft skill implies agility, adaptation and ability to change our responses and our behaviour in contexts and situations different from those we are used to.	
Negotiation		**Negotiation** This is a strategic skill, both at a professional/corporate and at personal level, essential for dealing with employees and especially with customers. Negotiation is a conversation that aims to reach an advantageous agreement for oneself and/or the company and one's interlocutor. To do so, two elements are essential: listening and curiosity, that is opening up to the other and asking questions to gather useful information to propose the best possible solution for both parties. In this sense, it is a competence that cannot only rely on instinct, common sense and experience, but requires veritable, specific studies.	
Service orientation	**Service orientation** This is a predisposition for being useful, caring, attentive and collaborative, or the ability to identify, recognize, analyse and anticipate the needs of		

	people to best satisfy them. This ability is vital in an increasingly competitive market, where it is necessary to intercept and immediately understand the needs of consumers, and, therefore, of possible customers, to create tailored offers with products/services useful to meet their needs.		
Ability to judge and make decisions		**Ability to judge and make decisions** This is a vital skill especially for leaders. It is important to know how to share and listen, but at the right time you also need to know how to decide about the direction you want to take. And in times of crisis it is even more difficult but necessary.	
	In the information age, which provides us with an enormous amount of data, this skill plays an important role, above all in order to establish business strategies and make important decisions for the company or one's profession.		

	In order not to get lost in numbers and in various kinds information, you need to understand how to best use data. In general, to acquire greater decision-making capacity, you need to focus on a goal, an activity or a problem to be solved, setting a deadline date, exploiting the opportunities and gradually eliminating the obstacles that can hinder or undermine the path to obtain the result.		
Emotional Intelligence	**Emotional Intelligence** This is the ability to recognize, understand and consciously manage one's emotions and those of others. Whether you are an intern, an executive or a leader, choosing the right time and attitude can really make a difference in any professional environment. This is one of the most transversal skills that		**Emotional Intelligence**

	allows you to adopt the most suitable behaviours and, therefore, to facilitate the creation of an optimal work environment, always obtaining positive results.		
Ability to coordinate with others		**Ability to coordinate with others** Teamwork has gained increasing importance in organizational contexts because interaction between colleagues greatly affects business productivity. Working in a team involves: - knowing how to organize one's work - knowing how to set priorities and changing them if necessary - knowing how to fit into a workflow, but also - having strong communication skills and the ability to work with different personalities.	
People management	**People management** Despite the development of automation and artificial intelligence, people will continue to represent the most important resource for companies. At the same time, however, it will become increasingly important to manage them,		

	motivate them, valorise them and, when necessary, also tell them off! Knowing how to manage people is clearly a crucial soft skill for managers, leaders and human resource managers and requires excellent communication skills, decision-making, empathy and emotional intelligence to give stimulating feedback, delegate tasks and build solid relationships with the team.		
Creativity		Creativity If a person is able to combine the information available to process new ideas and present something new, then it means that he/she is a creative person. The ability to innovate is the skill that really makes the difference in a context full of changes and in constant evolution. It is a skill that, over the years, and with routine you risk losing and to develop it you have to be curious and try your hand at expressing yourself. Contrarily to problem solving, which occurs following a problem, this skill serves instead to constantly improve	

		objects and procedures, even when everything is working very well.	
Critical thinking		**Critical thinking** This is a thought characterized by mental processes of discernment, analysis and evaluation. Critical thinking allows us to observe situations or problems from different angles, otherwise objective or based solely on our previous knowledge, and to assess how much each analysis could satisfy our needs. Facts are facts, but how they are interpreted can vary.	
		It is, therefore, the ability to be open minded, to not see things only as black or white, recognizing more complex links and elements than the obvious ones. It, therefore, means being honest and self-aware, recognizing one's own preconceptions, prejudices and points of view, but also knowing how to use logic and reasoning to identify all possible solutions to a problem and all the pros and cons of each, obviously in the shortest possible time.	
		Problem solving in complex contests In the current economic context, which requires a high capacity for flexibility, adaptation and interpretation of new situations, being able to unravel complex situations and quickly identify solutions is fundamental.	

		Time and experience are two important factors to acquire this skill, but it can also be developed by learning different problem solving models and techniques to identify priorities and critical issues to then identify the best possible solutions to solve problems.	
	In addition to the soft skills described, other important transversal skills must also be taken into consideration. We refer in particular to the **ability to communicate**, which is not only important for having an adequate command of language, to be able to explain each concept in a clear and simple way during a creative debate, but also for the ability to listen carefully and to effectively exchange views with one's interlocutors, comparing ideas and evaluating different possibilities, writing without making mistakes and having a broad and suitable vocabulary for the context in which one works.		

	The ability to communicate is valuable even when you are called to act as a speaker at a convention or to present project data and results to colleagues, superiors or potential investors. In many of these cases, not only is it essential to know how to present clearly and simply, but you also need to know how to create concise, aesthetically appealing presentations capable of capturing the interlocutor's attention. Furthermore, you need to "have self-confidence", showing confidence when presenting your theses, know how to receive feedback and interpret signals from interlocutors, to be able to anticipate any doubts or differences of opinion.		
	At the same time, **today** you should not underestimate the		

	relevance of being **able to work in teams** and establishing **good relationships with colleagues**. In order to be able to avoid problems and conflicts in the workplace, it is fundamental, in fact, to manage **interpersonal relationships** to the utmost. This means working with others to achieve the set goals, reacting positively to work pressures, remaining focused on priorities and avoiding transferring anxiety to colleagues, maintaining **self-confidence,** or awareness of one's value and abilities.		
	We should add that today, almost all workplaces also require the ability to use computers and/or other devices available. This implies knowledge of different IT packages, both basic		

	and advanced. This condition is considered increasingly important by companies to know how to acquire, organize and reformulate data and knowledge from different sources, to reach a defined objective.		
	Managing unpredictable situations or adapting to diverse changes in the reference market implies an adequate **propensity for flexibility**, one of the professional requirements that companies seek the most. Moreover, in the era of Google and information technology, that allows you to have all the answers you need simply at just a click away, you need to **be able to search**, that is to be able to type a question into a terminal to find an answer, as well as to carry out structured research, with a critical		

	sense and desire to investigate.		
	However, organizing, planning, developing a project and presenting it in time, although it may seem obvious, implies the involvement of rigorous people who can identify priorities, are attentive to what needs to be done, and take care of every detail useful to reach the final result, **respecting deadlines**. Furthermore, you should not forget that every company, large or small, always tries to reduce expenses or cut unnecessary spending. For this reason, it is essential to be **able to optimize resources**, making the best use of those you have available, planning an adequate strategy (effective and efficient) to achieve your intended aim.		

	Contrary to what people believed in the past, every worker is not just a pawn on the company chessboard, but a person with feelings and sensations that can be stimulated and motivated to work better, thus seeking, with the right ambition, not just to fulfil their duties, taking on the right responsibilities, but also to motivate and stimulate others to practically achieving the expected result, while creating consensus and trust, to be able to achieve new goals and respond to new and more stimulating challenges.		
	Acquiring, developing or reinforcing these soft skills represents one of the best investments that can be made, at individual or company level, with a view to personal and professional development.		
	It may seem a paradox, but in a world that is increasingly moving towards automated systems		

	and the use of artificial intelligence, soft skills have become increasingly important because they represent exactly the kind of skills that robots cannot replicate.		
	Of course, like hard skills, and perhaps even more so because of their intrinsic nature, you need to constantly refine your transversal skills too. The acquisition and management of these types of skills, in fact, take place throughout your life and they clearly change. Achieving a certain degree of skill can be adequate up to the occurrence of critical events, such as a problem that you've never faced before or such as having to manage a team for the first time, which requires a greater level of the previously achieved competence.		
Skill - lifelong learning combination	In this sense, the **combination of skills** (both hard and soft)		

	and lifelong learning is greater and more important, representing the main lever of competitive development.		
LIFELONG LEARNING	**But what exactly does lifelong learning mean?** **Lifelong learning** is a "personal" approach that aims to modify or expand your skillset and knowledge, as they are no longer adequate as regards new social (i.e. self-realization and inclusion) and professional needs.		
	The term lifelong learning means a continuous process of self-orientation and self-education throughout your life, where training is "personalized" to the needs of the individual to try to improve his/her overall quality of life. People no longer talk about acquiring knowledge that is valid for life, but about continuing learning in		

	line with the changes in society that today are rapid and continuous.		
	In lifelong learning, unlike traditional learning, the individual is responsible for what and how he/she learns, the situation and the context in which he/she chooses to do it, a condition that requires the ability to manage one's knowledge in a critical way		
	This is a process that originates in what today is called a learning or knowledge society, in which learning is the fundamental condition for an individual to be able to live and keep up with its changes, looking for the training opportunities best suited to his/her objectives and needs		
		What are the benefits of being a lifelong learner?	
		Continuous training, doing courses and going to seminars, following webinars or simply reading a book in your "spare moments", such as taking a ride on the tube, allows you to increase	

		your knowledge and opportunities for professional development, as well as getting a job promotion. Lifelong learning increases the ability to use knowledge in different and meaningful ways, not only in the professional sphere, thus helping to see and appreciate new opportunities. Keeping one’s mind trained and nurturing one’s culture, will make people more creative and innovative and will improve memory and concentration. Lifelong learning is also useful in developing social skills. Indeed, learning stimulates sharing and social involvement, coming into contact with others to learn from them and with them. This offers many **opportunities to socialize** and expand one's knowledge. This means more opportunities **for networking, getting to know interesting people and finding new professional collaborations.** By learning to socialize, you’ll be able to **develop communication and organizational skills**, which are very useful when working in a team.	

SUJBJECT	AUDIO IN STUDIO	VOICE OVER	KEYWORDS
TOPIC 3 **HRD (Human Resources Development) for new business models and markets + Upskilling needs in the digital era +** **How can you offer useful training and career development for your employees?** **LEARNING OUTCOME:** **The students will be able to support company management in ideating an efficacious staff training and skill development plan**			
	The introduction of new digital technologies is transforming the world of work and outlining the changes and challenges that companies in all sectors must be able to seize and meet.		
/ BUSINESS MODELS AND MARKETS	Digital Transformation is opening up new possibilities, new approaches, new services and new business models, revolutionizing production methods, but also the timing and quality of processes, leading to the creation of products and services that are increasingly tailored to the needs of the end customer.		
	The opportunities arising from digital transformation processes and innovation such as the cloud, big data, open data, the Internet of Things (Internet of Things), artificial intelligence (AI), 3D printing, cloud computing, etc. may not be		

	easily seized by different companies, especially small ones.		
	Companies must equip themselves not only with tools, but above all with resources with professional skills that allow them to innovate quickly and to manage change in such a way that it is not only based on intuitions or feelings.		
	With digital transformation, workers represent a strategic success factor for companies, that cannot refrain from focusing on their development and professional growth, supporting the evolution of the skills needed to guarantee the future success of the organization and the sustainability of company results.		
	Digital transformation paths represent a real opportunity to place the concept of human resources that must be attracted, engaged, retained, trained and valorised, at the centre of business strategies.		
PEOPLE STRATEGY	•	An effective People strategy allows the company to: • improve people's well-being and satisfaction, by valorising skills • seize digital transformation opportunities to rethink the corporate business model • promote long-term business sustainability • improve company profitability and productivity by reducing resources, time and costs	
		To be effective, the people strategy must be:	

		• integrated with the Business Strategy where the human factor is the key intangible lever of business objectives, determining activities, results, times and performance • focused and differentiated for the relevant population segments in the corporate value chain; therefore, the management levers are calibrated according to the specific needs of the company groupings of vocational profiles with a view to mutual exchange of value • not delegable, since the people in charge are personally involved and are responsible for it	
		Thus, defining the People Strategy means to: 1. direct the transformation of the professionalism and digital skills needed in every line of business 2. define a digital development and training plan capable of guiding organizational models and leadership styles 3. activate people review processes to assess skills and performance 4. support the adoption of new digital strategies for people management which is motivating and merit-based	
DIGITAL CAPABILITIES STRATEGY	Each company should build its own Digital Capabilities Strategy, aligning the human capital attraction, recruitment and development plan to the perceived needs of new digital skills and professions necessary to support the full realization of its strategic and industrial plan.		

	Once the framework of distinctive digital competences has been defined, the gaps to be filled must be identified and the company has to understand what competences it has internally and which ones instead it is appropriate to attract from the outside.		
	The evaluation of the digital Mismatch involves the verification of the impact of digitization on the company business model and on the strategic objectives that it intends to achieve in order to remain competitive in the reference market.		
	Mapping and analysing the new digital skills and the roles necessary to support the corporate strategy entails a rethinking of the working models in a flexible way to increase the responsibility and autonomy of employees in achieving set objectives.		
DIGITAL & CREATIVE READINESS ASSESSMENT	An effective response to this need is the creation of a Digital & Creative Readiness Assessment through which the company can extract a "thermal map" of the digital attitude of the different organizational units.		
		Digital & Creative Readiness Assessment allows you to: ● assess the **digital skills** of the organization's staff; ● assess the **creative inclination;** ● identify the people with the greatest **propensity for digital transformation** and the introduction of **new languages** and innovative, digital solutions, which can act as pivots of thought and action in the organization; ● increase **staff engagement** with respect to digital innovation and internal entrepreneurship.	

	The Digital & Creative Readiness Assessment, therefore, represents a key phase of the people strategy based on careful planning of the initiative that involves all functions, management and the entire corporate community.		
	In fact, the assessment has the dual objective of involving all employees in raising awareness of digital issues and at the same time, creating an initial clustering of digital ready employees, or those willing to use technologies and share information.		
	From a methodological point of view, the Digital and Creative Readiness Assessment involves the analysis of work processes to identify the core activities that make up the sequence and identify the expected digital skills.		
		The first phase aims to identify core business work processes, break them down into activities and outputs and finally to identify the vocational profiles employed to realize the individual processes	
		The second phase involves the mapping and analysis of digital skills. In detail one will: - identify the digital skills human resources actually have in relation to the individual activities of a process - identify the expected digital skills in order to achieve the results assigned to the individual activities of the process - identify digital skills standards	

UPSKILLING NEEDS IN THE DIGITAL ERA		The third phase involves the assessment of the skills gap, by realizing a comparative analysis between the digital skills actually possessed and the standard expected	
	By analytically diagnosing digital skills gaps and the main points for improvement, the human resources development plan must be prepared, in a consistent way to business strategies, in order to maximize the effectiveness of the people strategy.		
	In other words, the human resources development plan is an organic program of initiatives aimed at strengthening the digital skills of employees already working in the company and at identifying the company functions that require the introduction of new roles and digital skills coming from outside.		
How to offer useful training and career development	In this sense, training or professional refreshment is a critical factor for the success and continuity of the business in the innovation and digital transformation phase.		
	In a context where technology is rapidly evolving, the challenge for companies is to support the qualification and professionalization of the human resources necessary for company development, helping to reinforce their adaptability in a learning path that lasts for their whole life.		
	Having an effective People Strategy, in fact, allows people to be guided towards change by achieving greater performance.		
	The objective is to provide the tools and skills to face the challenges of digital transformation with a positive impact and effects on the atmosphere, on cohesion, on motivation and on people's involvement in corporate goals.		

	Therefore, there is a need to combine technical, IT and digital skills with decisive behavioural qualities to transform technical knowledge into excellent, professional performance.		
	Companies, especially those operating in technologically advanced and highly competitive business sectors, need mechanisms that support self-managed and virtual learning at all times, of an adaptive and flexible nature that can be customized to different types of needs.		
	Training methods are also evolving digitally. Traditional models such as the classroom, training lab, outdoor training, simulations are being revolutionized by flexible, learning ecosystems with contents adapted to specific needs, based on an approach that favours the person's ability to learn to learn.		
	Through the use of new technologies, training is increasingly carried out online, activating e-learning systems via the web, both in real time and remotely, with the development of open-source learning environments and the creation of virtual classes that are also intercultural, with constant and fast updating of content.		
		Some examples of new teaching models focused on the use of new technologies are: - **learning pills**, usable on the web or from mobile devices, focused on specific themes that are highly contextualized, simple and immediate, able to involve the user through by reproducing the organizational situation. - **distance-learning or e-learning 2.0**, which foresees the centrality of the learner, his/her freedom in	

		identifying resources and valorising opportunities for informal and non-formal learning This model uses tools for **interpersonal communication**, such as chats and audio/video conferences to **share experience**, such as forums and social networking environments, to **build knowledge**, through blogs and wikis, and finally to **collect text and multimedia resources**, such as videos, photos, slides and e-books - **mobile learning** which, with the aid of streamlined, easy-to-consult videos, tutorials or documents, facilitates distance learning. With mobile learning, learning becomes potentially ubiquitous, as it is no longer tied to a specific place; consequently, many periods of time in daily life, such as travel and waiting times, can become a potential learning moment. - **Gamification**, i.e. learning from a game that stimulates engagement, **involvement**, learning and **improves** the participants' **problem-solving skills**. nification is an extremely effective tool capable of conveying messages of various types, depending on needs, and of inducing active behaviours, allowing the **achievement of specific objectives**, such as the **improvement of customer management**, the **consolidation of loyalty to a**	

		brand or the **improvement in overall employee performance**. - <u>**Adaptive learning**</u> that allows you to adapt learning to the interests of students, using feedback and data offered by the user both through the compilation of questionnaires or surveys, and through the monitoring of the activities carried out on PCs, tablets or smartphones. The aim is to design the best course based on the specific needs or interests of individuals.	
	Thanks to adaptive learning solutions, the e-learning platform is able to realize "learning analytics", a process to gather, measure and analyse the data of the individual user, in order to offer a mixture of educational material built according to his/her learning needs. Today, adaptive learning is experiencing increasing success thanks to machine learning applications; most of these digital solutions are aimed at the study and massive collection of data on the degree of participation and interest in the lesson and on the ability of the class or individual to learn certain topics.		
	Data that can be integrated with the tracking of digital activities of the user, such as groups followed on social networks, videos displayed on YouTube, Google searches, participation in Webinars or Virtual Classes. In this way, the adaptive learning builds "tailor-made" study paths, favouring learning and maximizing learner involvement. The tracking data could, in fact, advise hiding some course contents, because they have already been		

	acquired by the learner, in order to avoid boredom or the feeling of already having seen it, or they could add special contents, suitable for those who already have the knowledge and skills to appreciate them.		
	Moreover, the path can be modified by the adaptive learning, suggesting the user should recuperate lessons missed or not do those in which he/she demonstrates already having sufficient skills, but also suggesting the adoption of micro learning, mobile learning or content gamification. All of this is increasingly aimed at improving the human experience and the centrality of the learner's choices, which are increasingly necessary for the success of an online training course.		
	All these teaching tools and models, together with the organization of activities, such as seminars, workshops, innovation labs, corporate academies and virtual communities that use social media to facilitate communication and collaboration between resources, favour Digital Culture Empowerment, that is a cultural change that involves the organization and makes it a participant in digital innovation and transformation processes.		
	Digital Transformation cannot be expressed only as regards technological aspects, but must be accompanied by a change in the corporate culture in directing collaboration and innovation, capable of supporting and promoting it. A shared, receptive and versatile corporate culture is the ideal, fertile ground for innovation to take root and truly become structural.		
		Artificial Intelligence, Internet of Things, Big Data Analytics and Cloud Computing are the most relevant technological trends of the Digital	

		Transformation that is accelerating change and facilitating people in their activities. The main changes include: - digitized Offices, with all documents being digitised and recorded online on Cloud platforms; - Business Intelligence Tools, to collect, classify and process fundamental data to define business strategies and models; - Interconnection between employees, thanks to new communication technologies and collaboration tools that allow the continuous exchange of information and sharing of data even between people who are physically distant or located in different workplaces; - diffusion of smart working, with the absence of time or space constraints for employees in view of greater autonomy, flexibility and responsibility for achieving results - the introduction of artificial intelligence technologies that have made it possible to automate repetitive processes and tasks, with the possibility of valorising the skills and work of the resources used in other activities with higher strategic value for the company.	
	Digital technologies can bring added value to business models, but the corporate culture must be able to involve all employees in change.		

	Digital transformation, therefore, requires a "digital" culture capable of providing conduct guidelines that employees should follow to act appropriately in their individual behaviour and in interactions with others, both internally and externally to the organization, to adopt the best choices to achieve the objectives set and thus, implement the company's global strategy.		
	Often employees and heads of companies, especially those of small and medium size, fail to change their approach and prefer to remain closed within a hierarchical and fragmented corporate structure, where they only limit themselves to performing tasks and where nobody is able to make decisions independently. But if the company really wants digital transformation, it must rethink and restructure itself in order to keep up with the competition and fully satisfy its customers' needs.		
	For an organization, having a digital reputation is a sort of "magnet" for talented people. Digitally talented individuals are generally attracted to companies that not only have started digital transformation processes, but have also adopted a digital culture capable of promoting continuous interaction. This discourages people from preserving the status quo out of habit or caution and encourages the creation of collaborative environments, based on greater autonomy, where decision-making is widespread in the organization. Employees not only receive explicit instructions on how to do their work, but also have the opportunity to innovate, to be creative, to fail and, above all, to learn from their failures.		

SUJBJECT	AUDIO IN STUDIO	VOICE OVER	KEYWORDS
TOPIC: HOW DOES BUSINESS NETWORKING WORK? **LEARNING OUTCOME:** **Students become resourceful communicators in networking relations**			
	Business success and sustainability don't only depend on the ability of a company to increase the performance of its resources, developing distinctive hard and soft skills to manage change, but also on its ability to interact with markets and other organizations.		
	Knowledge and relationships are, in fact, the two main assets of a winning business strategy, to achieve that competitive advantage that leads customers to choose the products/services of a company as opposed to those of its direct competitors.		
	In a super competitive environment undergoing rapid and continuous change and characterized by the birth of new business models due to the development and use of new technologies, the logic of value creation, understood as satisfaction of specific needs, cannot only be limited to the positioning of the company and its fixed set of activities along the value chain.		
VALUE CHAIN		In the value chain model, the company is seen as a process that generates value, starting from a series of inputs to obtain the product and final service to be offered to customers.	

		A company is a system made up of subsystems that, by consuming time, money, materials and labour, generate value for the customer and the company itself. With this model, the disaggregation of activities allows you to understand strengths and which areas need to be improved. If a company manages to strategically implement significant activities better than the competition and in an economical and efficient way, then it will manage to create a competitive advantage.	
VALUE NETWORK		The value chain model which is heavily focused on costs and efficiency, doesn't take into account the context and the market scenario that have changed in recent years due to the following phenomena: - the **competition** has increased and has expanded globally. - the **customer is always more informed, curious and, therefore, potentially unfaithful** - the **dynamism of the market** reduces the time windows of validity of the business. In the past, a company that gained leadership or a good market share, could think of maintaining it for decades. Today, a business (especially in the digital world) is set up, achieves success and then	

		fails (or seriously resizes) in a few years. - the arrival of the **Internet** and the digital and interconnected **economy** opens up many new opportunities. Today, the Value Network model lends itself more to creating value for the customer and for the company. Value creation takes place within a network of parties that create (and co-create) value together.	
		In this model, the successful company not only adds value, but reinvents it in its reference sector/system, working together with different economic actors, such as suppliers, commercial partners, allies, customers, to co-produce value.	
	In other words, today, the competitive advantage of a company is no longer only represented by product turnover, but by the number and quality of relationships established with its internal and external stakeholders, which together with the company and on the basis of each one's strategic skills, creates and co-creates value.		
	The effectiveness of the Value Network model depends on the ability to also aggregate the best skills external to the company. In this perspective, not only does the "supplier", who becomes a partner, but the customer also plays a fundamental role in creating value, thanks to dialogue		

	with the company to increase the value of products and services.		
	Today, the communities between consumers and between consumers and companies are the perfect place for co-creation, which forces the marketing function to change its mission from a centric company to a centric customer. In this sense, the following become key factors to be able to take advantage of co-creation: • the creation of a customer-company interaction system on areas of common interest • transparency in interaction • access to useful information, to understand emerging needs, problems to be solved and positive and negative experiences.		
	In the Value Network model, the customer is always at the centre of attention and all the interaction tools available today must be exploited to better understand the customer, monitor his/her needs and experiences to be able to address specific profiles. In the digital age, segmentation and profiling are fundamental as the customer is more demanding and informed and wants a product/service that perfectly meets his/her needs. Profiling capacity is certainly a key competence in new business models, which follows the entire customer lifecycle.		
	Once all the relationship and interaction channels have been activated (including co-creation) and you have increased your knowledge of your customer with profiling, you need to use everything to construct the perfect offer for your target. The offer must be dynamic and the company must quickly read the market by offering the correct products		

	and services. The speed and relevance with which it is done are the basis of the new value network model.		
	In this new scenario, where relational heritage is of crucial importance, business networking is an essential activity, on which the existence and development of a company increasingly depends. *But what is **business networking**?*		
business networking		This expression refers to the processes through which a company creates and governs over time, relationships of interaction and exchange, based on esteem and trust, with other parties, in an organized and conscious way, so as to develop new and wider business opportunities.	
reciprocity	The ultimate goal of business networking, in fact, is to make your business known as much as possible and to turn potential customers into customers. In this sense, it is important that the relationships established thanks to business networking activities are based, as well as on esteem and trust, also on the principle of **reciprocity**, to enrich all those who have relationships through "giving and receiving" information, skills, ideas, tips, contacts, which, in turn, allow you to generate other contacts and relationships, in a dynamic process useful for business development.		
advantages of business networking	In fact, there are diverse **advantages of business networking.**		
Meet potential customers and generate referrals	The first and most obvious is the possibility to **meet potential customers and generate referrals,** on which to leverage to increase your customer base,		

	through the use of ICT and active participation in environments and networks.		
word of mouth - WOM	The creation of a network of knowledge and business contacts, capable of producing references, can be traced back to the typical dynamics of **word of mouth (WOM)**, which has always been the basis of the success of companies, professionals and entrepreneurs.		
	Word of mouth, or the exchange of ideas, opinions, news, information, updates that takes place between two or more people and the relative diffusion outside the initial circle, represents one of the most effective forms of marketing. As in traditional word of mouth, also in business contexts, the higher the reputation of the person, the more effective and authoritative his/her opinion on the company or the product/service he/she is talking about.		
	The advent of the Internet has changed and improved some practices of diffusion of word of mouth, leading to an acceleration of the phenomenon, without, however, distorting the basic rules. Moreover, increasing competition and the presence of multiple operators offering similar products and services have made it essential for potential customers to raise barriers and filters aimed at selecting only the really serious and professional operators. Often these filters are based on trust, previous knowledge and above all on the fact that someone has obtained references on the potential supplier.		
	Only in this apparently simple and obvious way, is the company not forced to have to break the barrier of mistrust that exists between its products/services and the customer or the final consumer.		

Referral Marketing	Today, this process finds a powerful ally in a business tool known as **Referral Marketing**. Referral Marketing is, in fact, based on "word of mouth", with the difference that it is a traceable process, both online and offline, which must be planned, managed and monitored to diffuse the corporate brand without investing in advertising, but simply by leveraging existing users. Referral Marketing, therefore, is a type of marketing aimed at attracting new customers by creating relationships that can be transformed into a business flows thanks to the references of trusted people.		
	Today, we are constantly seeing cases of referral marketing techniques, especially online. As part of **B2C relationships**, an example of word-of-mouth made by final customers is that of Airbnb, a well-known hosting platform that allows travellers to rent accommodation for short periods of time.		
		This platform suggests to its members to invite other friends to try a service in exchange for a discount. In this way everybody gains something: - the person invited receives a discount as a welcome bonus - whoever made the invitation receives a discount of the same value once the friend has registered - the platform gets a new customer at no cost.	

BUSINESS NETWORKING OPPORTUNITIES		In **B2B relationships**, word of mouth and referrals are also fundamental to identify **new opportunities** for: • partnerships • strategic alliances • joint ventures with other companies able to present new potential customers or expand their business.	**NEW OPPORTUNITIES**
co-opetition	In addition to these results of business networking activities, there are also forms of collaboration between competitors, in a **co-opetition** perspective (collaboration + competition). With this expression, we refer in fact to a collaborative-competitive strategy between two or more competing companies, which jointly cooperate to carry out one or more production phases of a specific good and/or service, with particular reference to the research and development phase.		
	In this way, they share resources and mutual skills, reducing research and development costs. Once the output foreseen by the collaboration activity has been realized, the companies continue separately, differentiating the product by functionality, distribution strategy, accessory services, price and marketing according to the target audience, going back to wearing their "competitor" clothes in the eyes of consumers.		
	It is clear that the fundamental assumptions of co-opetition agreements are mutual trust and esteem between the parties, assumptions that, in the vast majority of cases, are the result of an understanding and structured business networking activity.		

	New contacts, referrals and new business opportunities are just some of the advantages of business networking.		
		To these you can include the possibility of: • **obtaining visibility**, "hitting" the right people • **staying updated** on general market conditions and trends in your sector • **finding solutions to problems** or business needs through the network • **sharing knowledge and experience**, capitalizing on that of others, especially before investing in something new • **increasing your confidence and boosting your morale**, especially in the initial stages of a new business, thanks to meeting positive and optimistic people.	
	But, how do you actually do business networking? There are two types of Business Networking depending on the way participants interact: 1. **online business networking** **2. face-to-face business networking.**		
	The first type has established itself thanks to the diffusion of network technologies that have certainly brought great added value to the management and development of human relationships, allowing people to		

	even get in touch with distant realities, in an increasingly interconnected world.		
ONLINE BUSINESS NETWORKING		The expression online business networking refers, in particular, to relationships created thanks to the use of: • **Social Networks and Online Communities**, such as LinkedIn, Twitter, Viadeo and in some ways, even Facebook groups, which allow people to get in touch and create relationships in various ways, such as chatting, direct messages, content sharing, and so on • **Vertical social networking platforms**, i.e. with a strong focus on specific issues • **Blogs and corporate blogs**.	
		Each of these tools requires the use of the right languages, a good linguistic sensitivity and knowledge of the semantic codes of the Internet to really obtain a valid response from users.	
	Today, many people refer to Communities on the Internet where they can interact with people who have personal or professional interests. Others, however, decide they want to have an even more active role and open a blog, a site where they can talk about their experiences or topics of interest, and can also receive feedback from surfers.		

	These sites are a mine of information on industry trends and consumer needs, that exchange impressions and experience on companies and products.		
	However, you should note that those who frequent communities and/or open blogs are the liveliest and often most advanced figures compared to other people who are more difficult to identify in the complex consumer system. These tools, if used well by the company, for example the corporate blog, allow it to inform people of the products/services it offers, reaching large numbers of interlocutors in an informal way with a reduced effort, from which, however, it can collect valuable feedback.		
	Businesses also use communities as sources of information. In fact, needs, requirements, ideas and criticism can emerge in the dialogues that develop that allow us to grasp the emerging trends of the reference sector, which can be used to develop new products or to supply new services. Just think by way of example of the software or video game market, where members of the community of enthusiasts receive beta versions of products from companies, which are then returned tested and, often, implemented, all practically free.		
	The organization that intends to use them must be able to rely on human resources not only prepared for the optimal use of communication technologies, but also capable of applying professional ethics in business relationships, to avoid situations of incorrect use of relationships networks. In the case of communities, for example, the company might opt to participate from the outside, by registering		

	an external person who monitors its contents and occasionally launches some theme, or it needs to clarify what space it occupies on the site.		
	Trying to influence Communities or Blogs without "declaring oneself" can be counterproductive, however, because users can discover the deception and this can damage the company's image. In addition, you can advertise on Communities and blogs without any problem (as long as you are not too invasive), although the best tools remain competitions, surveys and quizzes, that are more participatory for users and richer in information for the company.		
	In general, online business networking tools allow you not only to inform people about and explain the products/services offered, thus interacting with people in an informal way, but also to collect valuable feedback, that is, needs, ideas and criticism, both in terms of referrals and reviews of satisfied or unsatisfied customers.		
	If used well by the company, online business networking, therefore, represents an important opportunity to capture emerging trends in its reference sector and to use them both to develop new and more personalized products/services, and to keep customers more informed but they are also more "unfaithful" to the brand.		
FACE TO FACE BUSINESS NETWORKING	"Face-to-face" business networking refers, however, to business relationships that are initiated and/or developed during specific events that require your physical participation.		
FACE TO FACE BUSINESS NETWORKING		Examples of face-to-face business networking are for example:	

		• **meetings** organized by associations, groups or clubs created specifically to encourage business networking activities, such as the Bni - Business Network International, one of the largest reference exchange organizations in the world, or the Chambers of Commerce or Trade Associations • **conventions** • **conferences** • **exhibitions** • **sector events organized by national or local brands** • **events promoted by specialist magazines** •**book presentations with the author** •**training courses** •**seminars and workshops** •**meetings organized by universities.**	
	While online business networking is a great way for companies to communicate with potential customers and other organizations, it is not exhaustive and cannot completely replace what is done in person. In general, it is considered a good rule to mix the two ways of networking.		

	Face to face meetings, especially those not expressly aimed at developing networks, in which the climate is more informal and natural, still remain a particularly effective way of bringing concrete business results home. Even in this case, however, there are simple rules to be respected to ensure that meetings are transformed into truly profitable and lasting relationships.		
		In particular, in the context of "**face-to-face" business networking** activities it is important to: • **know what to say,** that is to be clear about how to present your business and why a potential customer should choose you • **be clear about the objectives and expectations of Business Networking activities,** to then measure the results and evaluate whether an effective strategy has been carried out, where it can be improved and how much each contact generated has cost, in terms of time and money. • **listen to your interlocutors**, get to know them and understand their needs, problems and requirements, avoiding talking incessantly • **not immediately sell your products/services**, especially if you don't know who you are talking to, what their needs are and above all without having first created a relationship.	**FACE-TO-FACE BUSINESS NETWORKING**

		• **create and grow relationships** between people who can lead to creating new Business opportunities, avoiding skipping the fundamental step of building a relationship of trust. • **create mutual benefit for the parties**. There is no business relationship if it is not win-win, not so much in the short term, but in the medium-long term. • **not lie,** or "pump up" your skills, abilities and/or experience, because if in the first phase the person doesn't have the tools to "control" what you're saying, successively, also thanks to social networks, he/she can easily verify what you've said, undermining the trust that represents the element at the base of every business relationship • **take your business cards with you**, the main tool for exchanging contacts at the beginning of any business relationship.	
TIPS AND PITFALLS		In addition to these aspects, those of: ➢a **more formal nature**, such as: • the choice of the right detail to grab the attention of your interlocutors, without exaggerating, however, in order not to risk leaving a negative memory	

		• the attention dedicated to the prominent personality of the event/meeting, greeting him/her at the beginning and thanking him/her at the end to be noticed and remembered ➢ **a behavioural nature,** referring to both verbal and non-verbal language, such as the use of small talk to break the ice at the beginning of a conversation, posture and gestures.	
	Regardless of the business networking method adopted, it is important to focus attention on the fact that the dynamics of this process cannot be improvised. Business networking, in fact, is not an occasional activity and should not be carried out without preparation, but requires a deep **awareness** of what is being done; therefore, you can't imagine that actions are undertaken instinctively and not correctly.		
	Business Networking cannot, therefore, be considered as an occasional activity to be carried out without preparation. Business Networking is part of Marketing Strategies and in exactly the same way as for Marketing it is fundamental to not leave things to chance, but to prepare a precise Business Networking strategy, clearly defined in terms of: - targets - target customers - tools to monitor and measure results.		
FOLLOW-UP	It is important to remember that Business Networking activities do not end with the reciprocal delivery of the business card. That moment marks only the starting point of the building of the relationship that must be cultivated by contacting the person, setting up further fact-finding meetings, contacting the Social Networks,		

	up to the first real business opportunity, which could also happen months after business cards were first exchanged. The same applies to online networking which requires follow-up activities and the creation of a detailed database of potential customers and partners, to be updated regularly at each interaction to capitalize more and more on the relationship and consolidate the knowledge acquired over time.		

SUJBJECT	AUDIO IN STUDIO	VOICE OVER	KEYWORDS
TOPIC 5 **Obstacles and pitfalls in intercultural communication** **LEARNING OUTCOME**			
	Internationalization and social-economic globalization processes have exponentially increased opportunities for contact between different cultures, determining a progressive and growing importance of intercultural aspects also in the field of business.		
	Cultural differences, therefore, influence how people do business, how decisions are made, how people are willing to take risks, how products/services are marketed and how projects are managed.		

		Interculture, in the organizational world, refers to: • the dynamics between people from different countries who must work in integrated **teams** with shared objectives; • **managers** who must manage colleagues of a different culture and who speak a different language; • people who must work with **foreign customers, suppliers or partners**; • people with **back office** roles who, although not travelling abroad, nor working in teams with foreign colleagues, must still respect deadlines with the support and contribution of colleagues from foreign companies.	
	Therefore, when dealing with people from another culture, you must take into account that their business practices, communication styles and management methods are different from those used locally or nationally. These situations require companies to pay increasing attention to the role of culture in business and to manage the dynamics connected to intercultural communication.		
	For this reason, you should avoid only considering your values and take into account the fact that concepts such as time and formality are viewed differently from one country to another.		

	It's important to remember that there are no right or wrong ways to deal with other people, but only different ways of communicating. For example, think about body language: some postures that indicate receptivity in one culture might, instead, indicate aggression in another.		
	Therefore, to conduct business with people from other countries you need to know the culture of your counterparty and remember that each person considers their "culture" as the most important. We need to be more aware of cultural differences and similarities, to communicate more effectively and do better business together.		
		To **communicate effectively**, however, knowing the language of your counterparty or using a language understood by everyone, such as English, is not enough; the exchange must respect the rules related to the situation and the elements that determine it. These elements, in absolute value, are the same in all cultures, but their relative value changes from culture to culture.	
ELEMENTS OF INTERCULTURAL COMMUNICATION: **PLACE** **TIME** **TOPIC** **TONE**		For example: • the **place**, or the context in which business meetings, meetings and dinners are held, according to different cultures, may or may not influence the possibility of dealing with certain topics; • **time** is a cultural variable. In some countries, for example, a delay of 15 minutes to a business appointment is	

		acceptable or even normal, while in others it is considered discourteous; • the **topic** is a risk factor, because some issues may not be appropriate in business contexts; • the **tone** used in speaking. You should pay attention to rhythm when speaking aloud, to the inflection used and to the sounds you transmit which make people perceive sarcasm, anger, affection or trust.	
		Understanding the **culture** of others is a critical success factor. It **determines** the **way in which we interpret the reality that surrounds us** and **verbal communicative expressions**, that are linked to linguistic **and non-verbal codes**, that is, that refer to all the other codes (for example gestures, the use of time, space, objects, etc.).	
		In this sense, culture also determines: - **consumer reaction** to products, advertising messages and commercial proposals - **people's reaction** to the attitudes and behaviours of others in work contexts, both internally and externally - the methods of induction, acceptance and **adaptation of companies and people** who work there.	

non-verbal communication	While fluent English can give a professional boost globally, understanding the importance of **non-verbal communication** between cultures is crucial **in international business**. **Some gestures are similar in all cultures**, such as a **smile** that means happiness or an expression of **anger** that indicates that you are angry. There are also cultural differences affecting other types of non-verbal communication, such as **eye contact**. The way you look at someone allows you to communicate multiple things, including interest, affection, hostility or attraction, and at the same time to measure the other person's interest in the conversation. **If you speak without looking into the eyes of a Greek executive, this could be interpreted as an attempt to hide something**. **At the same time, in other cultures, such as Norway, if you look at someone for too long, this could be considered as unacceptable behaviour**.	Split screen	
	Equally significant are the movements and **posture of your body**. Your perception of a person can be influenced by the way you sit, walk or stand, communicating a great deal of information. Even **gestures** must be taken into due consideration. You should pay attention to how they are used to avoid errors of interpretation.		

	Greeting, pointing, waving or using your hands when arguing or speaking animatedly are all gestures that can have a very different meaning from culture to culture. For example, while making the **OK** sign with your hand conveys a positive message in English-speaking countries, it could instead be considered offensive in others.		
	Communicating through touch can be seen very differently from country to country. A pat on the shoulder or a touch on the upper arm, if done to people who come from physically "more reserved" cultures, such as Great Britain, could make the other party feel uncomfortable. It is always a bad idea to use vulgarity in your own or any other language. You should also pay attention to jokes and humour, which even if a universal phenomenon, can be strongly influenced by culture, consequently resulting in the fact that not everyone will necessarily laugh at the same things.		
	Space can then create discomfort during a conversation if the other person is too close and invades our physical space. Although this differs depending on the culture, situation and proximity of the relationship, physical space allows you to communicate different non-verbal messages, including signs of intimacy and affection, aggression or domination. In general, Asians and people from some African cultures prefer to stay quite far apart. People from the Middle East, although they can share very close spaces, do not share public displays of affection between men and women. On the other hand, for Europeans the right distance depends on the type		

	of relationship with the other person: the more personal the relationship, the closer you are.		
	If it is true that there are no clear rules for doing business in every culture in the world, you must, however, show awareness of the differences and make an effort to learn to listen and observe people's faces and gestures when they meet and greet each other, so as to overcome any potential problems.		
cross-cultural business etiquette	You might be aware that there are a set of rules and behaviours, known as **cross-cultural business etiquette**, which apply in interaction with other cultures when doing business and which allow you to avoid faux pas and misunderstandings, mostly cultural, which could ruin relationships in intercultural contexts.		
	These rules and suggestions allow you to understand the appropriate behaviour to adopt on different occasions (**interviews, meetings**, first meetings, **breakfasts/dinners**/events). If respected, they allow you to transmit a positive image of yourself and/or your company and help create that competitive advantage increasingly necessary to beat the competition.		
	Although etiquette varies from culture to culture, because conduct standards are strongly based on tradition, it is possible to identify some common elements of good **commercial etiquette** in each culture and the aspects to be explored whenever you have to deal with a culture different from yours, in order not to undermine the relationship with the other party.		KEYWORD: **COMMERCIAL ETIQUETTE**

		In particular, it's important: - **to know the way you greet someone in a country**; in general, the handshake is the most common greeting, but there are small differences in every country and places where traditional greeting forms are still adopted and appreciated even by a foreign guest. - **Use the title followed by the surname of your interlocutor,** when contacting the latter, until you are possibly authorized to call them by their first name. - **Use business cards**. This is also a common rule around the world, but in some countries attention must be paid to how the card is created and delivered. For example, in Russia, Brazil, China and Japan it is good practice to provide double translation; in India and the United Arab Emirates, it must be proffered with your right hand, while in China or Japan you should proffer it with both hands - **Turn off or mute your phone in meetings**, to avoid distractions - **Respect local customs** during business meetings, inquiring about the concept of time in the culture of the other party, so as not to risk being disrespectful by appearing on time, early or late with respect to the agreed time	

		- **Speak in your interlocutor's language,** even using only greetings or a few courtesy phrases, to demonstrate an interest in doing business with him/her and his/her company. - **Don't forget to say "thank you"** during a meeting with a client - **Do not criticize**, if you don't agree about something, but try to understand the other person's point of view and never lose your temper - **Always be honest**, to establish a relationship of trust and not to undermine your company's reputation. In fact, this is only gained very slowly, but can be very quickly lost.	
intercultural netiquette	You should not forget that there are also rules to be respected in emails, which follow business netiquette. You learn most of these at work, but there are rules of **"intercultural netiquette"** that everyone should know. Let's have a look at the main ones.		
	First of all, the email should **contain a clear and direct subject**, as people often decide whether or not to open it based on the subject. The email must be sent to the **professional or business address** and certainly not to a personal one.	Split screen	

	Pay attention to "**Reply to all**" unless you really think everyone on the list should receive the email. Some people on the list may not be interested or have anything to do with the content of the answer.		
	Don't forget to **say goodbye in a professional way**, avoid using colloquial expressions and don't make temporal references**,** as the time in which the email is written may not be the same as the time when it is read.		
	Don't forget to provide **some general information at the end of your mail** indicating for example your full name, title, company name and other contact information, including a phone number.		
	Pay careful attention to how you write the text of the email. Avoid **using capital letters,** because it is equivalent to **shouting**. This is perhaps the most common intercultural source of irritation in emails.		
	In addition, **you should avoid humour**, which can easily become lost with translation or not have the same meaning in a different culture. In a professional email exchange, humour should, therefore, be avoided, except in cases where the recipient is well known. Also, something that you think is funny may not be funny for others.		
	As a general rule of writing to respect, you should remember that your e-mail must be easy to read for the recipient. **Bold** should, therefore, be used to highlight **keywords**, **italics** for **citations** and you should **underline titles and headings.**		
	Don't forget:		

	- to **read the message aloud** before sending it. If it seems brusque, it will be for the reader too. This will **avoid generating misunderstandings** - to **re-read the email** several times to check if there are **spelling mistakes,** avoiding relying on automatic spell-check - to **enter the recipient's address** only when you are sure that the **message is ready to be sent.**		
Business lunches and dinners	There are also rules to be respected as regards behaviour during **business lunches or dinners**, which often represent a strategic way to get to know a potential partner or client. In the latter case, it is important to be familiar with local etiquette or to be adequately informed before the meeting, to learn about any differences between the host country and yours.		
	Understanding the different culinary etiquette of the world can help international businesspeople to perfect their behaviour. To avoid any surprises, it's a good idea to know some rules on intercultural etiquette.		
		For example, let's discuss some questions about the following general aspects to consider: - **Seating:** Is there a protocol to be respected as to who sits where? Should you wait for everyone to be seated? Is it acceptable for men and women to sit next to each other? - **Eating**: What utensils should be used? A knife, a fork, your hands or chopsticks? Is there any etiquette to respect as regards how to use them? - **Body language:** How should you sit down? Is it bad etiquette to rest	

		your elbows on the table? If you have to sit on the floor, what is the correct position? - **Conversation**: Is the meal the right place to start a conversation? If so, is discussing business appropriate? - **Food:** What are the common foods you should eat? Is it good etiquette to compliment the chef and if so, how? Should you eat everything? Is it polite to ask for more**?** - **Alcohol**: Is it acceptable to drink alcohol? How much? Can you refuse another drink from your host? - **Bill:** Who should pay? Can you split the bill? Is it common to ask for a detailed invoice?	
	Considering that the answers to these questions can vary greatly from culture to culture, some general **suggestions** should be taken into account. **Asia** You should eat with chopsticks everywhere in Asia. There are some guidelines that help you understand how to use chopsticks. If necessary, it is appropriate to ask your "hosts" for help, who will probably be flattered and happy to help you.		**KEYWORD:** **GENERAL SUGGESTIONS (ON INTERCULTURAL ETIQUETTE)**

	Africa Africa is so large, diverse and complicated that it is difficult to say much about if there is a common etiquette across the continent. However, there are some general aspects to consider. Africans are famous for the pleasure they enjoy in eating and for their generosity. In many countries, there may be no utensils and you are expected to eat with your hands. In these cases, it must be remembered that in Muslim countries you should not eat with your left hand.		
	Middle East The Arabs are known for their hospitality and meals. Alcoholic drinks are also becoming more common in Muslim countries, but Muslims do not drink and, therefore, it is advisable not to request alcoholic drinks, since even when drinking is allowed, drunkenness is considered gauche. If you eat with your hands, only your right hand should be used.		
	Central and South America and the Caribbean Business lunches are common across Latin America and are usually long. Dinner is a purely social event and can last until late. In general, your hands should always be kept on the table when eating and food and drink should be passed with your right hand.		
	Europe Europeans eat using continental style. When using this style, hold the fork in your left hand and the		

	knife in your right. You should always keep your fork and knife in your hands. You should not rest your elbows on the table and your hands should both be kept on top of the table. Chairs should never be tilted on two legs and you should not push food onto your fork with your finger.		
business cards	One of the biggest mistakes you can make in international business is to think that the customs and ways of your culture are good behaviour to be held in another country. Knowing how to behave and what to say and not to say are fundamental skills. Even a very simple thing like delivering your "business card", if done incorrectly, can give a poor tone to the whole meeting.		
	In some countries, there is little emphasis placed on exchanging business cards. They are simply distributed to people and, in most cases, represent a quick way of providing your contact data to someone who may be interested in using the products or services you offer in the future. Hence, they are considered little more than a networking tool and in many cases we probably don’t even give them out, we don’t pay much attention to this or we don’t follow precise rules. In some countries abroad, however, it is very different and the exchange of business cards must be done correctly.		
	Typically, a business card includes the person's name, company name, a company logo and contact information (address, postcode, country, phone numbers, email addresses, tax information).		

		The typeface should be legible and professional. The international standard for business card sizes is 85.60 x 53.98 mm (3.370 x 2.125 inches).	
	It is polite to provide a translation of information on the reverse side of the card, using a professional translator or translation agency. The recipients of your "business card" must know who you are, what your title is, for which company you work and how to contact you. Make sure your title clearly indicates your position in the corporate hierarchy.		
	In some regions, such as North America, business card etiquette is rather liberal. Provided that "business cards" are clean and presentable, it is not unusual for managers of American companies to carry them in their pockets or take notes on the back of them or on other empty spaces. In many countries, however, it is considered disrespectful to immediately put the card in your pocket without having first studied it for a few seconds and possibly requesting information before putting it away.		
	If you travel a lot for work, it is a good idea to have a good supply of **business cards** with you to give to various business contacts. Of course, it would be advisable not to carry business cards in your pocket, you must avoid getting them dirty and you should never write on your "business card" or on one you have received, unless you have been given the ok to do so.		**KEYWORD:** **BUSINESS CARDS**

intercultural negotiation	All these aspects take on particular importance in the dynamics linked to **intercultural negotiation**, that is to relationships between two or more people or companies, and, therefore, between internal and external parties from different countries.		
		The elements that characterize any negotiating situation are: - **the presence of different parties**, i.e. with objectives and interests that do not coincide and in some cases also with non-homogeneous reference values; - a **relationship of interdependence between the parties**: their objective, what realizes their interest, can only be achieved through cooperation and a mutual exchange of resources; - **a disagreement**: the parties know that cooperating is advantageous, but they may be in conflict on how to distribute the benefit deriving from a possible agreement.	
	The conditions necessary to identify a negotiating situation are, therefore, fulfilled when a communication process occurs between parties who have differentiated interests, preferences and reference values, in order to mutually exchange material or immaterial resources. More precisely, the aim of the negotiation is to compose two or more conflicting positions, by searching for a solution, or a result that can be mutually accepted, as it is capable of satisfying the different expectations of the parties involved.		

		In this respect, it is possible to distinguish two types of negotiation: A) **DISTRIBUTIVE NEGOTIATIONS**, also called "zero sum", in which the gain by one party corresponds to the loss of the other. In these cases, therefore, one party will be more satisfied than the other, attributable to the WIN-LOSE scheme. When choosing this strategy, you take on a contradictory or competitive view. Attention is **focused on achieving immediate goals**, with little or no consideration for building future relationships. B) **GENERATIVE NEGOTIATIONS**, also called **COOPERATIVE** or **INTEGRATIVE,** in which compromise and cooperation are more or less as important as competition. The negotiation between the parties in these cases has the purpose of **increasing the value of the stakes and then being able to distribute it**. This is the typical case of partnerships or joint ventures, or outsourcing agreements, in which both parties are satisfied with the results generated by the agreement, which is called **WIN-WIN.** It is a strategy in which both parties gain an approximately equal advantage, both acting in their common interest.	

	The choice of approach to negotiation also determines negotiating behaviour. If a party chooses a competitive approach to maximize profit and take home the best result, his/her approach will be opportunistic and he/she will do whatever is necessary to increase his/her contractual "power". In the case, however, of a soft approach, he/she will seek the right cooperation to increase the advantage for both parties.		
	Negotiation dynamics are often complicated by cultural distances that depend on different behavioural patterns, rooted in business practices.		

	Cultural differences between businesses can: - create misunderstandings in communication processes and in the interpretation of actions; - influence both formal and substantive aspects, as well as the style of negotiation, i.e. the way in which a negotiation is conducted. In general, cultural differences amplify the complexity of relationships, favouring possible clashes that can put future business relationships at risk.		

	In cross-cultural negotiation processes, the **preparation phase** is, therefore, fundamental to facilitate both the relationship and the achievement of an agreement with your counterparty. This phase implies: - **a clear definition of the objectives** to be achieved - **the careful collection of** economic, sociological, psychological and demographic **information** concerning the context in which the negotiation will take place, which pertains to the counterparty, with reference to the company profile, your interlocutor and data regarding past negotiations.		
	In this phase, important information is acquired on the cultural, value and behavioural profile of the counterparty, whether it is a potential supplier, partner or customer, obviously taking into account the elements of the reference context, such as time, place, greeting forms and so on. Underestimating these aspects or taking them for granted, can jeopardise the construction of solid business relationships in intercultural contexts.		
	The preparation phase is, therefore, an essential moment to consider the market conditions, the strategic alternatives available, and to estimate, with plausible accuracy, the maximum results obtainable and those that your counterparty considers an acceptable minimum.		
		It is in this phase, in fact, that you identify: • **the BATNA - Best Alternative to a Negotiated Agreement,** or the best	

		alternative(s) to the agreement. By identifying BATNA it is possible to know what we'll do or what will happen if we fail to reach a satisfactory agreement with the negotiation.	
		• the **ZOPA - Zone of Possible Agreement**, or the area in which an agreement can be concluded that satisfies both parties. The ZOPA is essentially the limit, the area, above or below which you're not willing to reach an agreement	
	The preparation phase not only includes the definition of your interlocutor and the object of negotiation, but also the planning of where and when the actual negotiation session will take place. In planning a negotiation it is, therefore, important to do your part to determine when, where and how it will take place.		
	Being determined and assertive from the start, even if your counterparty suggests different solutions, allows you to increase the negotiating power perceived by your interlocutor. On the other hand, being overly accommodating with the counterparty can reduce your negotiating power. This behaviour can be perceived as an attitude of inferiority and is typical of those who communicate in a passive way, that is, of those who are afraid of expressing their point of view for fear of making mistakes or not having the approval of others.		

	The preparation phase is followed by the **negotiation phase**, in which you get in touch with your interlocutor. In cross-cultural contexts, it is important to pay attention to the cultural characteristics of your counterparty, especially in the initial phase of the meeting. In most cases, to break the ice, it is useful to dedicate some time to **schmoozing** or **small talk**, or conversations unrelated to the negotiators' mandate and focused on their relationship or the exchange of information, techniques which are important for creating trust and a positive negotiating climate.		
	Generally, it is preferable to avoid certain topics, such as **religion** or **politics**, and instead talk about aspects such as **travel**, **time**, or **issues** on which the interlocutors at the negotiating table are almost always inclined to have a conversation. In some countries, such as India, in fact, it is impolite to immediately speak about business at the first meeting and it is advisable to respect pleasantries, asking questions about the hobbies or interests of one's interlocutor.		

	When the parties don't know each other, in the initial phase of a meeting these conversations are of great use because they allow you to create not only a positive interaction, but also to establish the mutual level of competence. If, on the other hand, there is already a relationship between the parties, they allow you to confront each other informally before tackling the specific topics of the meeting, thus making you perceive the mood of both parties.		
	These conversations are also important at the end of a meeting, because ending suddenly can be perceived as a refusal by the other party and, therefore, allow you to consolidate the relationship between the two people and to soften the closing phase of the negotiation.		
	Furthermore, in some cases they allow you to avoid moments of silence, which could be considered uncomfortable and/or embarrassing. Apparently aimless discussions, with trivial or irrelevant content for the situation, can, however, have the important function of establishing, maintaining and managing social ties between the parties.		
	However, you should note that this rule does not apply everywhere, because in some countries, such as Japan and Germany, people tend not to get lost in chatter and go straight to the point. Consequently, even in this case, it is essential to inquire and study your counterpart's reference culture in order not to jeopardise the relationship and achieving an agreement.		

	During the negotiation phase it is also important to take **body language** into account, the meaning of which can change from culture to culture.		
		In general, assuming a **composed and proactive posture** before your counterparty denotes a respectful and collaborative attitude, inclined to dialogue and the achievement of agreements of mutual satisfaction, favouring a similar predisposition in your interlocutor. On the contrary, some postures, such as **crossed arms and legs**, denote a closed person, unwilling to collaborate or to converse or even an annoying, if not aggressive, approach.	
	However, it is good to remember that in order to correctly interpret body language, each behaviour of your interlocutor must be read in a broader context and coordinated with other signals that confirm their real value. Gestures, body posture and any other behaviour should, therefore, not be interpreted individually but contextualized and connected to each other to confirm their real value.		
	If the person has his/her **arms crossed** does not necessarily mean that he/she is "**closed**" and "**not willing to listen"**, because for example he/she may simply be cold. If however, he/she also has his/her **legs crossed, his/her back resting on the back of the chair** and perhaps his/her **chin up**, all these elements together **indicate a critical and closed attitude.**		

	In addition, different behaviours must also be consistent with the **words** and the **tone used** to have a single meaning.		
	During the negotiation phase, the interlocutors at the negotiating table have the opportunity to study and get to know each other in person. At this stage, questions are essential to obtain information on the counterparty's position, interests and arguments supporting his/her theses. It is, therefore, important to ask questions that draw attention or prepare the counterparty for further questions, making him/her feel recognized and valued.		
	Active listening is equally important, both by respecting the interlocutor's pauses and by repeating the key words he/she uses, which is a very useful approach for creating reciprocity and empathy.		
	In addition, you can also use the **mirroring technique**, which consists of assuming a posture or making gestures that mirror those of those before you, to facilitate a relationship based on trust and emotional harmony. Assertiveness, active listening and empathy are, in fact, the main elements of an effective negotiator, capable of anchoring the negotiation to his/her own strategy.		
	An assertive negotiator is a person who has clear objectives, knows how to read between the lines, uses and doses the resources available to negotiate, wants to close the agreement while maintaining positivity in the relationship and thus who interprets the negotiation not as a clash, but		

	as a relationship of exchange, aimed at maximizing the satisfaction of both parties. Collaborative negotiations are, in fact, those that lead to win-win results that are mutually beneficial, more stable and enduring over time.		
	Reaching an agreement, however, does not mean having concluded the negotiation. Following a win-win negotiation, it is good practice to congratulate the other party for reaching the agreement and to recapitulate what has been agreed to facilitate effective implementation.		
	The solution adopted, in addition to satisfying both parties when concluding the agreement, has to provide useful indications on the effectiveness of the new behaviours to be adopted to also maintain the same satisfaction in the future.		
		The final negotiation phase is, therefore, characterized by the translation of the agreement into **an action plan.** The results of these actions are **important feedback for the effectiveness of the negotiation**. By paying attention to feedback, actions and interactions can be improved.	
	Feedback is effective and constructive if it is descriptive, specific, relevant, tangible, based on facts and behaviours. Feedback is not effective if it is generic or a way to define your identity.		