Erasmus+

Thrive! Entrepreneurial skills as solid base for a future in the Creative Industry

Module 2
Employees in companies with growth potential or growth ambition

Teacher's manual

Erasmus+

The “Thrive! Entrepreneurial skills as solid base for a future in the Creative Industry” project has as central aim to support the (young) (female) entrepreneurs and companies and its employees in the creative sector to go through a transformation and innovation process that is necessary to survive the present times and to become a company with a sustainable business case.

This project has been funded with support from the European Commission. This publication reflects the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.

The project partners within this program are:

Contact address:
Stivako
Boeingavenue 207
1119 PD Schiphol-Rijk
The Netherlands
tel. +31 20 5435670
info@stivako.nl

Project website: www.thriveproject.eu

1. Summary – Structure of the module

Skills to be developed in the Module

The skills that shall be acquired via the course are

- Background information (“theory”) on innovation-management, business models, project-management
- Operate with innovation-methods and tools, especially “Business Model Generation CANVAS” and “Design Thinking”
- Basic skills in project-management
- Skills in communication (multi-cultural teams, teams with internal and external members, etc.)
- Ability to work in teams / networking / cross-cultural competences
- Ability to work under pressure / adaptiveness / flexibility
- Time- and self-management (ability to set goals, ablitiy to priotise, etc.)

Teaching and learning methods

Flipped classroom concept

The training module is divided in two phases: preparation phase and presence phase.
A mixture of methods will be applied:

- Self-study (“preparation phase” / “distance learning”)
  in the first phase of the learning module the participants prepare for the course by self-study of the theoretical background of the different subjects of the course
- Application of the knowledge (“presence phase”)
  during the presence phase the participants train the application of the knowledge via
    - Case studies /Business cases
    - Role playing
    - Working on concrete problems

Storyline-method

The business-case of an “Enterprise preparing for the transformation” is the recurrent theme during the presence phase.

Option: The participants define their own project / create their own business- case / found their own business.

Competences/Skills:

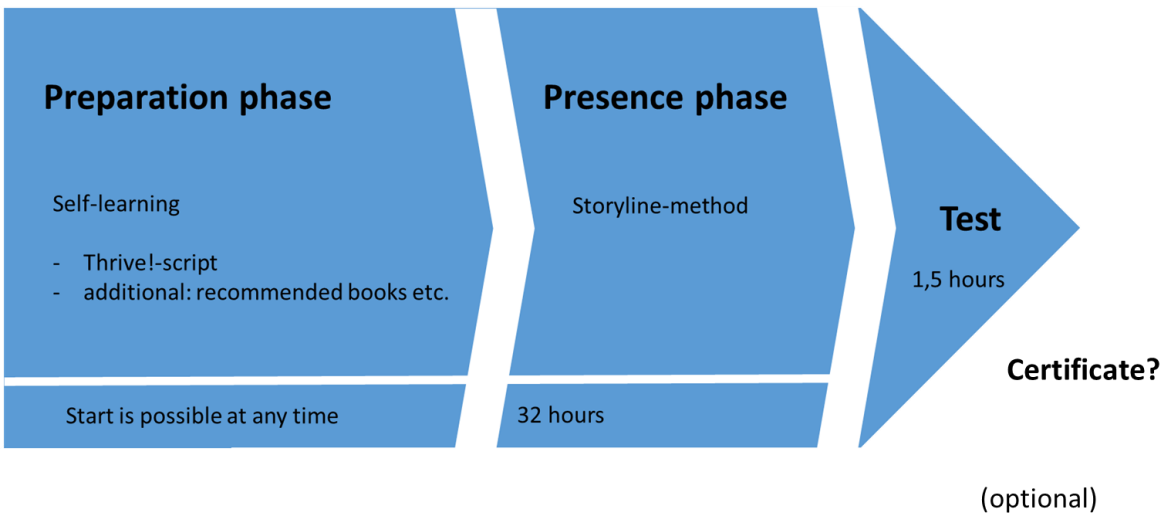
The method storyline supports the acquisition of methodological competence, i.e.

- Effective handling of (external) sources
- Competent handling of (new) media
- Visualization of work results
- Convincing presentation of work results
- Reflection of the problem-solving process as well as the own procedure
- ...

and improves the communication and cooperation behavior of the participants

- Development and observance of rules for group work
- Consideration for other group members
- Improvement of assertiveness
- Dealing with conflicts
- Successful argumentation / representation of one's own point of view
- Active listening
- ...

Guiding principle of the method Storyline: **LEARNING BUSINESS BY DOING BUSINESS!**



Sequence of the course

Comments:

The presence phase can be splitted on 4 or 5 days. The following description of the course follows the 4-day-model.

Optional the course can be completed by a test – and a certificate can be awarded to the successful participants.
As this depends on the specific framework-conditions of the organisation that offers the course the test and the certificate (incl. ECTS-points) are not part of the presented concept of the course.

2. The method “Storyline”

Storyline is a topic-centered method that aims to enable comprehensive and holistic learning.

One topic - in this course this is the initiation and implementation of an innovation project in an innovation-dynamic creative industry enterprise - is embedded in a relatively closed story in order to connect coherent learning contents.

The storyline forms the framework for the organization of the material to be taught, which is linked in content-related episodes in which corresponding tasks are to be processed and activities carried out.

The storyline is developed by the lecturer and given to the participants. After opening / starting the story, the learners take over the design of the further progress of the story. They bring their own knowledge and experience (also from their professional practice) in the process.

The course of action is controlled by the lecturer using key questions. These key questions give impulses for solving specific tasks. They are formulated as openly as possible so that diverse answers and problem-solving options are possible.

The learners are not supposed to give specific answers in the sense of "right" or "wrong" - rather, thinking processes should be set in motion to deal with the topic independently and to develop individual solutions. In doing so, different solutions are to be tried out.

An important part of the method is to (critically) reflect on the problem-solving process, present the results and discuss them with the other participants.

The teacher takes on the role of an observer as well as a consultant, coaches and a facilitator who supports the learners in the processing of the Aufagben.

The learners should learn in the group how new ideas are developed and developed in a team.

The (intermediate) results will be presented by the group in plenary after the completion of a task and discussed with the other participants. In this way, learners receive feedback from both the other groups and the lecturer.

At the end of the classroom phase, a reflection of the course or the edited project will be carried out. The individual and joint analysis offers the opportunity to evaluate one's own learning progress and to identify potential for improvement.

Storyline

The storyline should

- if possible come from the immediate world of experience of the participants,
- divided into individual episodes;
  In the first episode, the initial setting is designed, which then individually evolves the individual groups in the presence phase.

Unexpected "incidents" or "disruptive events" can increase the complexity of the task or trigger additional problem-solving processes.

Annotation

Depending on the group of participants, a specific problem from the corporate context of the participants can be made the starting point of the story.

Thus, from the point of view of the participants, the course can be used not only to acquire new knowledge, to apply new methods and to acquire new competences, but also to gain initial solutions for a specific business problem (and back to work in everyday life) to take).

For this purpose, a corresponding start-up settlement is then defined in the group at the beginning.

This procedure is very demanding and requires a very good preparation from the lecturer and requires the corresponding experience.

The storyline of the present course

Betterprint
– a traditional printer on the way to the media company of the future

Betterprint, a company rich in tradition and very successful in the printing industry with 180 employees, has to realize that due to the rapid development of the internet and the increasing digitization the business areas are continuously shrinking - some business areas are already completely broken.

The focus of Betterprint's business activities is on the printing of annual reports, sustainability reports, catalogs and even on business. The customers are predominantly medium-sized companies, of which z.T. For decades very good, in most cases, personal business relationships exist. Low-cost competition from abroad, the changing behavior of consumers in media usage and the new competition from online print shops have led to more and more orders being lost in the past few years and even long-standing customers forgoing their business relationship. Due to the development of digital printing, almost every brochure, catalog, etc. can now be printed - if they are not already available for download on the company's website or sent by mailing anyway.

This dramatic development, which continues at an accelerating rate, has led to the biggest crisis in Betterprint's corporate history and is now jeopardizing the printer's existence. In the past 3 years, the Betterprint has made losses.

The letter from the major customer BOLEK provides the occasion for a crisis meeting of the Betterprint management.

"...unfortunately, we regret to inform you that we are forced to assign our print jobs in the future to a printing company in Poland, which can deliver the products at a price advantage of 25% in acceptable quality.
We thank you for the always very good cooperation and..."

After the head of the department "finances" has explained briefly that on the one hand losses due to the loss of orders on the one hand and the rising costs for paper, colors, but also energy and personnel amount monthly losses of about 50.000, - to 60.000, - € , the suggestions of the individual members of the management team are quite different. The production manager favors investing in a new digital press, while the chief sales officer points out the importance of new products and the development of new customers. Karl Müller, son of the founder of Betterprint, who leads the company in the 2nd generation for more than 25 years, summarizes the ideas and considerations as follows to conclude the meeting:

Individual measures such as the purchase of new technology or promotions to attract new customers are not enough to secure the existence of Betterprint in the long term and sustainably. Rather, the previous business model is fundamentally put to the test. What are the strengths and weaknesses of Betterprint? What are the core competences? Which unique selling points are there? What could an innovative business model be for securing the future of Betterprint? What needs to be done?

Müller (61 years old) seizes the opportunity to open his executives that he has decided to prefer the generation change in the family business. The management is to be transferred to its subsidiary within the next two years, earlier than originally planned. Through her training and her previous professional activity in a renowned management consultancy, which specializes in medium-sized companies, Julia Müller has the best prerequisites for realigning Betterprint with innovative ideas.

Betterprint is fortunate that it has a well-educated workforce. Especially in the areas of "development" and "sales / marketing" two young people are working, who in the past have attracted attention due to their innovative ideas and willingness to implement, and who have ambitions to personally develop themselves further. In order to arrive at truly innovative ideas for the future of Betterprint, the management team agrees to capitalize on this potential and closely involve the two employees in the company's reorientation. Therefore, the management commissions the two employees to put together an innovation team in order to gain ideas for innovations as a first step.

The team should consist not only of internal employees, but also of external members (experts). A maximum of 2 external experts may be involved in this phase.

It is the task of the innovation team

- to make an inventory of the initial situation,
- to generate and test ideas for new products / services,
- to develop a first business model for a selected idea,
- to develop a project plan for the further pursuit / implementation of the idea and
- to present the results and discuss them with the management.

Action plan

If the story is fixed and the episodes are defined, the corresponding key-questions are formulated.

On this basis, an action plan is designed, which serves as orientation for the procedure of the course.

Action plan episode 1: Business models (part 1)

Storyline (sequence)	Key questions	Activities	Methods	Material	Learning targets/ results
1.1 Basic concepts	What is a business model? How can a business model be described? What are the individual elements of a business model?	The participants are divided into groups. The groups develop answers, ideas and suggestions by analysis of relevant material (literature etc.) and discussion. The groups document the results of their work.	Group	Manual Literature Internet Whiteboard Metaplan Paper Post-its	1. To be able to define the term “business model”. 2. To be able to name the elements of a business model. 3. To be able to differentiate the terms “business model” and “business field”. 4. To be able to name and describe some (common) business model patterns. 5. To be able to exemplify a selected business model in the creative industry. 6. To know the method Business Model Generation CANVAS.

Action plan episode 1: Business models (part 2)

Storyline (sequence)	Key questions	Activities	Methods	Material	Learning targets/ results
1.2 The business model 1.2.1 Customer segments 1.2.2 Value propositions 1.2.3 Channels 1.2.4 Customer relationships 1.2.5 Revenue streams 1.2.6 Key resources 1.2.7 Key activities 1.2.8 Key partners 1.2.9 Cost structure	How does a business model emerge? What is meant by value propositions? How can target groups be defined and identified? How can relations with customers be shaped? What significance do partnerships have? How can the financial flows be described?	The groups develop answers, ideas and suggestions by analysis of relevant material (literature etc.) and discussion. The groups present the business model of the "Betterprint" in the system of the BMG CANVAS. The groups document the results of their work. Each group presents the current business model of the "Betterprint".	Group Plenum (end of day 1)	Manual Literature Internet Whiteboard Metaplan Paper Post-its	1. To be able to describe a business model based on the "Business Model Generation CANVAS" method. 2. To be able to explain the meaning of thinking from the perspective of the customer (user orientation). 3. To be able to define and describe target groups and customer segments. 4. To be able to name and explain possible sources of revenue / price models (advantages and disadvantages). 5. To be able to explain cost structures of different business models. 6. To be able to defne and describe key resources. 7. To know and be able to explain the meaning of cooperation for innovative business models.

Action plan episode 2: Planning an innovation project

Storyline (sequence)	Key questions	Activities	Methods	Material	Learning targets/ results
2.1 Innovation processes 2.1.1 Phases in the innovation process 2.1.2 Roles in the innovation process 2.2 Innovation projects 2.2.1 Special features of innovation projects 2.2.2 Management of innovation projects 2.2.3 Planning of innovation projects 2.3 Innovation-Teams 2.3.1 Roles in innovation projects 2.3.2 Designing teamwork	How do innovation processes go? What are typical obstacles in innovation processes? How can innovation projects be designed? What different roles do members of an innovation team play? What should be considered when putting together an innovation team? How can obstacles in the innovation process / innovation projects be overcome?	The groups develop answers, ideas and suggestions by analysis of relevant material (literature etc.) and discussion. The groups develop an innovation project and prepare an initial project plan. Each group presents the project team and the project plan.	Group Plenum (end of day 2)	Manual Literature Internet Whiteboard Metaplan Paper Post-its	1. To know and be able to describe the phases of an innovation process. 2. To know and be able to explain categories of barriers of innovation. 3. To know the promoter concept and be able to name the different promoters and explain their contribution to the success of innovation projects. 4. To know the roles of the members of an innovation team and assemble a project team. 5. To know the steps for planning an innovation project. 6. To be able to develop a project plan and graph it. 7. To be able to organize and management work in an innovation team.

Action plan episode 3: Develop new products and/or new services

Storyline (sequence)	Key questions	Activities	Methods	Material	Learning targets/ results
Innovation method Design Thinking	What are (successful) methods in innovation management? How can the integration of the user perspective succeed? What are successful methods of startups and how can they be used? How can the failure of innovative products or services in the market be avoided?	The groups develop answers, ideas and suggestions by analysis of relevant material (literature etc.) and discussion. The groups develop initial ideas for an innovative product / service. The groups build a prototype of their idea and test it (user survey). Each group presents the result of the user test.	Group Plenum (end of day 3)	Manual Literature Internet Whiteboard Metaplan Paper Post-its	1. To know creativity techniques and innovation methods. 2. To be able to name and explain the method "Design Thinking". 3. To be able to describe the importance of the user perspective in innovation processes / projects. 4. To be able to apply the Design Thinking method. 5. To be able to implement customer orientation as a guiding principle in the innovation process. 6. To get to know the cooperation in an innovation team. 7. To bring own ideas into a team and be able to represent them – also against obstacles. 8. To be able to deal with conflicts in the team. 9. To be able to put an innovation idea into a pitch and presenting it.

Action plan episode 4: Develop a business model for the future

Storyline (sequence)	Key questions	Activities	Methods	Material	Learning targets/ results
Develop a new business model "Betterprint 2030". Use the method "Business Model Generation CANVAS".	How can the new product / service be integrated into a new business model? What impact does the new product / service have on the other elements of the business model? How can the new business model be convincingly presented? How can the new business model be implemented?	The groups present their new product / service in a pitch (3 minutes) (integration of user test results - see episode 3) The groups develop answers, ideas and suggestions by analysis of relevant material (literature etc.) and discussion. The groups develop the framework for a new business model "Betterprint 2030". Each group presents the new business model to the management team (30 - 45 minutes).	Plenum (start day 4) Group Plenum (end of day 4)	Manual Literature Internet Whiteboard Metaplan Paper Post-its	1. To be able to use the method Business Model Generation CANVAS. 2. To be able to develop and describe the framework of a new business model. 3. To understand the relationships between the different elements of a business model. 4. To be able to present a new business model and represent it to the management.

3. The presence phase

Building the working groups

The composition of the groups must be adapted to the goal of the story or the individual work phases.

Four criteria can be used:

- Performance (previous experience, qualification, function),
- social relationships among participants,
- (thematic) interests and / or
- coincidence.

Here:

If possible, the groups should consist of 4-6 members. The respective roles (team leader, specialist, external) are defined at the beginning of the group work.

The roles should be - in the course of the course - so that each group member can get to know the different perspectives.

Depending on the course of the course, an exchange / change of individual group members can take place, i. on the third day change e.g. each 2 members the groups, so that a new composition of the groups arises.

The change can also be provoked by the lecturer - e.g. by intervention by an unforeseen "disruptive event". This is then initiated, e.g. by the event: the freelancer (e.g., digitalization expert) gets out of the project. He has been recruited because of his special knowledge of a competitive company and should support their innovation team.

Notice:
"Interference events" should be used depending on the course of the course, i.e. the "performance" of the group and / or the progress achieved in the processing of the individual tasks must be taken into account.

Work equipment

The work equipment to be provided for the course or for the participants depends on the methods to be used

- Whiteboard
- Flipchart/Metaplan
- Paper
- Post-its
- Literature
- Internet-access
- Warming-Ups: Templates (see attachment) and Lego bricks.

Important: in sufficient numbers (according to the number of groups), rooms must be provided in which the individual groups can work undisturbed.

Sequence of the presence phase: „Betterprint“ – From tradition to innovation

You develop the framework of a new business model for the company "Betterprint" (details can be found in the separate description). In a first step, you will present the current Betterprint business model. Building on this, you set up an innovation project for the company's renewal process. The aim is to develop ideas for new products and / or services with the help of the innovation method "Design Thinking" with a suitable innovation team, to create a first prototype and to test this with the target group (phase 6 of the design thinking process). Based on the new product / service, the framework of a new business model "Betterprint 2030" will be developed and presented to the management (method: Business Model Generation CANVAS).

Duration of the module: 4 days – altogether 32 hours (8h/8h/8h/8h)

Day 1	
Duration	Teaching method
60 min	**Welcome** Introductions Query of the expectations and wishes of the participants Presentation and discussion of the process including explanation of the didactic concept (teacher)
120 min	**Keynote 1** Business models and business model innovations (teacher) Introduction to the case study and explanation of how to proceed (teacher)
210 min	**Work in groups 1** The participants work in groups of 3-6 persons each. *Task*: Presentation of the current business model of "Betterprint" using the system of the Business Model Generation CANVAS method. *Key questions*: • How can a business model with its nine elements be developed? • How can the customers (segments) be described? Can these be represented by so-called "personas"? • How can the existing value proposition of Betterprint be formulated from a user-oriented perspective? • Does the previous business model of Betterprint follow a "typical" business model pattern? • Where are the special strengths, where does the Betterprint have weaknesses? *Notice*: The missing information for the representation of the business model, which can not be taken from the case study, is supplemented by the participants according to their own ideas and experiences.
90 min	**Presentation 1** Every group Presentation of Betterprint's business model CANVAS (15-20 minutes each) Discussion with the other groups (5 - 10 minutes each) Moderation by the teacher

Day 2	
Duration	Teaching method
120 min	**Keynote 2** Innovations – Innovationmanagement – Innovationprojects (teacher) Warming – up: Projectmanagement Game „Building a tower“ (teacher) (Instructions and material: see annex 1)
270 min	**Work in groups 2** The participants continue to work in the groups of day 1. *Task*: Development of a project plan for an innovation project for the development of the future business model "Betterprint 2030" *Key questions*: • What is the concrete goal of the innovation project (order clarification)? • How do you want to put the project team together? • How do you shape collaboration in the team? • What are important milestones of the project? • What are possible problems and how do you want to solve them?
90 min	**Presentation 2** Every group Presentation of the project plan "Betterprint 2030" (15-20 minutes each) Discussion with the other groups (5 - 10 minutes each) Moderation by the teacher

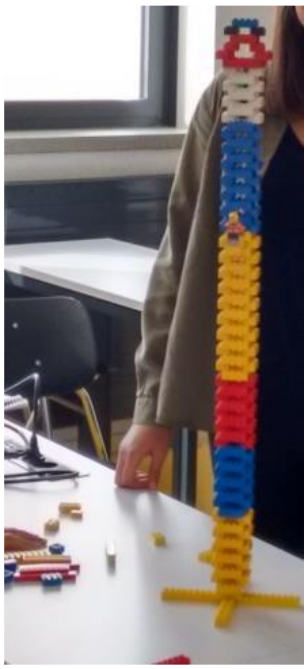
Day 3	
Duration	Teaching method
90 min	**Keynote 3** Innovation-methods – Design Thinking (teacher) Warming – up: „Nine-Dots-Problem“ (teacher) (Instructions and material: see annex 2)
300 min	**Work in groups 3** The participants continue working in the groups of day 2. *Task*: Development of ideas for new products and / or new services as basis for the future business model "Betterprint 2030" *Key questions*: • What are the key trends and what are the (future) opportunities and risks for companies in the creative industries? • Which products and / or services could initiate the turnaround on the basis of Betterprint's existing business model? • Do our ideas meet the needs of our (future) customers? *Notice 1*: Part of the group work is the test of a prototype of innovation. A period of 60 - 90 minutes is to be planned for this. *Notice 2*: Depending on the course and "performance" of the groups, "disturbing events" can be incorporated into the process of group work, e.g.: • The managing director joins the team, lets the group present the intermediate state of their work and unsettles the group by his evaluation of their ideas. • Fierce arguments happen in the team about the approach in the project - the project leader must resolve the conflict / lead a crisis conversation. • The freelancer surprisingly quits his job and leaves the team to work for a competitor. • The teams are recomposed by exchanging 2 team members each.
90 min	**Presentation 3** Every group Presentation of the results of the "prototype test" (15-20 minutes each) Discussion with the other groups (5 - 10 minutes each) Moderation by the teacher

Day 4	
Duration	Teaching method
60 min	**Preparation** Kurze Zusammenfassung des bisherigen Standes und Erläuterung der Aufgabe (Dozent) Every group Pitch of the innovation idea (3-5 minutes each) *Notice*: The innovation idea includes the results of the prototype test!
240 min	**Work in groups4** The participants continue to work in the groups of day 3. *Task*: Development of the framework for the future business model "Betterprint 2030" *Key questions*: • How do the other elements of the business model CANVAS change due to the planned innovation(s)? • Can the new business model be realised? • What are the particular challenges for the realization of the new business model? • Can the new business model realized in the existing structures of Betterprint? Which alternatives are conceivable?
120 min	**Presentation 4** Every group Presentation of the business model CANVAS "Betterprint 2030" (30 - 45 minutes each) Discussion with the other groups (10 - 15 minutes each) Moderation by the teacher
60 min	**End** Reflection and evaluation of the course (Moderation by the teacher)

Annex 1
Warming-Up: Projectmanagement – Game "Building a tower"

Instruction

(Source: http://www.projekt-toolbox.de/tools/planspiele/)



This game is suitable for use in teaching at colleges, universities and secondary schools. In particular, at the beginning of a project work or a theoretical event, the principles of a project can be experienced in a short time with this exercise. Subsequent reflection allows for insights that can be used later in the event.

Duration: 45 to 90 minutes,
depending on the number of participants
(Explanation: 5 Min; Planning: 15 Min; Buying Stones 3Min;
Building: 7 Min; Reflection: 15 Min)

Participants: 3-5 participants per team are recommended, competition situations of several teams are possible.

Equipment: Lego bricks, 250 pieces for a team. If several teams are formed, then the teams can play in a row, or with a corresponding number of stones in parallel. Meter stick for measuring the tower height, stopwatch for measuring the construction time, paper: template1 and 2.

Course of the game

1. The participants have to get together in teams.
2. Then the participantes are told the task and the course of the game verbally:
   "You should build the highest possible (desired > 100 cm) and beautiful tower that remains free for at least 20 seconds, while you should generate the largest possible profit. For this, you will be given framework conditions with the respective costs and revenues, so that you can consider (see template 1)": planning time, construction time, Lego bricks and a vague explanation of what the teacher (client) perceives as "beautiful".
3. After the planning phase, which lasts a maximum of 20 minutes (the game master stops the time), each team must submit a written plan with (see template 1):
   - Number of Lego bricks to be bought
   - Planned construction height
   - Planned construction time
   - Sketch of the future tower

4. Then the Lego bricks are "bought" from the box, three minutes are available for this.
5. Now the construction phase begins, which may be a maximum of 7 minutes (the game master stops the time).
   The teacher should confront the team with change requests during the construction phase.
6. Subsequently, the height of the tower is evaluated, the design is subjectively evaluated by the client, the built-in Lego bricks are counted and the yield is calculated (see template 2 evaluation).
   Now the winner team can be determined (based on the highest yield).
7. Subsequently, a reflection on the course of the game takes place, which can be structured on the basis of some key questions (see Reflection).

Warming-Up: Projectmanagement – Game "Building a tower"

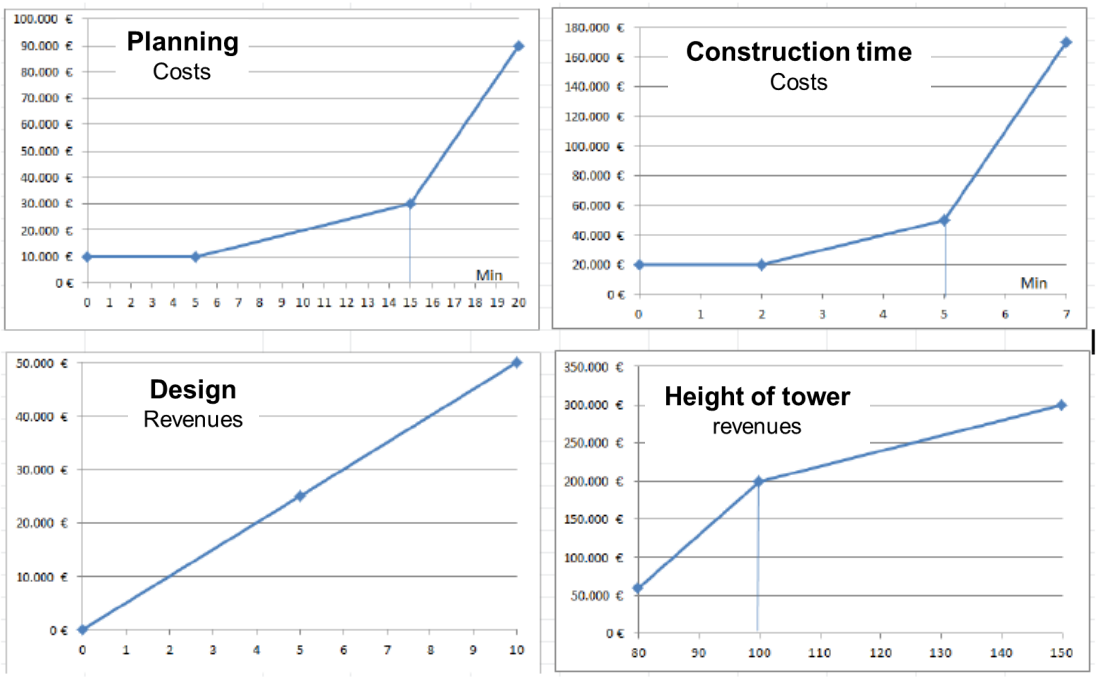
Project-Team

Template 1 – Project-Team

Project-Team: _____

Task: You have to build the highest possible (desired > 100 cm) and beautiful tower that remains free for at least 20 seconds, while you should generate the largest possible profit. Planning phase: max. 20 minutes, construction time: max. 7 minutes. A Lego brick costs 500 €.

Overview: Cost and revenue



Number of Lego bricks to be bought: _____ pieces

Planned height of the tower: _____ cm

Planned construction time: _____ min

Sketch of the future tower:

Warming-Up: Projectmanagement – Game "Building a tower" Project-Team

Template 2 – Evaluation

Template for Project-Team: _____

Plan data (see template 1)

- Number of Lego bricks to be bought: _____ pieces
- Planned height of the tower: _____ cm
- Planned construction time: _____ min

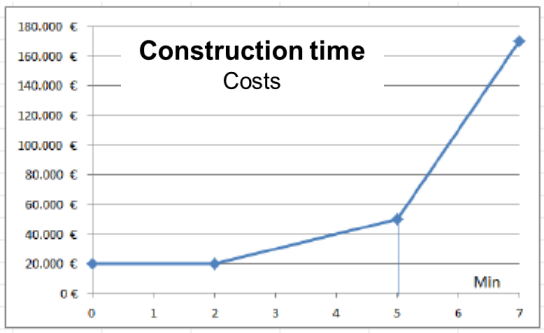
Actual data

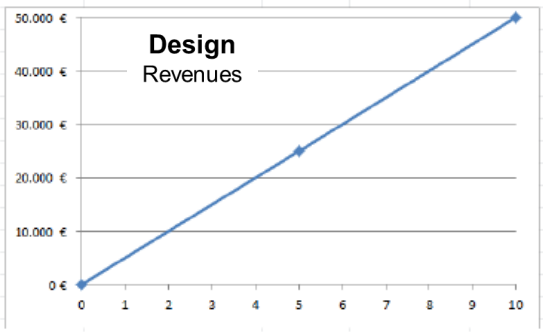
Tower is stationary for at least 20 seconds yes / no
Maximum time for plan and construction was met yes / no
Lego blocks installed: _____

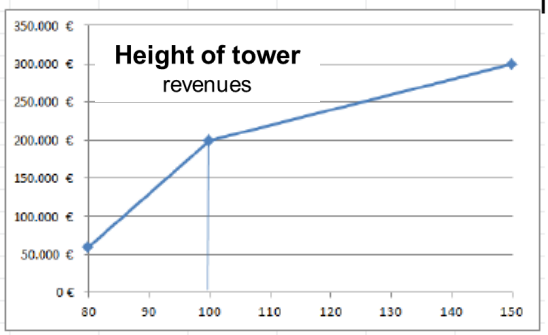
- Total number of Lego bricks bought: _____ pieces - _____ €
- Real construction time: _____ min - _____ €
- Real plannning time: _____ min - _____ €
- Real height of the tower: _____ cm - _____ €
- Design: _____ points - _____ €

Profit: _____ €

Comment:







Warming-Up: Projectmanagement – Game "Building a tower"

Teacher

Template 3 – Evaluation: Exampel

For the evaluation of the game a spreadsheet is available. It can be used to calculate quickly the result of a team. Therefore the orange fields must be filled in. Costs plus surcharges minus penalties correspond to the values in the graph of template1 and 2.
In the gray fields, the cost rates could be adjusted.

Building a tower (Lego)

						Variables	Penalties
Input	Units	Resources	Costs	Penalty if:			
Planning time	min	5-15 Min	2.000 € per min	> 15 min	10.000 € per min surcharge	2.000 €	10.000 €
Construction time	min	2-5 Min	10.000 € per min	> 5 min	50.000 € per min surcharge	10.000 €	50.000 €
Number Lego bricks	piece	50-250	500€/Stein			500 €	
Output	Units	Resources	Profit	Penalty if:			
Height of the tower	cm	100 - x cm	2.000€ / cm	< 100 cm	5.000 € per cm penalty	2.000 €	5.000 €
Design	Points	1-10	5.000€ / Point			5.000 €	
			Cost unit rates and limits can be varied by the teacher (grey zones)				

Example:

Input			**Costs**	**Surcharges**		**Total**
Planning time	16		32.000 €	10.000 €	due to 1 min exceeding	42.000 €
Construction time	6		60.000 €	50.000 €	due to 1 min exceeding	110.000 €
Number Lego bricks	250		125.000 €			125.000 €
		Sum	217.000 €	60.000 €	277.000 €	277.000 €
Output			**Profit**	**Penalties**		
Height of the tower	99		198.000 €	-5.000 €	due to 1 cm undercut	193.000 €
Design	8		40.000 €			40.000 €
			238.000 €	-5.000 €	233.000 €	233.000 €
input boxes				Result	-44.000 €	

In the **example**, planning time was 16 minutes (42,000 euros) and construction time was 6 minutes (110,000 euros), therefore the team "slipped" into the "expensive" time intervals. 250 stones were bought, which also have to be paid regardless of whether they were actually installed (125,000 €).

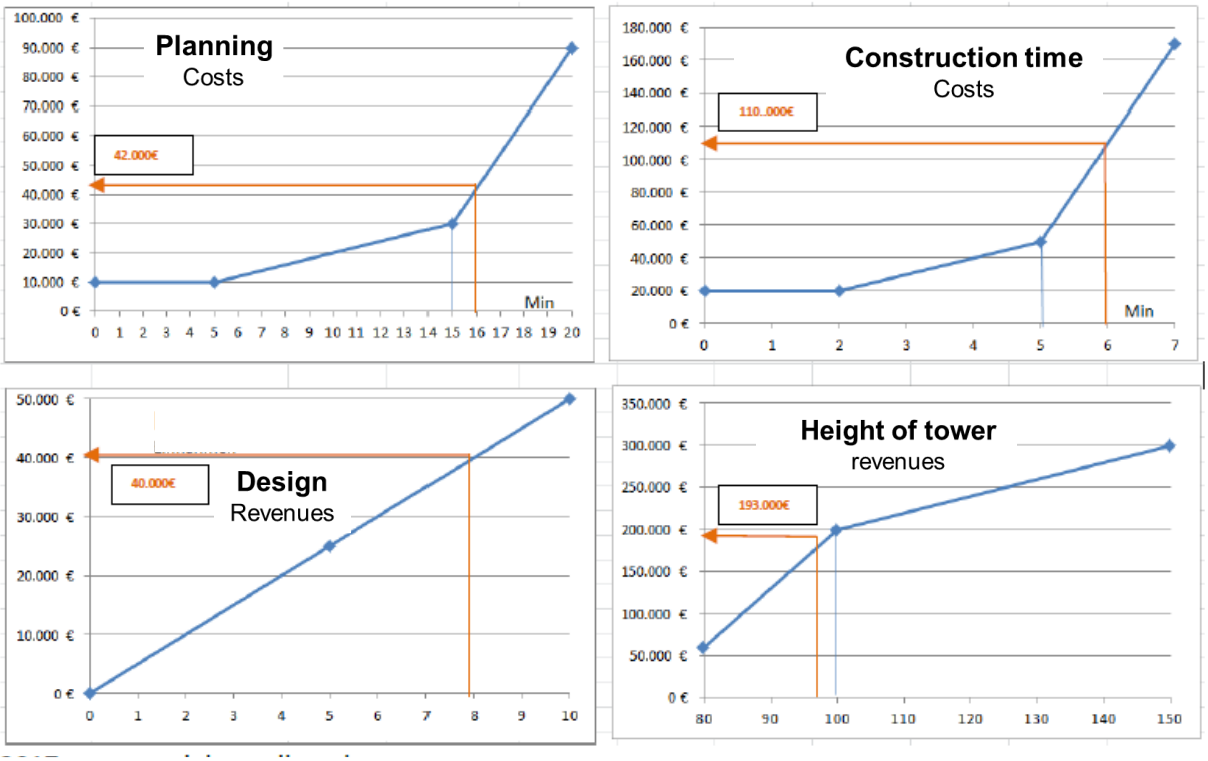
If the team had asked during the planning phase whether they can also buy stones in the construction phase, then the planned plus the additionally built stones would have been calculated (!).

A height of 99 cm was reached, which is less than 100 cm and thus was not in the range of "better earnings" (€ 193,000).

The design was subjectively evaluated as "attractive" and it was awarded by the game master with 8 points (40,000 €).

Overall, the team has achieved a loss of 44,000 euros. If they had reached the desired height of 100 cm and would have been 1 minute faster within the construction and the planning phase, they would have had € 60,000 less in costs and € 5,000 more in revenue and thus would have generated a profit of € 21,000 with their project.

The graph can also be used to determine the profit / loss.



Warming-Up: Projectmanagement – Game "Building a tower"

Teacher

Template 4 – Key questions for the reflection

In addition to the business component (evaluation of earnings), the behavior and working methods of the team should be reflected. The following key questions can serve this purpose:

Did the team clarify the task?

Has the project team carried out an appropriate clarification of the project assignment by asking the teacher, e.g. what is meant with "beautiful"? Has the project team looked at the framework conditions (cost rates) and did the team ask, for example, whether there is a possibility to buy additional Lego bricks during the construction phase? Were adjustment screws recognized, which were then taken into account during the construction phase, e.g. time management to optimize the profit?

Did the team execute a realistic project planning?

It can be reflected whether the project team asked which resources are given for the project. For example, by asking the teacher how many Lego bricks are available in total, how many Lego bricks are available in which color and in which size, etc. Were the decisions made by the team or by single members of the team?

Has the team defined different roles in the project team?

Of particular interest is how the teams have organized themselves internally. Effective and less effective ways of working can be scrutinised. Due to the time pressure and the risk of stability, it is suitable for example to build the tower in sections parallel and then assemble. For example, it can be examined whether there was a time manager and height controller in the respective teams. Who paid attention to the design? A special look van be taken on the behaviors. Was a definition of role profiles part of the planning? Were the strengths and weaknesses of the team members considered?

Has the team practised a risk management?

The biggest risk in this project is certainly the risk that the Lego-tower collapses during the construction phase. It can be examined whether the groups have/were prepared for this event. If the tower has fallen over in a project group, it can also be discussed how the team reacted. A second risk lies in time management. Has this been respected and did the team react accordingly? How were decisions made, e.g. to cancel the construction due to time problems?

How did the team handle the change requests of the teacher?

This question is also very exciting because changes occur in every project. In this context, the different approaches practiced by the project teams can be reflected. The teacher should also like to make contradictory statements if he was interviewed by the team in the planniing phase or spontaneously asked in the construction phase.

Find further insprations on http://www.projekt-toolbox.de/tools/planspiele/

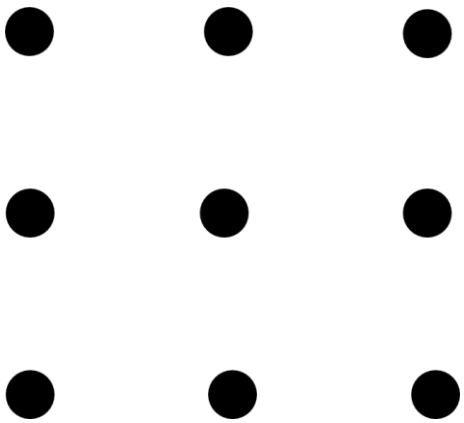
(Notice: German Website)

Annex 2:
Warming-Up: Innovationsmanagement – “Think outside the box!”

“Nine-Dots-Problem”

The task is to connect nine square points with a pen through a maximum of four straight lines without removing the pen.

Initial situation



Exercise

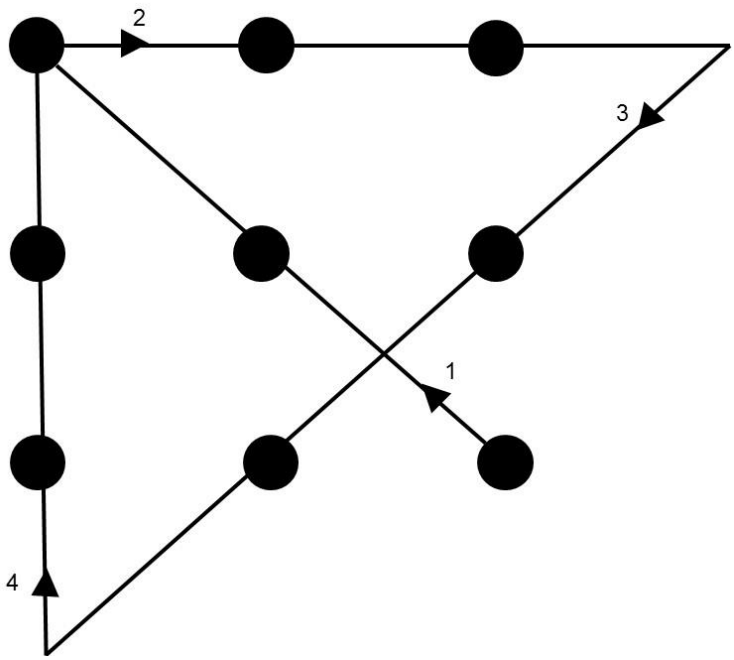
Hand out task sheets and briefly explain the task.

The participants have 5 minutes to complete the task.

The worksheet can be downloaded here:

Worksheet_Warming-Up_Innovation_english.pdf

Solution:



Learning objective:

“Think outside the box!”

Exceed limits of the given framework in order to be able to solve the problem / task.

The presentation can be downloaded here:

Presentation_Warming-up_Innovation_english_1.pdf