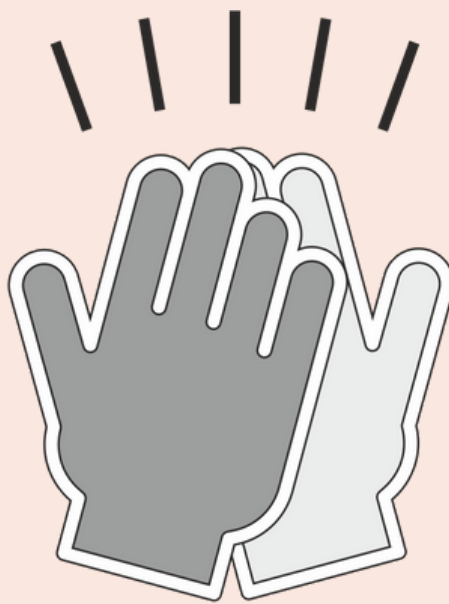




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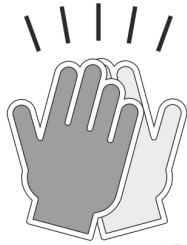


HIGH 5

INTEGRATED DESIGN

WORKSHEETS
FOR STUDENTS

2022



HIGH 5



Erasmus+

2019-1-PL01-KA203-065784

INTEGRATED DESIGN - Set of worksheets for students (English language version)

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Lodz University of Technology, Poland

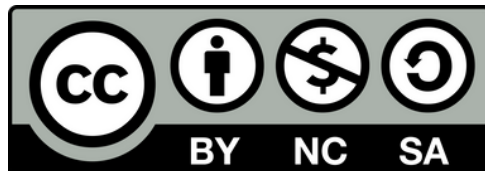
University of Thessaly, Greece

University of Aveiro, Portugal

University of Library Studies and Information Technologies, Bulgaria

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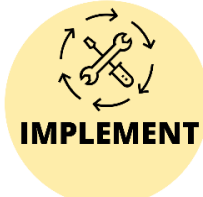
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WORKSHEET – INTEGRATED DESIGN

STAGE OF INTEGRATED DESIGN	GOAL OF THIS STAGE	TOOLS THAT CAN BE USED
 <p>DISCOVER</p>		
 <p>DEFINE</p>		
 <p>IDEATE</p>		
 <p>IMPLEMENT</p>		



WORKSHEET – DISCOVER

TASK 1.

Each team member should try to find information on the subject of the team's project by...

...listing at least 3 things that come up to your mind about the **topic**

...listing at least 3 things that come up to your mind about the **topic & people**

...listing at least 3 things that come up to your mind about the **topic & places**

...listing at least 3 things that come up to your mind about the **topic & emotions**

...making observations of the world around you, in your everyday life – list **at least 3 surprising findings**

...finding at least 3 **press articles & scientific news/reports & videos & images** that somehow represent/illustrate the topic



TASK 2.

Group your findings and based on obtained data, think of questions for questionnaires/surveys to be asked by you to stakeholder groups. One team should prepare at least 6 questions.

Questions to potential stakeholder group:

1.
2.
3.
4.
5.
6.
7.
8.



TASK 3.

To conclude the discovery phase, after surveys/questionnaires/research, try to answer the following questions:

What is the goal of your research?

Who is your target group?

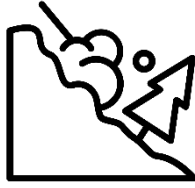
What data collection method did you use? (Interview, questionnaire, etc.)

What method did you use for the analysis?

What problematic areas of the topic have been pointed out during the research?

Give a conclusion on the research you conducted.

WORKSHEET – ABC AVALANCHE



This is one of the brainstorming methods that can be conducted individually or in teams.

All the ideas have to start from each letter of the alphabet. Try to write down your first thoughts.

A...

N...

B...

O...

C...

P...

D...

Q...

E...

R...

F...

S...

G...

T...

H...

U...

I...

V...

J...

W...

K...

X...

L...

Y...

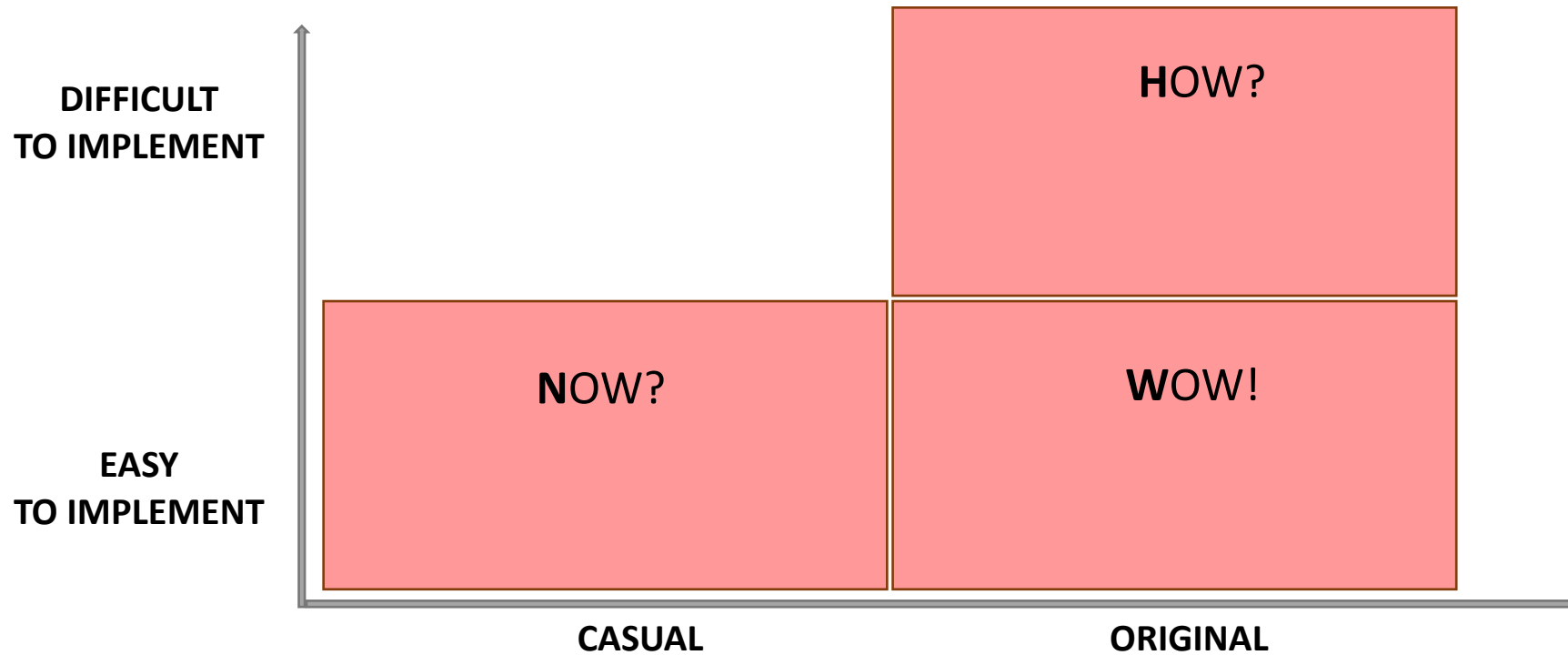
M...

Z...

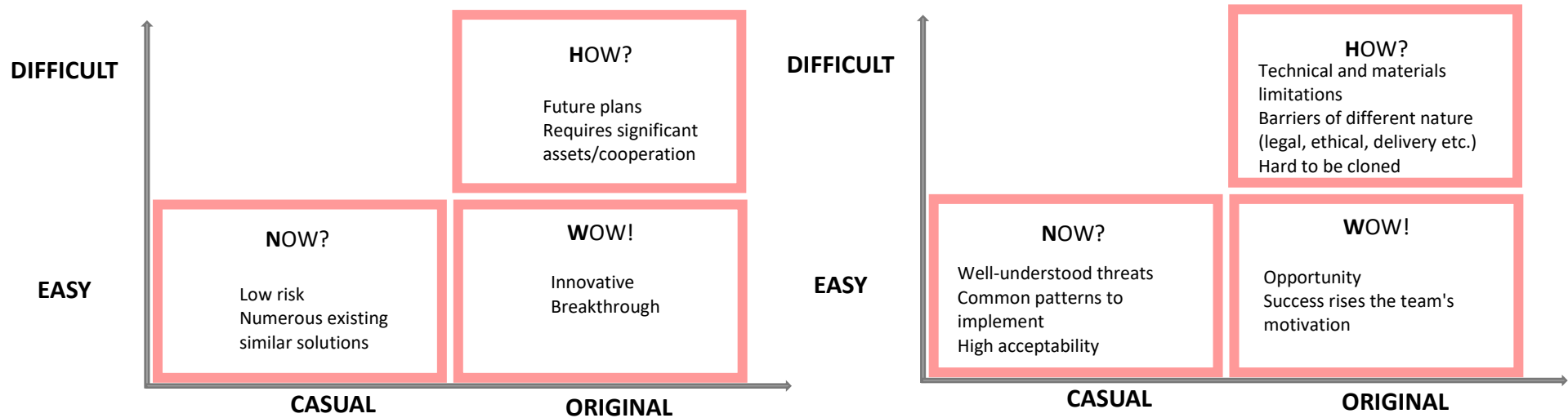
WORKSHEET – IDEA EVALUATION

You can evaluate your IDEAS with the use of NOW HOW? WOW! method. Just try to assign your ideas to the following categories:

- NOW – easy to implement
- HOW? – breakthrough, but complicated (technically)
- WOW! – original, appealing



NOW, HOW? WOW! method gives you the possibility to evaluate your ideas and select promising candidates for further project work. On the left, you have an exemplary explanation of the potential of each category. Investigation of all categories enables to withdraw the useful information towards final solution development (some of them are mentioned on the right).



Remember! Before the final decision, try to explore your various ideas and verify the initial impression about them with at least common knowledge available on the internet (examples or similar approaches from various countries, geographical destinations, related branches of market, etc.).

WORKSHEET – IMPLEMENT

Creating a journey map for your process of implementation. It makes clear interactions in the implementation process and facilitates a common understanding between all players. A journey map is a visual storyline.

Most journey maps follow a similar format: at the top, a specific user, a specific scenario, and corresponding expectations or goals in the middle, high-level phases that are comprised of user actions, thoughts, and emotions; at the bottom, the takeaways: opportunities, insights, and internal ownership.

<p>Scenario + User + Goal <i>Scenario describes the situation that the journey map addresses and is associated with an actor's goal or need and specific expectations</i></p>				
Phase 1	Phase 2	Phase 3	...	Phase N
<p><i>Phases are the different high-level stages in the journey</i></p>				
1.... 2....	3.... 4.... 5 ...	6.... 7.... 8
<p><i>Opportunities are insights gained from mapping; they speak to how the implementation can be optimized.</i></p> <ul style="list-style-type: none"> • What needs to be done with this knowledge? • Who owns what change? • Where are the biggest opportunities? • How are we going to measure improvements we implement? 				

WORKSHEET – SUSTAINABILITY

Sustainable development is a way of providing humans socio-economic development without endangering our planet's natural systems and our own future. However, first we need to understand what causes us to behave in unsustainable ways and in which ways we have not been meeting our planet's (user's) needs. By defining the problem we gain more insight and are able to get to the root of it.

1. Sustainability means meeting our own needs without compromising the ability of future generations to meet their own needs. What can you do to follow this principle?

.....
.....
.....

2. How would you include different aspects of Sustainability into your everyday life?

.....
.....
.....

3. How economy, society and environment are interrelated in the classical economic model and how they should be connected in a sustainable world?

.....
.....
.....

4. Pick one Sustainable Development Goal. Imagine how your work efforts are helping to achieve that goal.

.....
.....
.....

5. Think about your viewpoints on sustainability. What would the world look like in your opinion if we were sustainable? How would you like the world to be?

Write down at least 6 sentences.

.....

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WORKSHEET – SD GOALS

Sustainable Development Goals (SDGs) were adopted by the United Nations in 2015 as the global plan to achieve a better, more inclusive and sustainable future. The mission of the SDGs is to provide a framework for our nations to end poverty, attain gender equality, protect natural resources, create sustainable cities, and ensure that all people enjoy peace and prosperity among other things.

TASKS

1. Get acquainted with Sustainable Development Goals. Although all of these, of course, are important in achieving a prosperous and healthy society, choose the top 5 SDGs that are the most important in your opinion. Why?

1.

2.

3.

4.

5.



2. Keep working with your chosen SDGs. Find out how well your country is doing in regards to these 5 SDGs. You can use pages like SDGTracker, SDGIndex, read the latest annual Sustainable Development Report or check out other websites. Write a short overview for each SDG.

1.

2.

3.

4.

5.

3. Lastly, it's time to think of some potential solutions. Focus on three SDGs which are covered the least. What could your country, county, city or other local municipality do to improve the situation regarding these SDGs? Write down for each SDG what could be done! If necessary, you can find additional information or examples on the internet on how to contribute to the goals in hand and see inspiring examples from all over the world. What do you think has been stopping the implementation of these improvements so far?

1.

2.

3.

WORKSHEET – CIRCULAR ECONOMY

Problem: **Circular Economy applied to your group Topic**

Looking for:

1. Integrated solution to be applied by
 - consumers/families in practical life (individuals and families)
 - producers, firms and / or institutions
 - cities and society

and

2. Design a circular scheme that illustrates your integrated proposal.

WORKSHEET – ENTREPRENEUR

Process:

- ❖ Split into workgroups
 - Conduct online research
 - Identify company/brand
 - Why/How/When
 - ◆ Result

Objectives:

- Identify reasons that motivated the change
- Define whether it was an innovation or an adaptation
- The importance of design thinking in the process
- Has the company become more sustainable? Why?
- What change: finance approach, leadership, mentality
- Impact of the change
- Why were they, entrepreneurs, and what did they make different
- Did they consider the circular economy in the process

Group Discussion of the findings:

- Present the case
- Explain their choice
- They were innovators or adapted to their needs
- The result
- Good examples of measures taken by companies
- Why design thinking is so important in the process
- The importance of sustainability in the future of the companies
- Why the circular economy is important in the production process
- The importance of being an entrepreneurship



WORKSHEET – GAMIFICATION

Gamification can be defined by the act of adding elements of games (any sort of games, it's not limited to video games) inside activities which usually do not present such elements. Gamification is done to raise the engagement and the interest of the participants.

There are many ways to gamify a certain environment and methodologies to do so. In his Octalysis framework, the author Yu-Kai Chou presents a way to classify and define the game elements that can be used in gamification.

Fill in the following table with elements of each main category of gamification defined by this framework:

Meaning	Accomplishment	Empowerment	Social Influence	Unpredictability	Avoidance	Scarcity	Ownership

WORKSHEET – HIGH IMPACT PRESENTATIONS

Presenting is using verbal communication aided by a certain number of tools. Verbal communication is an extremely powerful asset if it is used correctly. It can inspire and motivate the audience much faster and more efficiently than written communication can. Verbal communication is also ubiquitous in our life as we use it and are subjected to it on a daily basis. But mastering it can be difficult and there are numerous easy mistakes that are often committed.

Fill in the following table with the Do and Don't of verbal communication:

What the Speaker should do	Speaker should not do	Usual problems encountered	The supporting tools should...