



Fostering diGitalisation and blonic transformation of SMEs through  
the development of a novel and innovative Training material for  
overcoming COVID-19 crisis – GIST

Radmila Ustych, InnovaWood

25/05/2023

Co-funded by the  
Erasmus+ Programme  
of the European Union



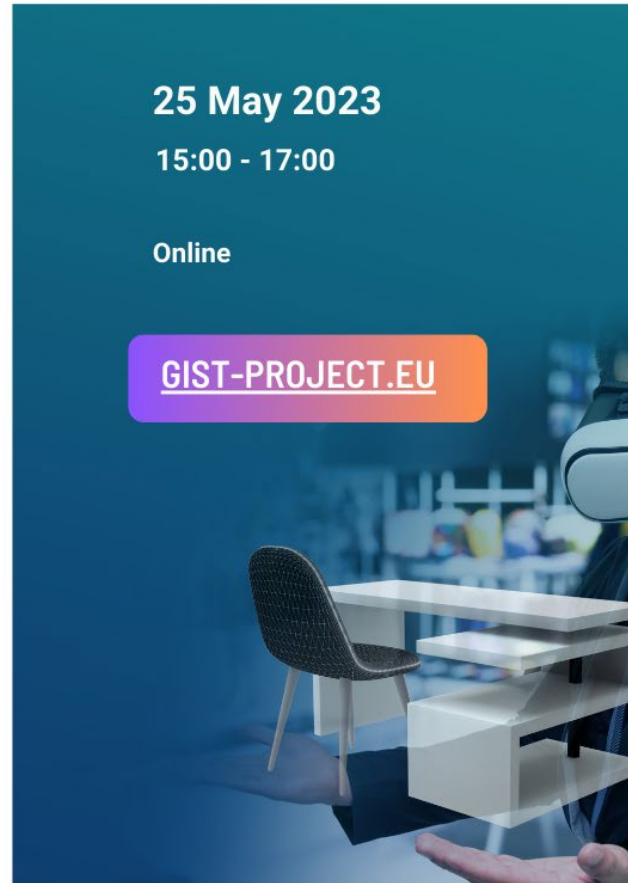
## UNLOCKING THE POWER OF INNOVATIVE LEARNING TOOLS for bionic transformation

25 May 2023

15:00 - 17:00

Online

[GIST-PROJECT.EU](https://gist-project.eu)



**15:00 WELCOME**

Furniture education going digital  
[Radmila Ustych, InnovaWood](#)

**15:10 BIONICAL DIGITAL TRANSFORMATION  
FOR SMES. OVERVIEW OF GIST E-LEARNING  
TOOLS.**

[Radmila Ustych, InnovaWood](#)

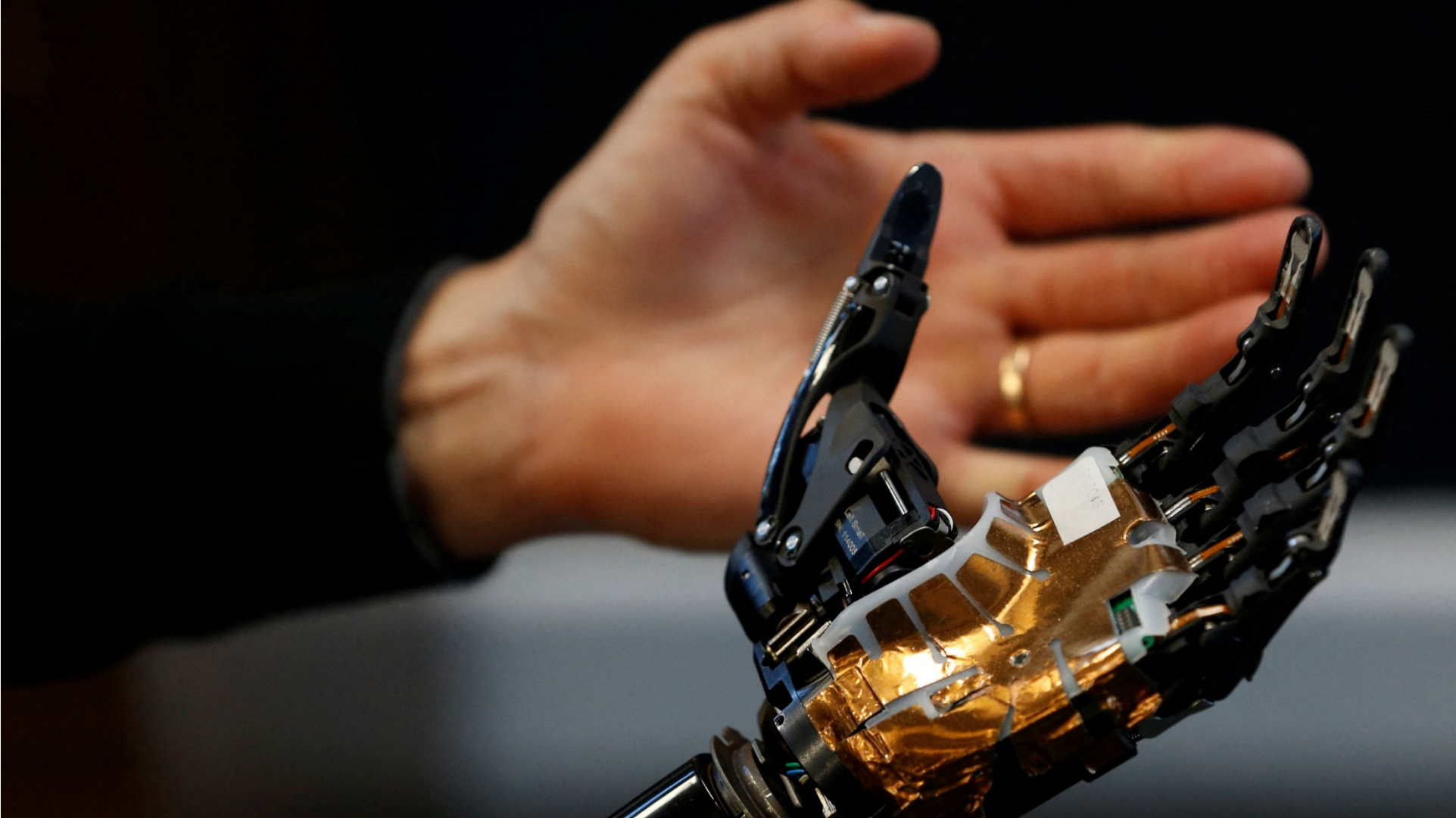
**digINEB.eu: BEST PRACTICES, TRAININGS  
AND DIGITAL SOLUTIONS FOR THE  
NEW EUROPEAN BAUHAUS ECOSYSTEM**

[Maria Giuffrida, Trust-IT Services](#)

**16:15** Questions and answers  
Looking ahead: open discussion

**17.00 END OF EVENT**





# BIONIC COMPANIES

# What is BIONIC COMPANY?

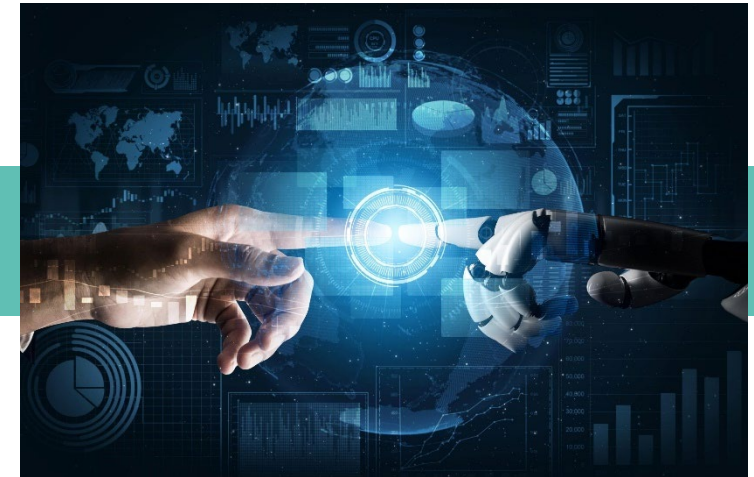
Menti.com



## OBJECTIVE

The main objective of **the GIST project** is to **develop and implement an innovative training material for SMEs**, which will provide them the basic competences to reach a “bionic status”.

# BIONIC company



Bionic is a company **which is capable of combining**

- **technological aspects,**
- **human creativity,**
- **transversal and leadership skills**

**to achieve more productive operations and greater innovation.**



# Fostering diGitalisation and bIonic transformation of SMEs through the development of a novel and innovative Training material for overcoming COVID-19 crisis

**Erasmus+ project**  
**2020-1-DE02-KA226-VET-008154**  
06/2021 – 05/2023 (2 years)

Coordinator: Karlsruhe Institute of  
Technology KIT, Germany  
Consortium: 6 partners in 6 countries

Innovative training e-course for furniture  
SMEs to become bionic

 [gist-project.eu](http://gist-project.eu)



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Erasmus+ Programme  
of the European Union  
2020-1-DE02-KA226-VET-008154  
Duration 06 / 2021 – 05 / 2023




 **Transition to bionic companies in  
furniture & wood**



**Training material for companies in  
wood & furniture to reach bionic status**

# Fostering diGitalisation and blonic transformation of SMEs through the development of a novel and innovative Training material for overcoming COVID-19 crisis – GIST



 <https://www.kit.edu>

Centro Tecnológico  
del Mueble y la Madera  
de la Región de Murcia



 <http://www.cetem.es/en>



 <https://www.globalnet.com.pl>



Institut za razvoj i međunarodne odnose  
The Institute for Development and International Relations

 <https://irmo.hr>



 <http://www.innovawood.com>



 <https://www.stp.si/about-us.html>



# 1 GIST Training Path Definition

- ✓ Gaps and needs.
- ✓ Learning Outcomes.
- ✓ Analysis of the results.
- ✓ Target groups.
- ✓ Learning Pathways.
- ✓ Joint Curriculum.



IO1.A3: Definition of Training Path and Methodologies

# 2 GIST Training Content Development

Development of 5 Training Units:

- ✓ 18 Learning Units
- ✓ 18 Power Points
- ✓ 18 Infographics
- ✓ 17 Videos
- ✓ Evaluation questions
- ✓ In 7 languages
- ✓ Free access

# 3 Collaborative Platform and Verification Action

e-Learning platform:

- ✓ Multilanguage
- ✓ Training contents
- ✓ Evaluation tools
- ✓ Gamification
- ✓ Micro-learning

Verification actions:

Stakeholders will carry out the course to evaluate the contents and the platform.



# Target groups

Total Learning Hours: 128

Total ECVET: 5,12

EQF level 4



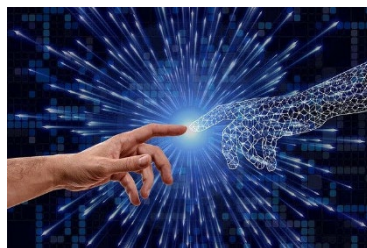
## Company BT Facilitator



Hours: 84  
ECVET: 3,36

- LU1. What is bionic transformation?
- LU3. 3DP printing and custom manufacturing
- LU4. Robotics
- LU5. Cloud Services
- LU6. Augmented and virtual reality
- LU7. Big Data
- LU9. Design & Strategic Thinking
- LU11. System Thinking
- LU13. BT Funding Opportunities
- LU15. Making a Bionic Transition
- LU16. Innovation Uptake
- LU17. Leadership
- LU18. Intercultural Mediation

## General BT Facilitator



Hours: 82  
ECVET: 3,28

- LU1. What is bionic transformation?
- LU2. Technological drivers of bionic transformation
- LU8. Communication & Brainstorming
- LU9. Design & Strategic Thinking
- LU11. System Thinking
- LU13. BT Funding Opportunities
- LU15. Making a Bionic Transition
- LU16. Innovation Uptake
- LU17. Leadership
- LU18. Intercultural Mediation

## Facilitator for BT fostering



Hours: 80  
ECVET: 3,20

- LU1. What is bionic transformation?
- LU2. Technological drivers of bionic transformation
- LU8. Communication & Brainstorming
- LU10. Collaboration & Decision making
- LU11. System Thinking
- LU12. BT support environment
- LU13. BT Funding Opportunities
- LU16. Innovation Uptake
- LU17. Leadership
- LU18. Intercultural Mediation

As we move from Industrial to Bionic era we are entering a new realm of human machine interaction

## INDUSTRIAL-ERA



## BIONIC-ERA



### BIONIC ORGANIZATION

**Firms that find the optimal fusing of people and machines -- is the dominant competitive form today and in the future.**

Source: IXL Center  
Dr. John Sviokla



## Tesco Homeplus virtual subway stores in Korea took supermarkets to people by creating a more interactive and hassle free shopping experience



### **Tesco Homeplus Korea Market Challenge:**

How to grow without increasing number of retail stores?

**Solution:** Virtual store on Subway station with bar codes and mobile application for online delivery

**Outcomes:** Online membership increase 76% and online sales increased by 130%

Source: Business Today

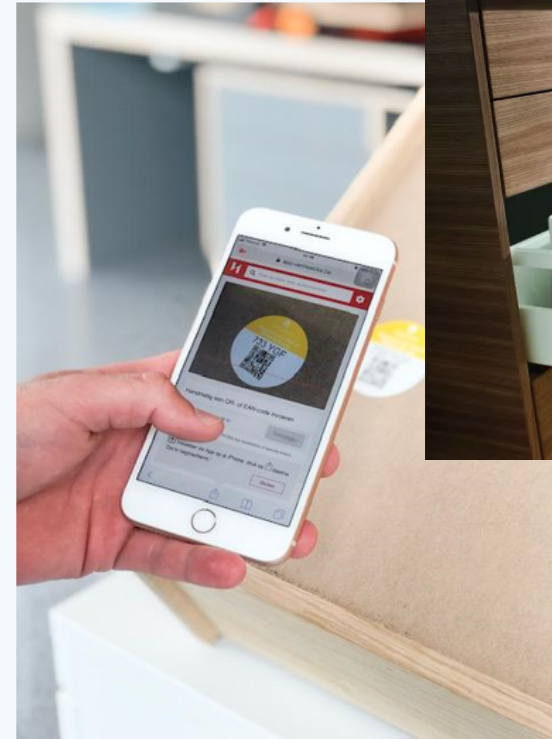


## 7. DIGITAL TRANSFORMATIONS STUDY CASE #6: BELGIUM



### What did the transformation bring to the company (what changed)?

- **Van Hoescke's** transformation story is a true success. Over the past 5 years, their turnover increased by 23%, their staff increased by no less than 75% (from 114 to 225 employees).
- In the meantime, 43,000,000,000,000 (yes, 43 thousand billion!) different combinations can roll off the production line with an average turnaround time of just three days. As a result, Van Hoescke is able to deliver to 4000 customers every day. This means 70 tons of furniture fittings and more than 9000 pallets.
- Moreover, due to the implementation of their 'online configurator', there are no longer any intermediate stocks.



Source: vanhoecke.be

Source: gist-project.eu



# In the Bionic Era three new forms of capital behavior, cognitive and Network have emerged to create and capture new value

## Behavior Capital



Behavior Capital is the collection and modeling of the behaviors of people, companies, and things – natural and man-made.

## Cognitive Capital



Cognitive Capital is the set of algorithms (both transparent and opaque) to make decisions, or to start a machine learning process where the machines can learn on their own.

## Network Capital

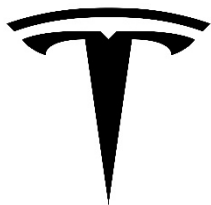


Network Capital is the number and structure of the connections in a network

Source: IXL Center  
Dr. John Sviokla



# Uber





How do you prepare yourself to be

BIONIC

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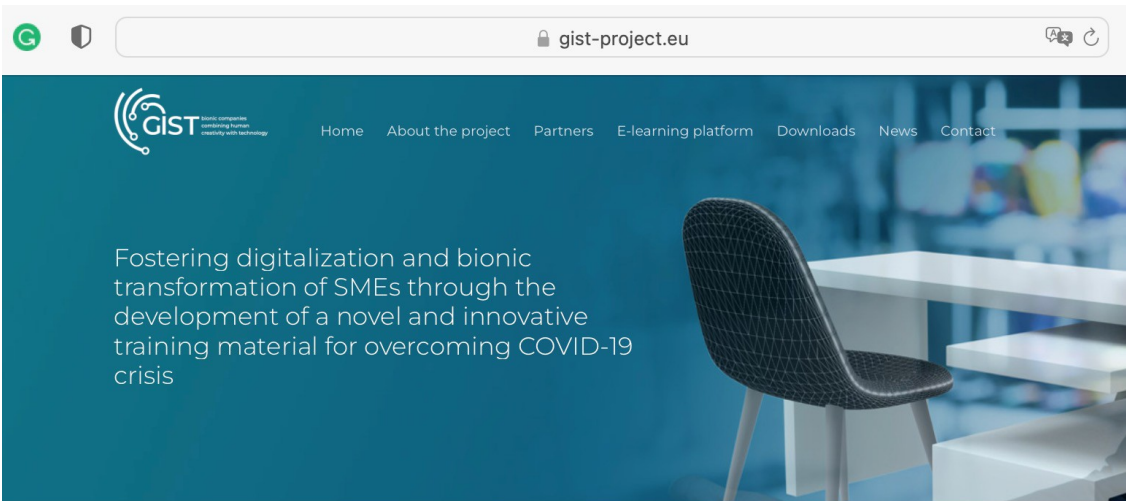




# Bionic Transformation Facilitator



We now turn to the e-Learning platform for a detailed presentation



GIST project, funded by Erasmus+ program from 2021 to 2023, develops and implements an innovative training e-course for SMEs to reach the status of bionic enterprise.

#### What is Bionic company?

Bionic is a company which can combine technological aspects, human creativity, transversal and leadership skills to achieve more productive operations and greater innovation.



#### Bionic companies

Bionic may sound very futuristic, however bionic companies can also be found in traditional industries (like furniture industry). These companies are complementing their successful business processes with far-reaching digital transformations to reposition their competitive capabilities for a bionic future.



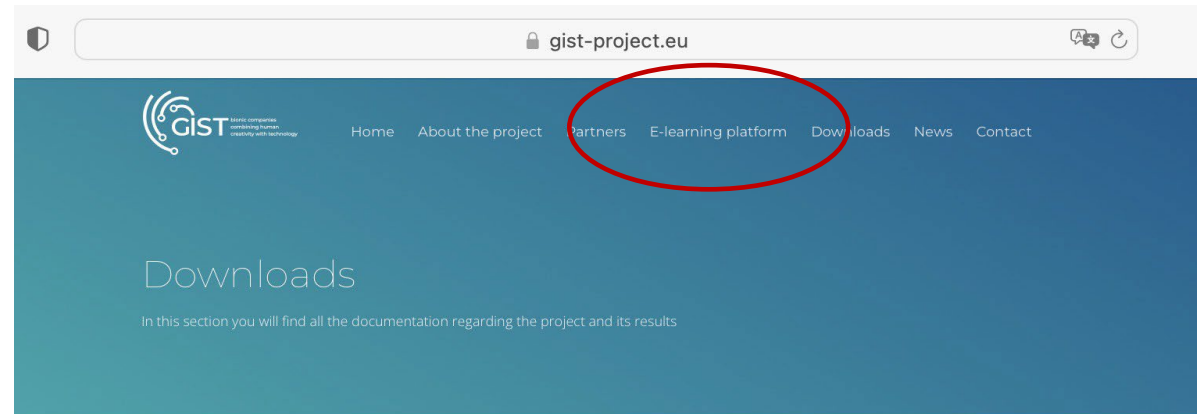
#### Elements of bionic companies

Many of the elements of bionic companies are well known: technological solutions and technical skills related to industry 4.0, creativity, communication and leadership skills among them. But the formula for putting them all together is neither immediately evident nor easy to implement.



#### GIST approach

We believe the GIST approach to building bionic companies in the furniture sector relies on strengthening both technical and soft skills and the leadership qualities of the staff. Companies that understand how to lead a bionic transformation can make rapid process and create substantial value.



#### Dissemination materials

GIST project leaflet [Download](#)

GIST project rollout [Download](#)

GIST project poster [Download](#)

Course "Facilitator of Bionic Transformation" in brief [Download](#)

#### Newsletters

Newsletter 1 [Read more](#)

Newsletter 2 [Read more](#)

Newsletter 3 [Read more](#)

#### Intellectual outputs

IO1 A1 Key study on current skills, knowledge and qualifications regarding digitalisation (ENG) [Download](#)

Summary in English [Download](#)

Summary in Spanish [Download](#)

Summary in Croatian [Download](#)

Summary in German [Download](#)

Summary in French [Download](#)

Summary in Polish [Download](#)

Summary in Slovenian [Download](#)

IO1 A2 Learning Output Definition [Download](#)

IO1 A3 Definition of Training Path and Methodologies [Download](#)

IO1 A3 Definition of Training Path and Methodologies revised and extended [Download](#)





# 3 SIMPLE STEPS

GO TO [gist-project.eu](http://gist-project.eu)

## E-LEARNING PLATFORM

## REGISTER IN E-LEARNING PLATFORM

GO

**Losglobos**

LOG IN NEW PASSWORD HELP DESK VIDEO HELP

### Welcome to e-learning platform!

**FORM**

Please, enter valid details: your first name, surname, a new login and a new password.  
Note that **you will not be able to change the login or edit the first name or the surname** while using the platform.

\* required fields

First name:\*

Surname:\*

E-mail address:\*

Choose the language of the course:\*

English

Login: \* **ATTENTION: Note that your Login ends with "@gt". You will get your login by email.**

@gt

Password:\*

Confirm password:\*


The administrator of your personal data is Globalnet Sp. Zoo. , registered office at ul. Ratajczaka 20/ 18A, postcode 61-815 Poznań Poland

I agree to the processing of my personal data as part of the marketing formula by Globalnet Sp. Zoo. with its registered office in Poznań, ul. Ratajczaka 20 / 18A, postal code 61-815 Poznań ("Globalnet").: \*

I agree to receive marketing information sent by Globalnet via electronic communication (e-mail) to the e-mail address formula provided by myself in the register.


For more information on personal data protection go on our website [www.losglobos.eu/form/rodo](http://www.losglobos.eu/form/rodo) - I accept the content of the Globalnet Privacy Policy. :\*

**SEND FORM**



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2020-1-DE02-KA226-VET-008154



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**103-A3. Development of the e-learning pl...**

Video guide how to use eLearning platform



**Losglobos GIST** bionic companies combining human creativity with technology

Student: **Dobrucki Karolina** / www / Project GIST

HOME PAGE MESSAGES MY PROFILE HELP

### Welcome to e-learning platform!

**TASKS**

Introduction

**COURSE OVERVIEW**

OVERVIEW OBJECTIVE PARTNERS COURSE STRUCTURE

METHODOLOGY LANGUAGES ASSESSMENT and CERTIFICATE ECVET

**YOUR BADGES**


**SCHOOL QUIZ RANKING**

No.	Nick	Avatar	Points

**MICROLEARNING**

Title: **LU4. Robotics**

**TU.1 LU. 4**



# Target groups

Total Learning Hours: 128

Total ECVET: 5,12

EQF level 4



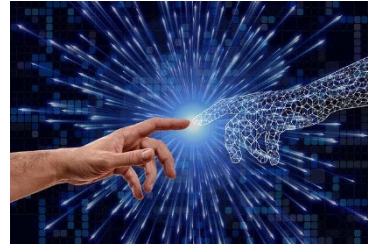
## Company BT Facilitator

## General BT Facilitator

## Facilitator for BT fostering



Hours: 84  
ECVET: 3,36



Hours: 82  
ECVET: 3,28



Hours: 80  
ECVET: 3,20

TU-1: 14.0  
Technologies

- LU1. What is bionic transformation?
- LU3. 3DP printing and custom manufacturing
- LU4. Robotics
- LU5. Cloud Services
- LU6. Augmented and virtual reality
- LU7. Big Data
- LU9. Design & Strategic Thinking
- LU11. System Thinking
- LU13. BT Funding Opportunities
- LU15. Making a Bionic Transition
- LU16. Innovation Uptake
- LU17. Leadership
- LU18. Intercultural Mediation

TU-2: Soft skills

- LU1. What is bionic transformation?
- LU2. Technological drivers of bionic transformation
- LU8. Communication & Brainstorming
- LU9. Design & Strategic Thinking
- LU11. System Thinking
- LU13. BT Funding Opportunities
- LU15. Making a Bionic Transition
- LU16. Innovation Uptake
- LU17. Leadership
- LU18. Intercultural Mediation

TU-3: Management

TU-4: Case studies

- LU1. What is bionic transformation?
- LU2. Technological drivers of bionic transformation
- LU8. Communication & Brainstorming
- LU10. Collaboration & Decision making
- LU11. System Thinking
- LU12. BT support environment
- LU13. BT Funding Opportunities
- LU16. Innovation Uptake
- LU17. Leadership
- LU18. Intercultural Mediation

TU-5: Company culture



# Bionic Transformation Facilitator




We now turn to the e-Learning platform for a detailed presentation

**3. INTRODUCTION TO STRATEGIC THINKING**

**3.1. DEFINITION**

- A skill to envision or develop a solution
- The mental or thought process that an individual applies in the context of achieving a goal or a set of goals,
- Based on past experiences, current information and expectations about the foreseeable future,
- Pragmatic type of critical thinking with the focus on finding and developing unique opportunities to create new goals through dialogue,
- Actions to think ahead and feel winds of change,
- Competences to improve business strategies and create clarity out of complex and seemingly disconnected details.



Neuro network. Source: Freepik

18 PowerPoints

**OVERVIEW OF BUSINESS SUPPORT INSTITUTIONS**

Main entrepreneur-enabling platforms and business vehicles that are considered to be a part of the business support ecosystem nowadays include:

	Incubators		Accelerators		Innovation centers
	Soft-landing missions		Government agencies		Science and Technology parks
	Consultancies		University and research centers		Clusters

18 Infographics

**3D PRINTING OFFERS**

A GREAT CHANCE TO PRODUCE ALL KINDS OF RAPID TOOLING THAT HELPS DEVELOP FURNITURE AND PROTOTYPES FOR FORM-TESTING OR FIT-TESTING



17 Videos

**TASK 1**

First result: 100 %  
Date of sending: 2023-01-19 09:31  
Attempts: 1

100%

Read each statement below carefully and choose True or False answers.

- ✓ To use Big Data you need programs that use multiple machines working together.
- ✓ The cloud is used remotely by a client for storage.
- ✓ Smart production started in the 1970s.
- ✓ Virtual Reality cannot be applied outside of the gaming industry.
- ✓ A transformation to a bionic company will result in a job loss because the machine algorithm will design the products and processes.

✓ ✓ ✗ ✗


Quizzes



# COMPETITION

## LOOK OUT FOR THE BUTTONS



Losglobos  bionic companies  
combining human  
creativity with technology


HOME PAGE | MESSAGES | MY PROFILE | HELP

Statistics

YOUR BADGE:



Logins



8%

MANAGER				BOARD MEMBER			
No.	Nick	Avatar	POINTS	No.	Nick	Avatar	Points
1	Julia L.		2735	1	Mikotaj S.		988
2	Iga O.		1167	2	Wojciech S.		938
3	Adam M.		756	3	Iga O.		871
4	Edyta B.		714	4	Edyta B.		796
5	Wiktoria W.		545	5	Julia L.		783



34.50%



# STUDENT FEEDBACK

## WHAT IS YOUR EXPERIENCE WITH THE COURSE

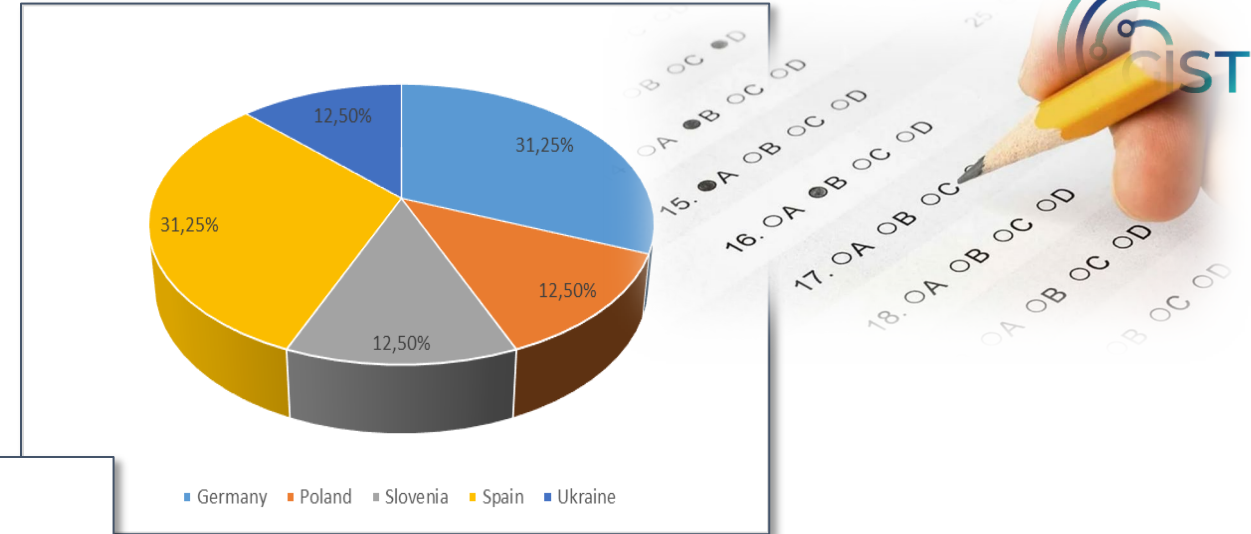
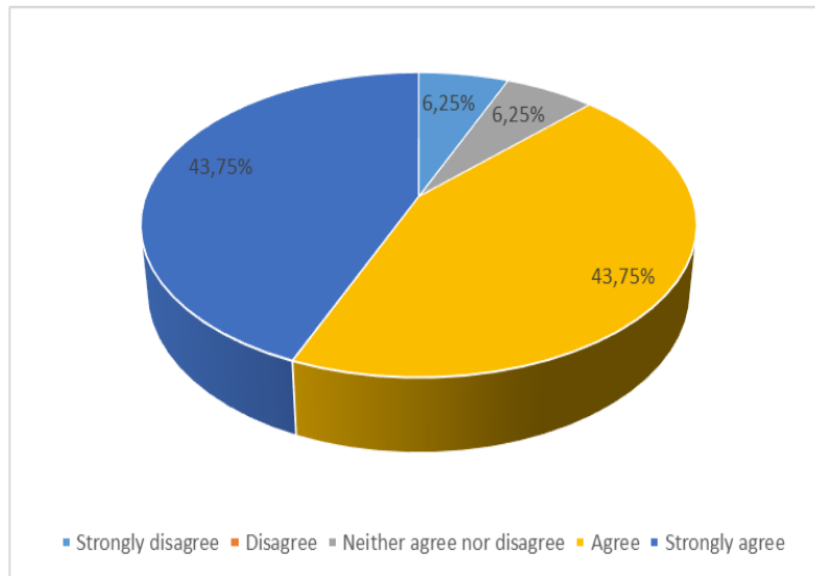


Figure 12. I believe the material could help me at my future/current job





Certificate of Completion awarded to

dana drozdova

to certificate the completion of the course

# Company Bionic Transformation Facilitator

With a duration of 84 hours

April 14th, 2023

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**DIGINEB**



# Your opinion

<https://forms.gle/4nWiNLPi3h6oPu7eA>

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## FACILITATOR FOR BIONIC TRANSFORMATION

Online training course

GIST-PROJECT.EU

Gist-project.eu

- Make the learning easier both for teacher and trainer through digital tools
- Complements the traditional course
- Can be used to offer on-demand and personalized training pathways for everyone who is interested
- Good also for workplace-based training

REGISTER IN E-LEARNING PLATFORM



# Your BIONIC journey

Conclusions.

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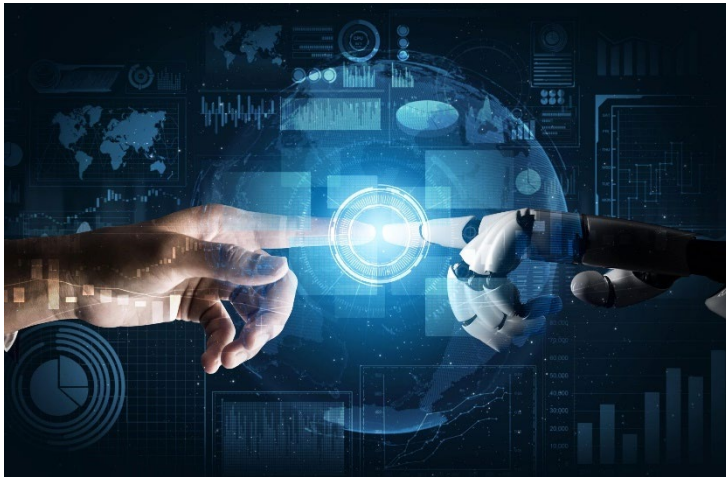
# Your BIONIC journey



Go beyond technology

Operate processes -> design processes

Focus on customer and customer experience



Bionic is a company **which is capable of combining**

- **technological aspects,**
- **human creativity,**
- **transversal and leadership skills**

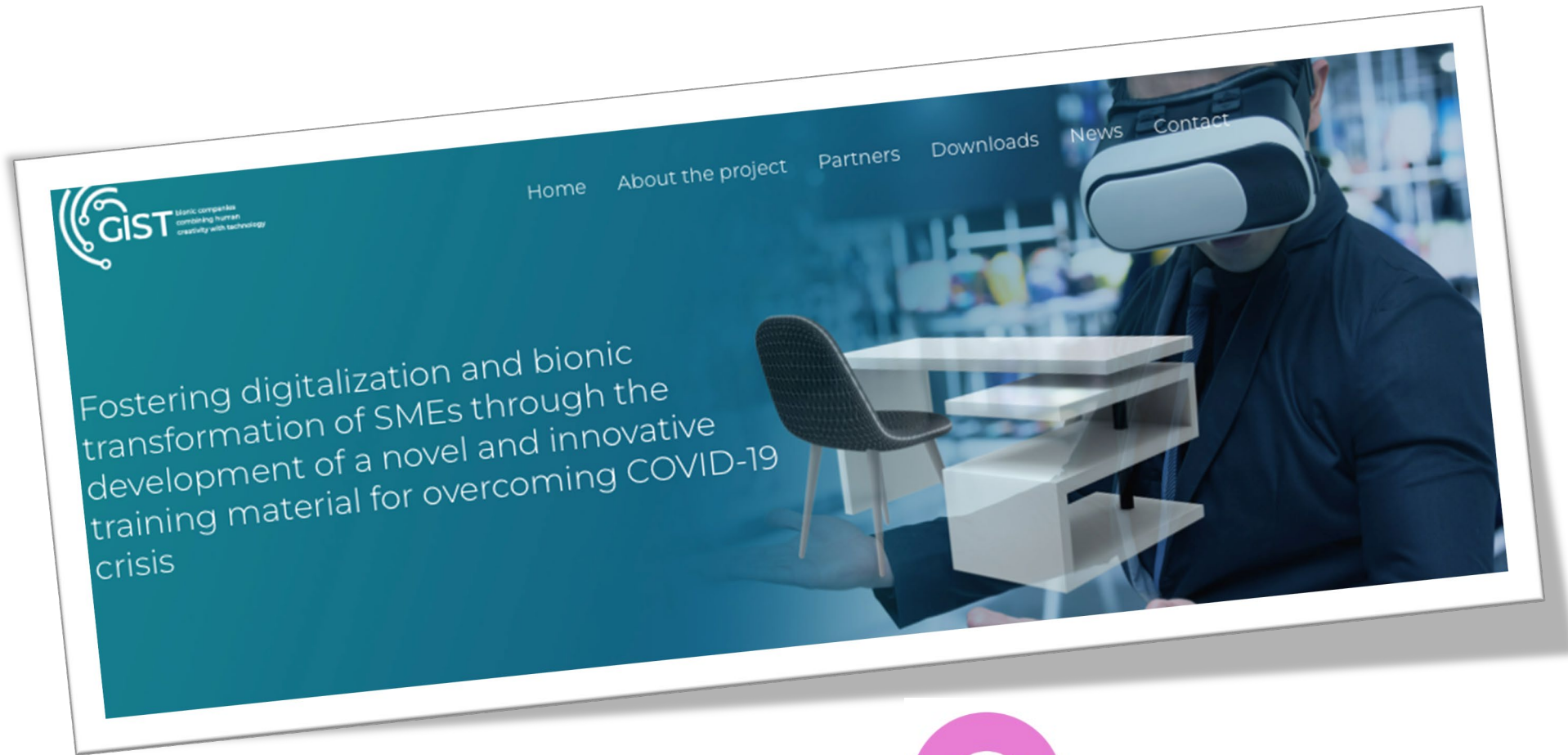
**to achieve more productive operations and greater innovation.**

= What do you know about your customers' behavior (or that of the end-users in your sector)? Do you capture it, analyze it, and model the ways it might change?

= What can you automate using AI and advanced analytics?

= How can you build a complex, effective network?

Source: IXL Center  
Dr. John Sviokla



<https://gist-project.eu>



<https://www.linkedin.com/company/gist-project/>





Thank you



Radmila Ustych  
25/05/2023

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