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Social network tools and procedures for developing entrepreneurial skills in PhD programmes

D4.3 (WP4): Documentation of the Online Training Environment

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EXECUTIVE SUMMARY

The current report aims to provide all the information necessary to access to the prodPhD Online Training Environment. This document includes a description and the way to use the main platform capabilities for collaborative work, including social network solutions.

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1. INTRODUCTION

The main objective of the prodPhD project is to implement and demonstrate innovative methodologies for teaching and learning entrepreneurship in PhD programmes. The prodPhD Online Training Environment involves the different software components that have been designed and deployed based on the specifications defined from the outcomes of WP2. The Online Training Environment provides the required social network utilities and the tools to create the virtual community of the project with its own personality.

The “learning by doing” methodology is being demonstrated through different pilot actions. The module selected for this demonstration has been chosen between 20 modules on entrepreneurship (see D3.1 Guidelines of the training methodology and teaching and mentoring procedures) with a duration adapted to the PhD candidate’s availability. This availability estimation has been obtained from the D2.1 ‘Report on the needs and requirements analysis’ outcomes. Among those modules, the so-called “Entrepreneurship for Digital Economy” has been selected according to the needs and interests of the PhD candidates highlighted of the WP2 outcomes.

Learning by doing encourages active engagement with available materials, the exchange of experiences, competences and approaches. This methodology will be implemented through the collaborative work tools and social networks solutions integrated in the ProdPhD Online Training Environment.

2. ProdPhD Online Training Environment

The prodPhD home page includes the Online Training Environment access. The home page is available through the link:

https://www.scipedia.com?microsite_guid=246560




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Profile Library My network Groups



ProdPhD Project

[Overview](#) [Publications](#) [Members](#) [Analytics](#)



Social network tools and procedures for developing entrepreneurial skills in PhD programmes (ProdPhD)

[Partners](#) [News](#)

[Online Training Environment](#)

[Open Access Repository](#)

It is acknowledged that entrepreneurship is nowadays a powerful driver of economic growth and job creation. Accordingly, the European Commission's Entrepreneurship 2020 Action Plan, adopted in 2013, states that EU economies need more entrepreneurs with higher levels of technical education to be more competitive and innovative. Besides, it identifies education as one of the three pillars for facilitating entrepreneurship, and recognises that universities must become more effective in supporting entrepreneurial activity. In fact, outside business schools and economic faculties, universities at large need to increase their offering of entrepreneurship education, as it may benefit not only business students, but also engineers, biological scientists, physical scientists, etc. In fact, in the context of this proposal, entrepreneurship is seen as a transversal competence that educators can use in any discipline to foster the entrepreneurial mind-sets and skills of their students. This proposal is also motivated by the conviction that the methodologies to stimulate future entrepreneurs can benefit from the new social networking and collaborative work technologies that have been already proved to be successful in other fields.

INFORMATION

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Twitter:
@ProdPhD1

MEMBERS

ANALYTICS

Reputation score		10297
Publications		9
Views		51

Figure 1: Home Page

The access to the Online Training Environment is available through the project home page. The home page provides main project information including the overview and scope of the initiative, the contact and social media project information and the access to the Online Training Environment that provided the training material, documents and data selected to demonstrate the entrepreneurship learning in PhD programmes. The main project portal also gives access to:

- Open access repositories of the project.
- News's page.
- Profiles of the different researchers.
- Analytics and statistics of the activity of the participants on the different actions.



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Welcome to our ProdPhD online training courses!

We hope you're ready for an engaging, rewarding online learning experience.



ENTREPRENEURSHIP FOR DIGITAL ECONOMY

This module aims to provide students with key concepts about digital economy, emphasizing on the information and communication technologies (ICT) impacts. This training course aims to provide some skill and abilities to the students to reinforce their strengths and reduce their weakness in order to exploit the opportunities to run their entrepreneurial activities based on digital technologies.

Start

Figure 2: Online Training Environment entry page

The Online Training Environment provides the description and the access to the module offered to the PhD candidates to improve their knowledge, skills and motivation to start up entrepreneurial activities. In order to demonstrate the Online Training Environment, the module “Entrepreneurship for Digital Economy” has been chosen between 20 modules on entrepreneurship. This module has been selected according to the needs and interests of the PhD candidates that were suggested in the surveys and interviews carried out during the WP2 tasks. Furthermore, the “Entrepreneurship for Digital Economy” module contents make it especially indicated for the “learning by doing” approach that is intended to be demonstrated.



Figure 3: Call for candidates

2.1. Training module organization

Each module is internally organized in chapters; each chapter includes videos, documents, references to contents of interest, quizzes and collaborative case studies.

The training organization is described so that:

1. The modules are arranged in such a way that the PhD candidates acquire the fundamentals of the contents from a theoretical perspective in a first step. This task is carried out via videos, referenced contents and documents.
2. Once the students understand the main concepts of each chapter, they can strengthen this new knowledge by playing the corresponding quizzes.
3. Finally, the participants are expected to carry out some collaborative case studies. These case studies aim to improve the participants' skills by working in experimental scenarios related to the taught concepts.

2.2. Entrepreneurship for Digital Economy Module



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This module aims to provide students with key concepts about digital economy, emphasizing on the information and communication technologies (ICT) impacts. The duration of this demonstrator is 4 hours and is composed by 4 chapters:

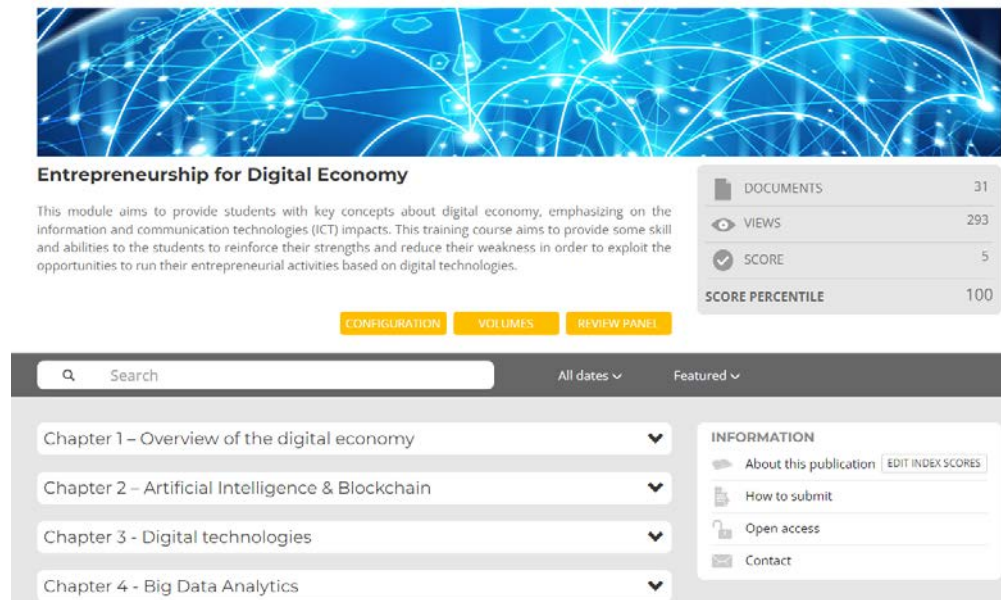


Figure 4: Entrepreneurship for Digital Economy

The contents of the Entrepreneurship for Digital Economy are organized in chapters and issues:

Chapter 1 – Overview of the digital economy

- Introduction
- An introduction to Digital Economy Part 1
- An introduction to Digital Economy Part 2
- Difference between sustainable and disruptive innovations
- The impact of digital innovations on business models
- Digital innovations transforming value chains to value networks
- Conclusions
- Case Study Development
- Bibliography

Chapter 2 – Artificial Intelligence & Blockchain

- Introduction
- Pre-test
- Artificial intelligence
- Bigdata
- Artificial Intelligence and its Decline
- Blockchain
- Conclusions



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- Bibliography
- Final-test

Chapter 3 - Digital technologies

- Introduction
- Internet of Things
- Cloud, 5G and Edge Computing
- Digital Reality
- Case Study
- Conclusion
- Bibliography

Chapter 4 - Big Data Analytics

- Introduction
- Digital Divide
- Millennials and other generations face the Digital Economy
- Online consumer behaviour
- Digital Economy after COVID-19
- Conclusion
- Bibliography

Those chapters are made up by theoretical contents, quizzes and case studies.


2.2.1. Theoretical contents

Theoretical contents are presented through videos, documents and references. Some contents are from IPAG, other ones are external video or documents contents related with the topics of each chapter and references to lectures of interest.

Read document
Discussion
Wiki Editor
Visual Editor
Edit data
History

↑↑ Don't forget to use the discussion forum


Introduction [edit]



Reading! [edit]

Answer key to the case study
Digital 2020 Global Digital Overview

Remember! [edit]


Here you are the dedicated discussion group. Use this framework to share your thoughts, comments and options.
Create new discussion topics and start coworking!



Internal messaging is a quick way to communicate and collaborate with coworkers. All the members of this course, both students and mentor, can communicate through the internal messaging.

Figure 5: Module videos, documents and references

2.2.2. Quizzes

Each chapter has several quizzes intended to test the knowledge learned in a leisure way. The quizzes help to strengthen the concepts testing what has been previously learned.



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Quiz! - Digital Economy - Chapter 1 - Part 1.1 [edit]

1. _____ is influenced by the service encounters (touchpoints) that together form the complex customer journey.
 - ☐ Customer experience
 - ☐ Parcel Lockers
 - ☐ Purchase stage
 - ☐ Technology
2. Driven by consumers, the e-commerce surge stems from the final leg of the supply chain: the _____ where the order placement and the service encounter occur.
 - ☐ Consumer journey
 - ☐ Service touchpoint
 - ☐ Last-mile
 - ☐ Key variable
3. _____ in the e-customer journey increases customer expectations.
 - ☐ Service innovation
 - ☐ Consumer innovation
 - ☐ Touchpoint innovation
 - ☐ Holistic consumer

Submit

Figure 6: Module quizzes

2.2.3. Case studies

The case studies are practical activities that the students must solve collaboratively. To achieve these tasks, participants are provided with:

- A description of the experimental situations, proposed questions and activities.
- Discussion group and forum to provide online environments to share ideas and proposals to solve the experimental situations.
- Collaborative edition tools that allow editing text, references, links, videos with the participants explaining the outcomes of the activity, etc.
- A template of the document to be edited in a collaborative way.



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Description [edit]

Realize a Case study based on the « Extended Monaco » case study previously presented. Find a similar example describing the implementation of 5G services in a specific country (e.g. Luxembourg, or South Korea). After an ad-hoc data collection, prepare a five-slide PPT describing your findings. You can add pictures or videos. References are imperative.

Extra information [edit]

<https://extendedmonaco.com/>

This is a collaborative task! [edit]

You must co-work with your partners in the current course:



Here you are the dedicated discussion group. Use this framework to share your thoughts, comments and options.

Create new discussion topics and start coworking!



Internal messaging is a quick way to communicate and collaborate with coworkers. All the members of this course, both students and mentor, can communicate through the internal messaging.



Work in the document in a collaborative way. Collaborative edition tools will allow fulfilling the solution to the practical activities including text, references, links, videos explaining the outcomes of the activity, etc.

Figure 7: Module case studies

2.3. Support Team

Participants have technical and expert support for the whole duration of the pilot. The support team is composed of:

- A professor, expert in entrepreneurship that supervises and resolves any doubts that may arise during the development of the activity.
- A member of the organization responsible of the implementation of the training environment which is in charge of answering any technical questions raised within 24 hours.

2.4. Communication tools

“Learning by doing” methodology requires working groups and discussion forums, internal messaging and online collaborative edition. The Online Training Environment has not been built from scratch but take advantage for social network tools available in Scipedia platform. For this purpose, the prodPhD Online Training Environment will offer different communication tools:

2.4.1. Discussion group

The training module has a dedicated discussion group. All the demonstrator participants are members of the discussion group and will use this framework to ask question and doubts or to share their comments and opinions.



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The discussion group is particularly useful to co-work in the module's case studies where candidates have to resolve the exposed problem collaboratively. The discussion group allows creating discussion topics and is available during the whole training duration.



Figure 8: Discussion group

2.4.2. Communication wall

The training platform provides a wall to share comments.

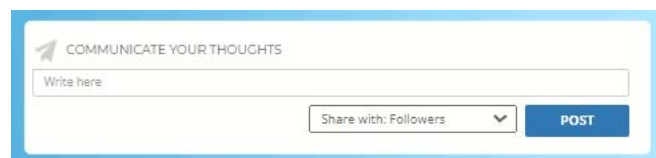
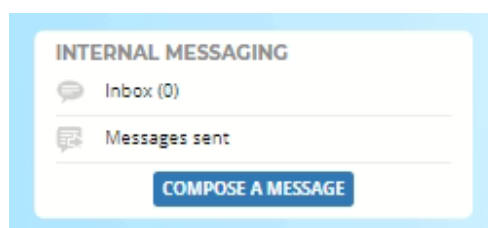


Figure 9: Communication wall

2.4.3. Internal messaging

The Online Training Platform disposes of internal messaging. The internal messaging is a quick and easy way to communicate with both participants and support team.





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Figure 1: Internal messaging tool

2.4.4. Discussion forum

All the training pages have a discussion forum dedicated to the topics covered in the corresponding issue. All the actors of the demonstration, participants and mentors, can use this framework to contribute with their expertise. The discussion forum is intended to engage students in the exchange of knowledge as a base for carrying out the “learning by doing” approach.

Open Access Repository of the prodPhD project
Published on 16/09/21

Key performance indicators (KPIs)
E. Sanz , P. Alonso , B. Haidar , H. Ghaemi , L. García

Read document

Discussion

Edit

Visual Editor

Edit data

History

DISCUSS ABOUT THIS DOCUMENT WITH THE AUTHORS

Subject

Question or comment

SEND

Figure 2: Example of discussion forum

2.4.5. Videoconference room

An open videoconference room will be available for the module participants; this space can be used for internal discussion and will be the platform to carry out an online 1h entrepreneurship class with an expert. The pilot participants will be able to take advantage of this event to ask and clarify concepts with the mentor.

2.4.6. Case study revision

The case studies are practical activities that the students must resolve collaboratively to arrive to common solutions to be presented to the training course mentors. In order to accomplish this objective, the module participants are provided with a common template of the document to be edited in a collaborative way for each case study. Once the participants consider that the module mentors should review a part or all the exercise, they will use the “Review” tab of the document to reply or inform the mentor about the status of the activity (see figure 10).



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Case Study - Overview of the digital economy

[Read document](#) [Review](#) [Edit](#) [Visual Editor](#) [Edit data](#) [History](#)

EDITOR DECISIONS HISTORY
Editor:
22 June 2022
Major revision is needed
Complete de different sections

REPLY TO THE COMMENTS OF THE REVIEWERS
Complete de different sections
Reviewer A
10 June 2022
Complete de different sections

INFORM THE EDITOR
Please, revise the manuscript and respond to reviewers' comments. Then, send a summary of the reviews to the editor.

REVIEW STATUS
The author is improving the article

REVIEW STATUS
No reviewers have given their recommendation yet.

SUBMISSION STATUS
Confirmation by the editor of the publication is pending

[FURTHER INFORMATION](#)

Figure 10: Participants review form

Once the participants notify the mentor about the status of the activity, the mentor will use the review tab to give his/her comments to the students until he/she considers that the activity has been successfully accomplished.

Read document
Review
Edit
Visual Editor
Edit data
History

Assign reviewers
Reviewers feedback
Editor decisions
Review history

REVIEWERS FEEDBACK

WRITE YOUR COMMENTS TO AUTHORS


Subject

Question or comment

SEND

REVIEWERS COMMENTS

Complete de different sections


Garcia-Espinosa, Julio
6735

Escuela Técnica Superior de...

10 June 2022

Complete de different sections

EDIT
DELETE

Reply to: Complete de different sections

REVIEW STATUS

The author is improving the article

Figure 11: Mentor review form

3. CONCLUSIONS

The Online Training Environment aims to provide to members of PhD programs with the skill to assess the business opportunities through the “learning by doing” approach. To success, the platform offers the materials and contents to improve the skills in entrepreneurship and the environment to co-work in a collaborative way.

Specific actions to be carried out on the prodPhD Online Training Environment has been designed and implemented. The environment provides the required social network utilities and tools to create the virtual community of the project and includes the necessary teaching guidelines and specific “learning by doing” materials for entrepreneurship training.