

D.T3.1.1 LAB ON BUSINESS SUPPORT

Deliverable D.T3.1.1

Template

Pilot report

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Executive Summary/Management Summary

CNA Emilia Romagna supports the directives presented by the Italian government within the “Industry 4.0” national plan, and is investing in the implementation of a network of Digital Innovation Hubs at regional level, able to support and guide companies towards the new production model of Industry 4.0, a key issue in the project “4-Steps”.

All these changes will induce companies to strengthen their competences, to acquire new ones and to rethink their internal organization of work.

It will be more and more important to create a network partnership with universities, research centers, technology partners, Competence Center and DIHs, able to guarantee a “pipeline” of talents to support the entrepreneurs’ future, in addition to an exchange of skills and knowledge. Innovation is the key word of the growth and development of companies, and it increasingly represents an essential element to guarantee the competitiveness and profitability of companies. CNA Emilia-Romagna cooperates with the competence center BI-REX to launch opportunities and services addressed to companies, coherently with those of the 4-Steps project, in order to support the companies of Emilia Romagna in their innovation process, through the adoption of the enabling technologies of Industry 4.0 and the development of solutions with a high TRL.

CNA Emilia-Romagna considers technology transfer and digitalization in SMEs among the priorities of its policy, and for this reason its presence in the *Smart Specialisation Platform* represents an opportunity to get in touch with present and new actors of innovation at European level.

The cooperation and exchange of new ideas coming from the launch of new partnerships will enable CNA Emilia-Romagna and its DIHs to develop new innovation strategies keeping into consideration the local strategic positioning and the growth prospects of SMEs.

Within this logic, and in order to improve the business/production processes of the companies of Emilia-Romagna, CNA Emilia-Romagna has organized a path aimed at its DIHs (pilot action D.T3.1.1.).

Through the support of two experts, Professors Carmelo di Bartolo and Valentina De Matteo, a path according to the methodology of **Design Thinking** was implemented, reserved to the representatives of the local DIHs, in order to focus their experience and knowledge in a development project for companies, able to become a demonstration of the design management process.

In this scenario, **Design Thinking** becomes a more and more effective development model to face the project culture: a tool useful to design scenarios conditioned by change, enabling companies to a global scale growth.

A path with such structure will enable DIHs to identify solutions, also with a creative vision, typical of strategic design, through the use of valuable tools which will enable to work and offer new ideas to companies.

Thanks to this pilot action, DIHs will have a role of support and acceleration of the digital transformation in SMEs, enlarging the diffusion and adoption of digital technologies, as well as the access to digital technologies in companies.

Introduction (incl. business needs and requirements)

CNA Emilia-Romagna aims at addressing its pilot action to the local DIHs, which are the access points to tools, services and relations for the companies interested in knowing the programs and opportunities regarding Industry 4.0 better. CNA Emilia-Romagna has analyzed the needs of the Emilia-Romagna area concerning a greater demand from companies to invest in innovation and digitalization 4.0.

According to the needs of companies, CNA Emilia-Romagna has planned to address its Pilot Action to the professionals of its DIHs and to experiment the design thinking methodology.

The path is formed by several meetings according to the following diagram:



STRUCTURE

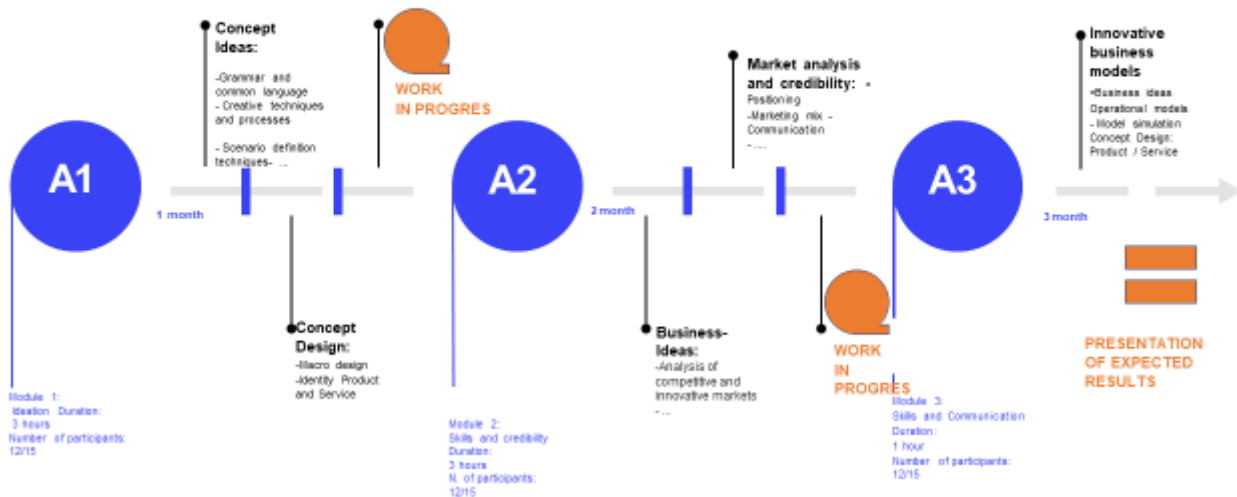


Figure 1: methodology of the design thinking path

Details of the path:

1) Pilot D.T3.1.1 (A1 of the diagram):

- a. 24th June 2021: plenary online initiative to present the design thinking methodology; project designing, listening and generation of ideas and organization of working groups through coaching actions.
- b. During the meeting Professors Di Bartolo and Valentina De Matteo highlighted how digital technologies such as Big Data Analytics, Artificial Intelligence and the Internet of Things are essential in the transformation and strengthening of the way in which Design Thinking is applied in projects of consultancy and innovation. Digital transformation is not only a technology phenomenon, but it involves the whole business organization, significantly reinforcing the different phases of the innovation processes and of Design Thinking. At the same time, Design Thinking helps companies in understanding the potential of digital tools and of all the potentialities of business and of involvement of the working teams. Companies need Design Thinking to understand the potential of technology innovation, to turn it into business opportunities and into products and services accessible to people. Innovation cannot any longer be confined to the research and development department, it should rather be transversal to all the business units and processes. Design Thinking is the tool to accelerate this transformation, which is organizational even more than digital.
Below the map of participants:



24 GIUGNO: MAPPA dei partecipanti

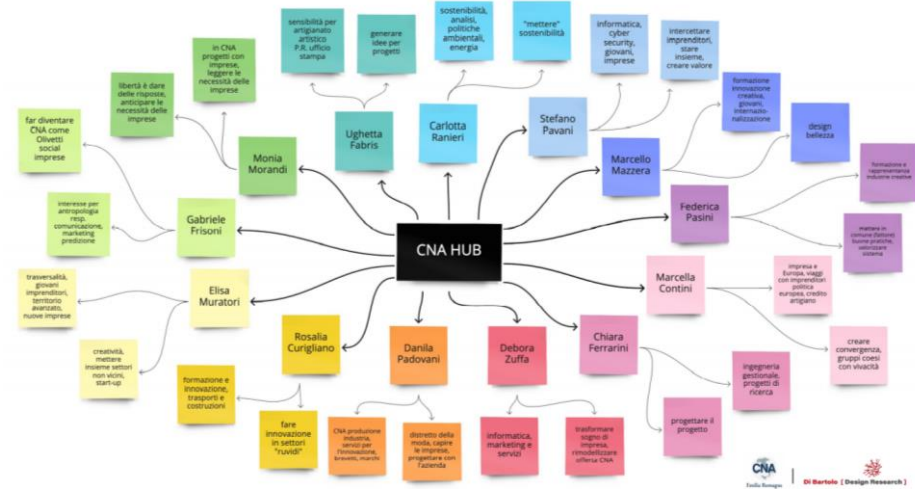


Figure 2: Map of participants

- c. 1st September 2021: in order to better facilitate their interaction, participants they were divided into two working groups, which worked and exchanged ideas online, supported by Professors Di Bartolo and De Matteo. Aim of the meeting was to identify an SME for each group, fit to better represent the values of CNA and whose managers were dreamers and pioneers, aware of their own goals and determined to achieve their ideals. Those entrepreneurs also needed to guide the growth of their activities and projects according to their dreams and ambitions, offering real advantages and benefits to the users, sharing their values with the potential users. Dividing the representatives of the 10 DIHs in groups, mixing skills and backgrounds, enabled to guarantee a high level of discussion among participants and of awareness-raising on SMEs. Then each group had to fill the descriptive form with the characteristics of the chosen company, according to the following diagram:

THE COMPANY. Descriptive form

1. **COMPANY NAME**
2. **PROFILE:** small / medium / large company ?
3. **PRODUCTION:** production or service company? What kind is it?
4. **CULTURE:** is it an innovative or conservative company? Which approach to innovation does it have?
5. **POSITIONING:** how it stands compared to competitors
6. **SWOT ANALYSIS:** identify the internal characteristics of the company, or its own strengths (Strength) and weaknesses (Weaknesses) and external situations that could be opportunities (Opportunities) or threats (Threats)

Figure 3: Information sheet of the path:

- d. 10th September 2021: each group presented the information sheet with the relative SWOT analysis of the chosen company to the experts Di Bartolo and De Matteo, who deemed the choice of companies as very interesting and in line with the target of most national SMEs.
- e. The teachers stressed the importance of illuminated entrepreneurs wishing to see their companies grow according to their dreams and ambitions, able to offer real



- benefits and advantages to the users, for the common good, characteristics possessed also by the identified companies presented during the pilot.
- f. The importance of the connection between dreams and common goals gives companies a clear and accurate vision, and a cause for reflection to make the members of a company understand its aim.
 - g. Each group filled the following chart with the details of the selected companies:

PART 1. for the 10th September 2021

A. Team working:

5/6 people per group, mixing skills and backgrounds

B. Activities to be carried out in groups:

1. Dream: starting from the proposed map, find links between "dreams" and common goals

2. Selection: among the companies known to each member of the group, identify those that most reflect the values of CNA and in which there is an "enlightened" entrepreneur as an interlocutor

3. Description: of one company per group, fill in a descriptive card according to the model provided on the following pages

Figure 4: Descriptive sheet of the group path:

- h. 23th September 2021: plenary online initiative of validation of the projects designed in the previous phases

In the occasion of the meeting, Professors Di Bartolo and De Matteo showed how to support companies in their innovation path through the design thinking approach and how the staff of CNA Hub can encourage a digitalization strategy in companies.

The **Design Manager** ensures that internal design **processes**, **procedures** and **functions** add **value** to the company, identifying suitable figures and tools, crossing different functional units and different company projects.



Figure 5: The role of design manager

This meeting was the conclusion of the first pilot action and the start of the second pilot action, which will be addressed to companies and will see Camilla Fecchio and Valentina De Matteo as teachers.



1. Your Solution: your Digital Innovation Hub and its services

Could be a literature review, an empirically study (case study, action design research, etc.) or a mix of both; incl. a summary of the experiences you made within the workshops, trainings, events out of WP2 & 3.

The design thinking methodology origins from case studies and represents a valuable development model to face the challenges of the ongoing digital transformation and to generate a methodology to support the development of digital needs.

The described methodology is a clear sign of how Design Thinking is becoming a fundamental approach in the new digital world, which requires a radical rethinking of the processes and organizational structures with which products and services are designed, implemented and distributed. Hence the growing interest towards Design Thinking. An approach starting from a change of view from the past, in terms of mentality, process and tools. Hereafter the representation of the process of Pilot 1.

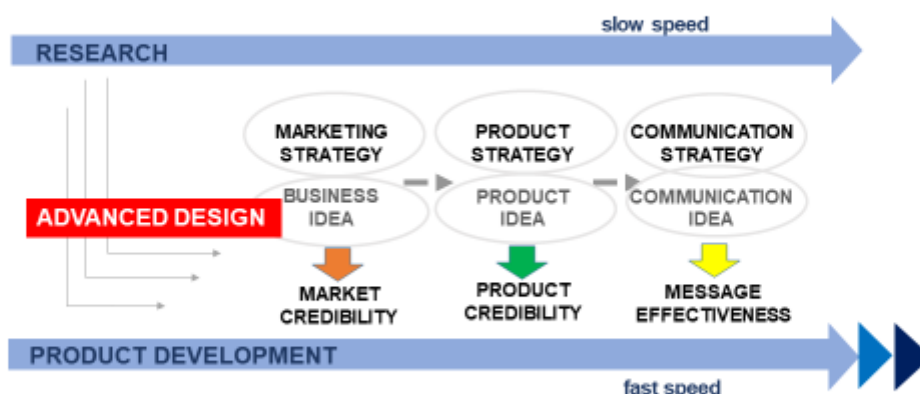


Figure 6: Pilot 1 Process

1.1. Your Solution 1, the Hub

In order to sensitize companies to the Industry 4.0 impact and to accompany them towards processes of growth and transformation, CNA Emilia Romagna offers a catalogue of services, which provides individual answers to the needs expressed by the companies, starting from a bottom-up approach, through the identification and analysis of the needs of the artisan world and of SMEs.

The services developed by CNA Emilia Romagna for companies are described below.

INNOVATION AND RESEARCH

WHAT

CNA accompanies businesses in identifying instruments for the development of new products and processes for their economic expansion and digital transformation.

HOW

1. ORGANIZATIONAL INNOVATION

We help the companies in their growth through the innovation of managerial and decisional models.

For example: business networks; lean manufacturing; creation of international partnerships.



2. DIGITALIZATION

We accompany the enterprises throughout the selection of the most adequate computer solutions for each reality.

For example: purchase and installation of hardware; choice of the management software; implementation of websites and business networks

3. MANAGEMENT CONSULTANCY

We implement process and product analyses from the perspective of Industry 4.0.

For example: survey of the innovation potential; implementation of development plans.

4. MATCHING THE BUSINESS WORLD WITH HIGH LEVEL SKILLS

For example: training internships; research apprenticeship

5. TECHNOLOGY TRANSFER

We bring the technologies developed in research agencies to companies.

For example: agreed conditions; support to companies; training paths and seminars.

6. PATENTS AND CERTIFICATIONS

We assist the companies in these procedures.

For example: protection of industrial property rights.

TRAINING AND EXPERTISE

WHAT

For companies, training is the keystone to generate value, activate change, enhance their own potential and position themselves as protagonists.

HOW

1. DEVELOPMENT OF TRAINING COURSES TOGETHER WITH COMPANIES

We identify the needs of companies in order to create an adequate business training plan.

2. TRAINING PATHS MANAGED BY EXPERTS

We propose training on the most innovative aspects of management organization, of internationalization, of research.

3. FINANCING FOR TRAINING

We identify financing opportunities and propose them to companies.

4. INTEGRATION OF HIGHLY QUALIFIED PROFILES

We select new specialized skills to meet the companies' needs.

FINANCING CONSULTANCY AND CREDIT

WHAT

CNA offers the companies consultancy and services in the fields of credit and finance, in order to guarantee them an adequate competitive and development level.

HOW

1. IDENTIFICATION OF SPECIFIC FINANCING

2. SEARCH AND ASSISTANCE ON TAX BREAKS

For example: super-amortization and hyper-amortization; tax credit for research and development; incentive laws.

3. "CREDIT PLAN"

We offer a comprehensive consultancy, in order to plan the needs of credit of every company at the best.

For example: bank agreements; debt restoration; creation of a business control system; assessment of the economic-financial effects of investments.

INTERNATIONALIZATION

WHAT

CNA supports the growth of companies in the global market, by identifying the most adequate instruments for their international development

HOW

1. SCOUTING OPPORTUNITIES OF FINANCING

We monitor the main financing sources, with special attention to the non-repayable funds, and accompany enterprises in designing proposals.



For example: international partnerships; ministerial, regional and local calls.

2. PLANNING A COMMERCIAL ACTION

We support companies in developing their national and international market.

For example: marketing plans; structure of the distribution channel; promotional events; trade exhibitions.

3. ACCESS TO NEW MARKETS

We implement market analyses and define the most adequate strategies of commercial penetration.

For example: business meetings (B2B); integration of Export Managers and Digital Marketing experts.

1.2. Your Solution 2, products & services

The profile of CNA Emilia-Romagna has been published on the *Smart Specialisation Platform* portal and this opportunity will put CNA ER at the center of a database consulted by policy makers and stakeholders at international level. Being published in this database represents a great opportunity, which will guarantee visibility to the structure and an exchange of experiences with other centers.

Thanks to this possibility and the support of pilot 1, CNA ER will be able to offer a qualified level of services, availing itself of a network of innovation actors, both within the Emilia Romagna region and in Europe.

1.3. Your Solution 3, processes

Through its hubs, CNA Emilia-Romagna supports and sustains companies in the processes of growth and digital transformation, helping companies in identifying their innovation needs, up to the actual implementation of the research project and the introduction of the necessary technologies, through an offer of services and opportunities aimed at creating an organization able to generate employment growth by improving the efficiency of their structures and knowledge systems.

1.4. Your Solution 4, networks

Coherently with the National Industry 4.0 Plan and the Smart Specialization Strategy of Emilia Romagna, aimed at creating an increasingly dynamic and competitive region, able to generate employment growth by improving the efficiency of its structures and knowledge systems, CNA ER aims at creating and maintaining a strong connection with the key actors (research laboratories, companies, Emilia Romagna Region, innovation centers, Clust-ER, etc.) in order to favor the generation of knowledge, technology and organizational innovation, capitalizing competence and relationships.

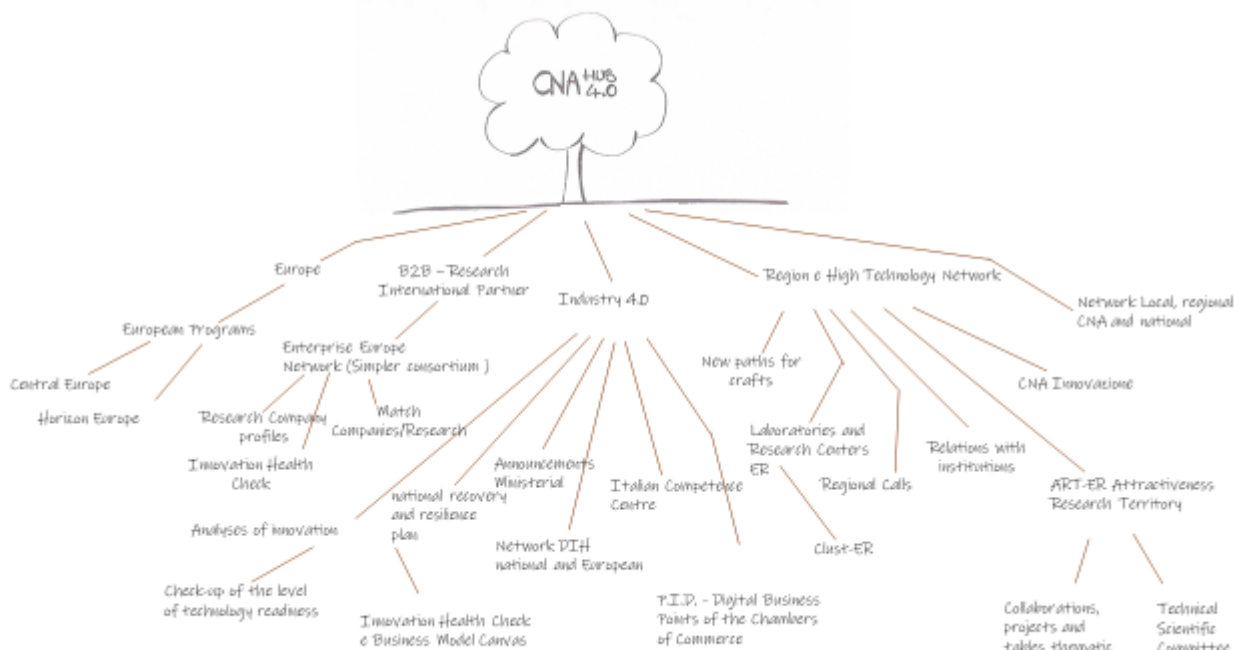


Figure 7: CNA ER Network

1.5. Your Solution 5, business models

CNA Emilia Romagna has adopted the methodology of Design Thinking as it represents the most adequate choice to support its DIHs, which play both the role of catalysts for change within SMEs and of facilitators for the development of a new mentality in organizations for the creation of a new innovation process.

CNA Emilia Romagna also adopts the Business Model Canvas methodology, a strategic tool using a visual language to represent the business model of an organization.

Through this methodology, action plans are designed through a visual template showing the infrastructure, the products, the customers, the suppliers and other elements characterizing a company, offering an overview.

2. (Expected) Impacts for your tackled business/industry, region, country & Interreg

The companies of Emilia-Romagna, always virtuous and attentive to innovation, show a strong attention to the technology research in the investments within I4.0 to be activated in their companies.

The SMEs of Emilia-Romagna are interested in the advantages they could get through the technologies of Industry 4.0, which would make them increasingly “intelligent” and interconnected along the whole production chain.

The presence in the area of the Emilia Romagna region of Technopoles, University, Bi-Rex Competence Center and industrial research laboratories supporting companies in developing high TRL solutions, guarantees a high degree of availability for the experimental development and industrial research within a public-private cooperation.

Together with its 10 DIHs spread in the Emilia Romagna area, CNA ER has the goal to support companies in the transformation process and to inform them about I4.0 issues, thus raising their awareness on the theme, thanks also to supporting measures such as the National Plan I4.0, sustained not only by CNA ER but also by all the key actors (research laboratories, companies, Emilia Romagna Region, innovation centers, Clust-ER, etc.), in order to facilitate the development



and experimentation of real solutions and their fast application, able to have the widest diffusion and impact on the regional and national area.

Thanks to the funding from the Commission of new programs on digital Europe, digital investments will be promoted at EU level, enabling companies to face the digital challenges in a more aimed and rational way, strengthening ecosystems in support of digitalization.

The objective is to create the largest number of jobs, thus enhancing the growth of organizations and stimulating their competitiveness on international markets too.

In this way, also the role and functions of the “European DIHs” will be strengthened, as they will be given a role of support and acceleration of the digital transformation in SMEs, thanks to their function of catalysts of incentives and promoters of innovation projects.