

D.T3.1.2 WORKSHOP HOW TO DEVELOP INNOVATION

Deliverable D.T3.1.2

Deliverable report

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The DIHs of CNA Emilia-Romagna

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, with the aim of accompanying companies in the transition to the new business model 4.0, key theme of the project 4 steps.

Through its Digital Innovation Hubs, CNA Emilia-Romagna supports companies to help them understand their digital maturity, identify priority areas of intervention and use the public tax incentives made available by the Industry 4.0 Plan.

The strength of the DIHs of CNA Emilia-Romagna is to be able to offer companies a qualified level of services using a network of national and European innovation actors, strengthening their skills on new enabling technologies.

Through its offices located throughout the Emilia Romagna Region, CNA Emilia-Romagna is able to guide companies towards support structures aimed at digital transformation and technology transfer to stimulate and support them in the implementation of industrial research and experimental development projects.

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 Specialization 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.T3.1.2.).

Through the support of two experts, Professors Camilla Fecchio 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.

The idea of CNA Emilia-Romagna is to provide a useful tool for DIHs to plan scenarios conditioned by change, which enable companies to grow on a global scale.

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

CNA Emilia-Romagna aims at addressing its pilot action to its 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.



Pilot 2 (D.T3.1.2) was designed in continuity with pilot 1 (D.T3.1.1). In this second phase, the two case histories presented in pilot1 were taken into consideration.

The two pilot cases facilitated the learning of the managers of the local DIH, in a practical and fast way.

The objectives of the meetings were: **to formalize a real model** fit to be spent with companies that enables you to focus attention on your real needs / needs, through the use of easy-to-use tools and to **develop new solutions** and implement them through a process of continuous improvement in favor of companies.

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

STRUCTURE

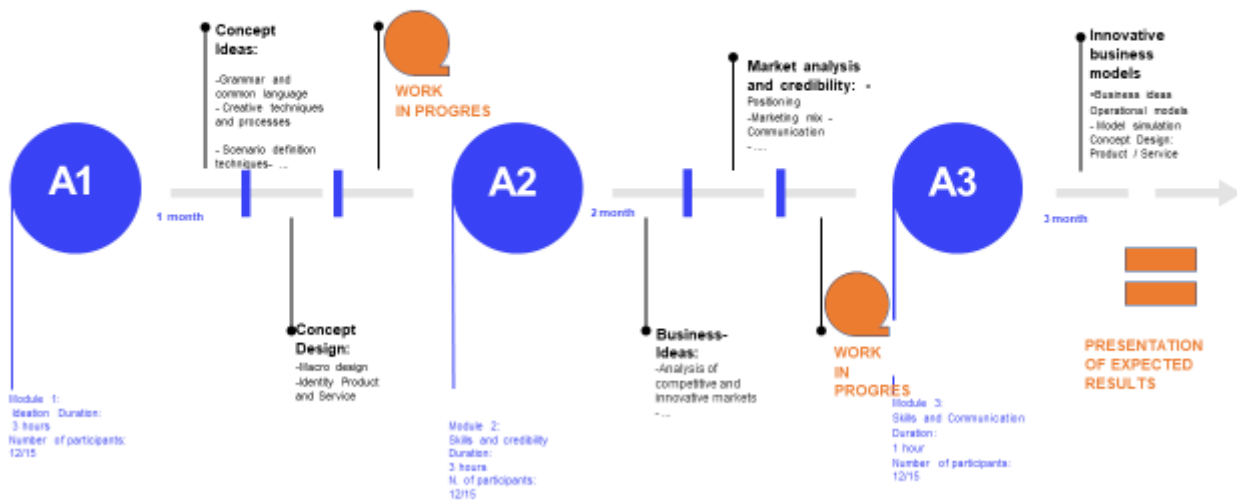


Figure 1: methodology of the design thinking path

Details of the path:

1) Pilot D.T3.1.2 (A2 of the diagram):

The path included several appointments and focus groups, with the use of work teams to stimulate group interaction and discussion, in order to create new and interesting food for thought. The webinar initiatives were alternated with moments of back activity, where the two work teams met to collect ideas to share in the plenary initiative.

The calendar was organized by the two facilitators, Professors Camilla Fecchio and Valentina De Matteo:

- a. 23rd 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 2: 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. The participants were split into two working groups and their activities followed one another as described below:

b. 6th October 2021: Group 1 - case history Packtin

Group number 1: met in a videoconference to define the product concept and the company's evolution strategy.

The Packtin case taken into consideration is a start-up from Reggio Emilia (Italy) that offers a techno-scientific platform for a 360° enhancement of agro-industrial by-products. Its story begins in the laboratories of the University of Modena and Reggio Emilia, studying the preservative properties of natural compounds, also contained in many industrial by-products.

Today Packtin acts as an intermediary in dialogue with the entire Italian agri-food chain and aims to help make it more circular and sustainable.

In order to carry out this activity, the participants of the group started from the swot analysis to propose strategies and support actions that the CNA System can offer to help a company build its own business development project.



Figure 3: Packtin core process

c. 12th October 2021: Group 1 - plenary presentation in webinar of the work carried out. On the occasion of the presentation, the participants of Group 1 presented the Packtin case with an in-depth analysis of the strategies that can help develop the company's business project and the services that CNA can activate to support, which are as follows:

- 1) Punctual knowledge of CNA services and possibility of use / support
- 2) contribution in part of economic and financial analysis
- 3) Promotion of a sustainability campaign on the national territory

The company's goal is to expand new fields of application in addition to the food one with which it already collaborates.

This company intends to continue to collaborate closely with the University, as one of its partners comes from the university world. An important part of the company's business regards applied research and consultancy. 40% of customers to whom he advises have met them through the university, through research, conferences, etc ...

Packtin is developing collaborations with various food companies on a national level, customizing its products for the different food matrices concerned, and then arriving to their application and marketing. In particular, 9 companies worked on the construction of the pilot line, with which it is developing various partnerships on projects and activities.



Innovation for the company is not so much how it produces the material itself, but its use on the market. For this reason, it is important for the company to protect the invention of its product and its economic value, in order to protect its investments in research and innovation.

This company, a manufacturing start-up, considers important to participate in public tenders to finance its activities. In particular, the Emilia-Romagna start-up tender, which they won in 2017, covers 70% of the costs of machinery and represents a valid tool for young companies, that can boast of obtaining tax breaks and advantages, thus creating new opportunities for doing business and encouraging employment, through a sustainable growth strategy.

This company wants to contribute to the Green Revolution in Italy by becoming the first circular agri-food company capable of fully and sustainably exploiting resources through a new generation plant. The idea is to build a model capable of demonstrating to the major players in the agri-food chain that a circular economy is also economically viable. It is a great opportunity for the whole country, given that Italy is a world leader in several very important agricultural productions, from tomato to orange, from olive oil to beetroot. The circular economy train is passing by and Italy has all the credentials not only to get on board, but to be at the helm.

d. 20th October 2021: GRUPPO 2 - Officina Cosmetica Estense

Back meeting of the second working group. The participants of Group number 2, like group number 1, met in a video conference to define the product concept and the company's evolution strategy in the wellness sector.

The participants met to analyze the various phases of increasing business and communication activities to start the business development project to be proposed to the company.

The company taken into consideration is Officina Cosmetica Estense of Cavallini Francesco from Ferrara (Italy). This company, a start-up and small niche production company, has created the cosmetic line "Il Secreto di Aspersa".

Their cosmetic products are of natural origin and contain the principle derived from the Helix Aspersa Muller snail, HelixComplex®.

This business started with the sale of products in neighboring areas (pharmacies) but wants to expand. Their site has an e-commerce section.

This company collaborates with the University of Ferrara and has a strong propensity for R&D. Innovation is the basis of their entrepreneur's vision.

In order to carry out the activity, Group 2 purchased a product on the company's e-commerce site to evaluate the shipping times of the product and the effective validity of the site.

Also the shipping wrapping and product packaging were taken into consideration.

The group then took into consideration the swot analysis to propose strategies and support actions that the CNA System can offer to help the company build its own business development project.

e. 21st October 2021 - Group 2 - webinar presentation in plenary of the work done.

On the occasion of the presentation, Group 2 presented the Officina Cosmetica Estense case with an in-depth analysis of the strategies that can help develop the company's business project.

The swot analysis has been taken into consideration and suggestions for improving the company strategy have been presented on this.

The company is a small start-up, but should invest in a new coordinated communication image and a renewal of eco-sustainable packaging, through the connection with the University of Communication / Design or contest to study a new product identity proposal that has greater impact. and be more captivating.

Another suggestion is to expand the sales network. This company currently supplies local pharmacies in Ferrara, but should expand its distribution network throughout the region.

It would also be important to expand the product lines, for example differentiating them according to the age target to make it more attractive to a larger range of customers.

Furthermore, participation in sector fairs (example: SANA and Cosmoprof) and organic shops would give the opportunity to identify new contacts and new ideas for product development.



Finally, the opportunity to identify new and potential producers of raw materials (snail slime) would give the company the opportunity to diversify suppliers, reducing dependence on a single source of supply, thus sharing the risks.

The initiative continued with the intervention of the two professors Fecchio and De Matteo who presented the objectives and the process of the path initiated to the representatives of the DIHs, which consist in bringing together the experience and internal knowledge of CNA in a development project for the company, which becomes a demonstrator of the Design Management process.

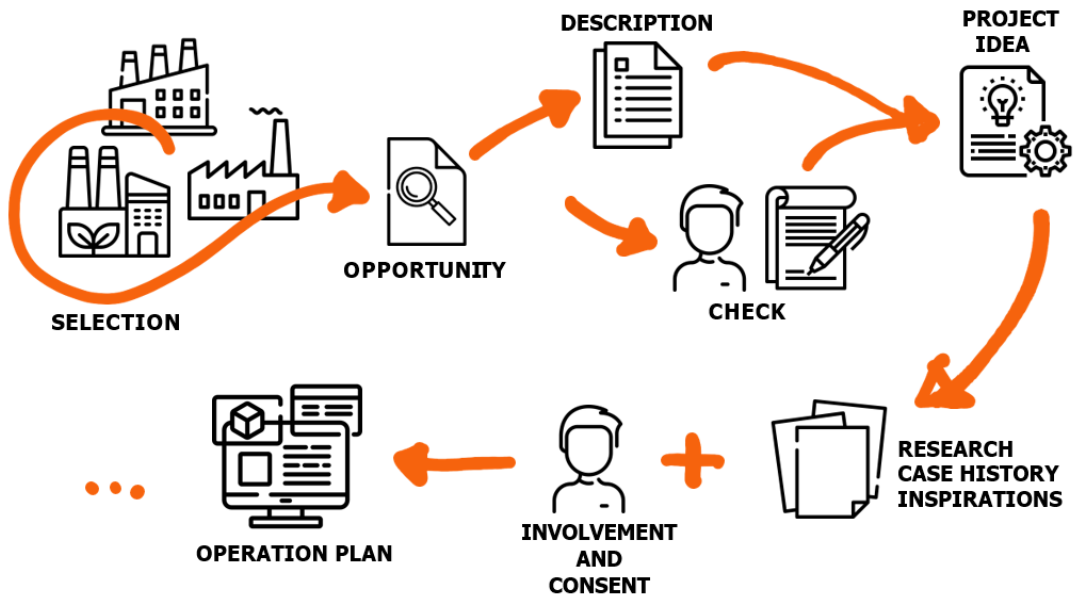


Figure 4: design manager path

The two professors then presented the product concept of the two companies Officina Cosmetica Estense and Packtin and the operational plan with the key figures to be involved and the activities to be started.



O.C.E.

Sense of well-being

Emotional

- Therapeutic value

Functional

- Sensory attractiveness
- Differentiation
- Risk reduction
- Reduction of time and effort
- Personalization

Language

- Communicate with languages appropriate to customers / market profile.

Virtual community

Transparency and authenticity

- Involve customers in the development of products / services for customers.
- Declare and concretely demonstrate the values of the company in which the customer is identified.



Customer age

30 years and over (hypothesis) sensitive to recognizing the quality of the product / services

Type of business:

Quality chain / parapharmacies / pharmacies / spas / ...

Information channels:

spread the word / expert advice / prescription / informants / ...

Connection

Facilitate customers to find the product on the market.

E-commerce

- Simplification of purchase procedures, simplified interface, prepare the languages related to the market that you want to preside: Italian, English, Russian ...
- Multi-channel predisposition of sale



Figure 5: Strategic concept of Officina Cosmetica Estense

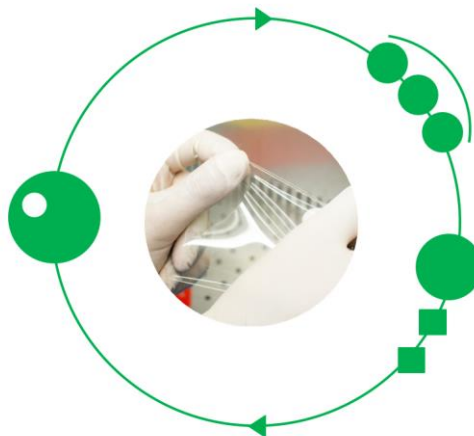
Once the entrepreneur has obtained the consent on sharing the operational plan, this must activate a new process of action that must generate:

- New Attitudes
- Innovative Processes
- New Business



Recovery of reduced quantities of food waste

Increase production and sizing of machines to handle larger quantities of waste



Hidden technology

- Patent and process security
- Consulting at the patent and trademark office

Regulations and certifications

State of the art on any existing regulations or plans law in the EU

Expansion of new fields of application

- Other types of use

Figure 6: Strategic concept of Packtin



In the construction of the project it is also important to listen to the market and, based on the business strategy adopted, to define a strategic concept as well as a financial and investment strategy. At this stage it is important to define a business idea that takes into account the credibility of the product in the eyes of the consumer.

Once this phase has been organized, in order to place on the market a product that has credibility, it is necessary to define marketing, design and engineering strategies, in order to position the product in a targeted way and give it a positive and credible uniqueness within its target market. Positioning allows the creation of decisive strategic advantages that have the success of the service / product as their ultimate goal, from all points of view: conceptual, rational and emotional.

Finally, it is important to build a communication strategy that contains a social message to be transmitted to the consumer. Behind the achievement of success, in fact, there are many consumers who have been convinced by the complex of perceptions, sensations and emotional impressions that the product itself has transmitted to them. The more desires, expectations, dreams and experiences that consumers mentally associate with a product, the greater the chance of a purchase act.



Figure 7: Strategic concept of the product in the market

At the end of the plenary part with the presentation of the professors, the presentation of the results continued in the presence of the two companies: Packin and Officina Cosmetica Estense, which showed interest in the work done, asking for an appointment with the representatives of the DIH of Reggio Emilia and Ferrara to deepen the project.



1 The Design Thinking methodology

The design thinking methodology originates 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 2.

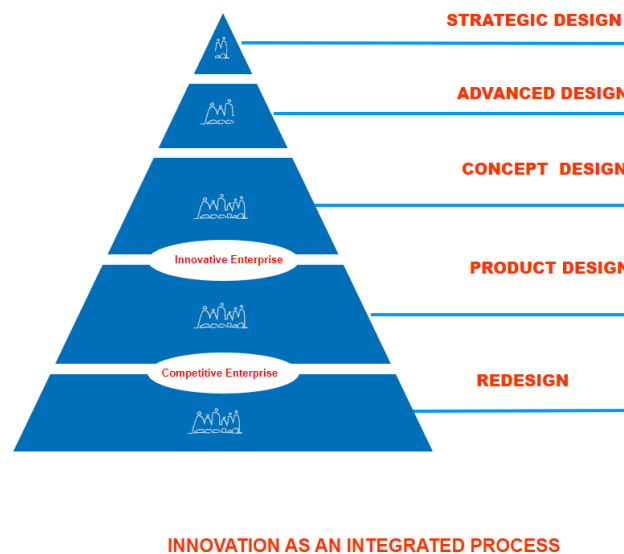


Figure 8: Innovation as an integrated process

1.1. CNA Emilia Romagna's catalogue of services

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 proposes 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. Smart Specialisation Platform

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. The Hub of CNA Emilia-Romagna

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. The 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.

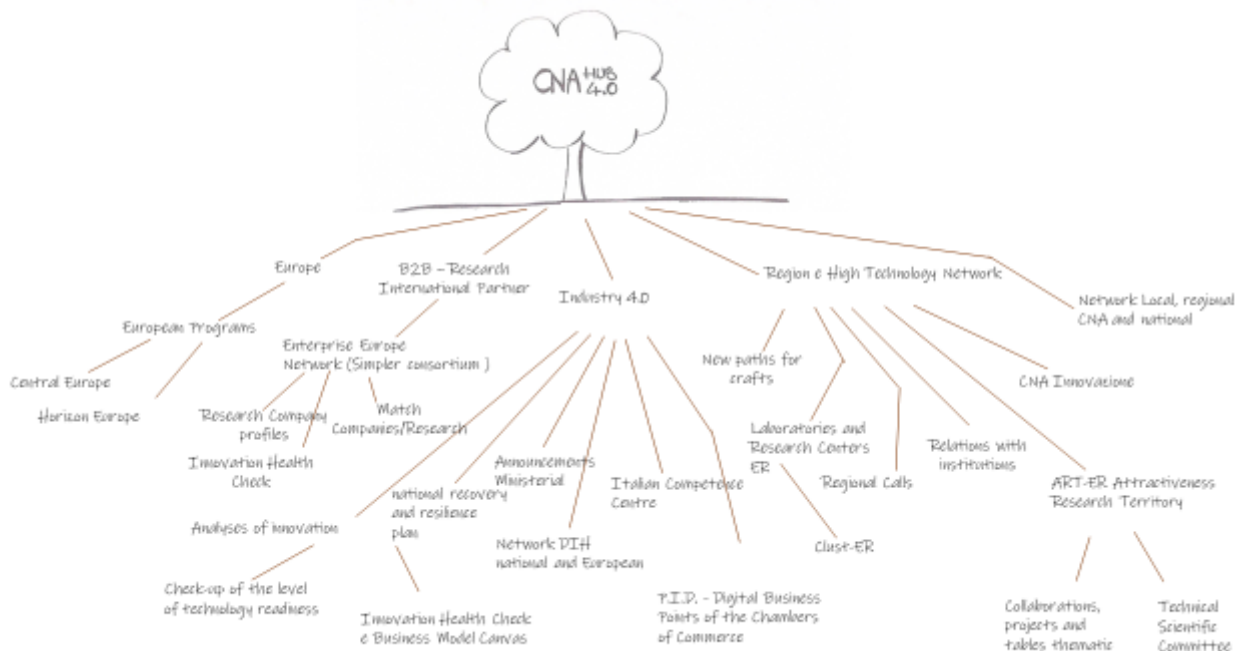


Figure 9: CNA ER Network

1.5. The Business Models Canvas

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. The digital transformation and the opportunities for SMEs

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.

