WORK PACKAGE THEMATIC 2
SUMMARY OF MAIN ACTIVITIES AND RESULTS
Work Package Thematic 2 defines the general framework for a technological and knowledge management model which supports a more effective and efficient way to work for WISEs.

Considering that ICT and managerial tools/services are not tailored to WISEs needs and resources, this Work Package, built on results from previous Work Package, aims to provide a framework for WISEs empowerment through ICT tools and skill injections.

In order to meet the needs of WISEs, the Technology Framework defines the general Information System architecture and identifies main functional areas to be supported by the ICT tools. The knowledge management framework also helps to assess competences (technical, technological and managerial) of the WISEs, to define gaps in competences and to identify the correct learning path. To achieve this goal, the activities were structured in four phases:

Activity #1: The Design of the general framework for WISEs processes and service empowerment

The main goal of these activities is to define the scope of activity and the approach to define the solution. For this purpose, we had defined the innovation actions and business processes on which to focus the efforts and implement the identified solutions. Then the guidelines defined how to effectively act the initiatives.

The design of the general framework started with the identification of innovation actions to be developed to support WISEs both in term of Technology solutions to support process activity that in term of Competences to improve Managerial and Entrepreneurial skills. Then we focused on identifying the main processes and services, provided by the company, that need improvement both in terms of skills to evolve and govern the processes and technological tools to support the activities. We started from a reference model on which we have mapped business processes and categorised by highlighting those that are transversal to all companies and regions (support activity) and those specific to each individual company (primary activity). For each company process, a list of indicators to measure performance was provided. HR Management, Planning, Project Management and Marketing are those deemed most relevant. After outlining the purpose and the main actions to be pursued, the definition of action guidelines and identification of best practices allowed reaching and setting up specific objectives and priorities to tackle the technological and managerial shortages of WISEs. In each region concerned, all types of the stakeholders were actively involved in the activities needed to provide the final deliverable.
Activity #2: The Design of the Information system application architecture framework for WISEs

The objective of these activities is to design the INNO-WISEs Platform architecture through which the identified tools and services will be provided. These activities include the selection of the functional areas for which the service must be configured, the definition of an architecture that allows achieving the pre-established objectives and the definitions of best practices and guidelines for management, as well as the regime and the evolution of the system.

Starting from the processes and services identified in the previous phase, the functional areas to be supported through the platform tools have been defined. The main activities in charge of each functional area, the interactions with the other areas and the categories of tools to support them were therefore detailed. The design of the architecture took into consideration the state of the art of technologies and methods for the development of software solutions with particular attention to the potential offered by the cloud paradigm. The architecture that emerged has two main pillars: the "Marketplace" identified as the tool through which the platform will provide companies with the ICT tools that will be considered most appropriate to their needs; and the "e-Learning portal" which will provide the tools for the management of skills and training modules for the acquisition of skills deemed to be missing. The guidelines for the management and evolution of the platform have been defined to support users in the task of keeping active and evolving the platform even after the conclusion of the project activities. The guidelines are based on two fundamental elements: on the one hand, the principle of sustainability for which the suppliers of the tools and the users themselves will be, with their use, to keep the platform alive and active; on the other hand, the adoption of the Lean start-up model for the development of the information system. The guidelines illustrate how to manage the infrastructure in terms of activities, skills and professional figures in charge.

Activity #3: The Design a general framework for WISESs competences evolution

The objective of these activities is to identify the areas of expertise for which companies need support for their development. The result obtained consists of a list of the main skills that the WISE deems necessary and of value for the company and a framework for assessing its level and defining an evolution path.
Since the management levels of companies are made up of people who often have a humanistic or a social background, we have focused on skills related to entrepreneurship and ICT professionals. In this way, a wide list of skills related to the managerial field, the entrepreneurial one, the ICT management skills and also the so-called soft skills have been identified. On the basis of this list, the companies were asked to indicate their perceived departure level and the desired target level. From the analysis of the models and frameworks present in the literature, a model for the management of the competences of the ICT professional was taken as reference. The European standard and reference for the management of skills, the eCF3.0 Framework, has been used as a reference from which the main rating criteria and the approach for assessing and defining the gaps have been borrowed. In particular, the competences identified “on the field” in the first phase were remapped on 12 eCF 3.0 competences and identified 5 professional profiles. The model that emerged, appropriately refined and detailed, can be used for the assessment of the competences of the managerial levels of companies and will act as a reference for identifying gaps that can be filled by defining appropriate training paths through interactive and MOOC (Massive Open Online Courses), which will be detailed within the Work Package Thematic 3.

Activity #4: The Guidelines for implementation of digital solutions in a coherent environment

The last part of the activities focused on identifying the benefits and in particular the actions enabled by the use of the platform and on the definition of models that could allow companies to have a reference for a better platform approach. The questions we asked were “What WISEs are able to do now?” and “How the Platform works in the different context?”. In short, the objective of these activities is focused on the dissemination on one side of the benefits and therefore why it is appropriate to have an instrument of this type and on the other to illustrate how the platform is able to adapt to different contexts and different functional needs.
Starting from a review of the strategy, the one defined within the activities of the First Work Package, it was shown how the INNO-WISEs platform is able to meet all the objectives set. The analysis focused on the two pillars of the platform: the “Marketplace” and the “Skills management framework”. The benefits, expected from the project proposal and witnessed by literature, have been accompanied by a work of analysis of the ideas provided by the partners who participated in the Maribor meeting. Furthermore, some representatives of the WISEs, in the regions of the project, were asked to illustrate their experiences. Through the definition of a case study, in which to report the main needs, the benefits they see given the tools offered by the platform and the opportunities that they can be picked up or put on site having partially or totally filled their gaps.

Conclusion

This Work Package will also lay down the basis for the implementation of Work Package Thematic 3 which will aim at testing the general model developed. A set of guidelines for framework use and best practices will support the process. Lastly, context variables have been analysed that may in some way influence the evolution of business application support. The goal was to define a reference model that testifies how the platform can take different configurations to meet the specific needs of companies and the specificities given by the context in which they fit. Several variables were taken into consideration, exogenous and endogenous, on the basis of which, we have hypothesised some scales and qualitative evaluations. The result is a model in which companies can map their positioning and identify the configuration of the platform they consider most appropriate to their needs.