







THE PROBLEM

The problem to be solved in the Pugliadigitale 2.0 project was to promote and build a network of companies in the Italian region of Puglia, taking advantage of the techniques and necessary certificates for building digital services methodologies and applications created based on the composition of such services.

Digital Services are achieved either by removing them from existing legacy systems in the consortium companies or by new developments.

Collaboration in the project comes from a large company, SMEs and universities.

The Department of Informatics of the University of Bari in collaboration with SER&Practices s.r.l. were responsible for the implementation of the Software Certification Service.

NEEDS

The needs of the companies within the consortium Pugliadigitale 2.0 were essentially three:

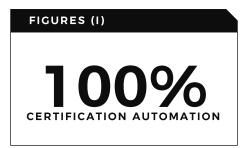
- Carry out the transformation of companies' legacy systems, by a set of reusable components with which to build new ones, independent of the original, reducing application development time and costs.
- Build a Service Catalogue/Applications developed by various software vendors. Once certified, they are used by companies in the consortium.
- Achieve cost reduction in the development and maintenance of the new services and applications.

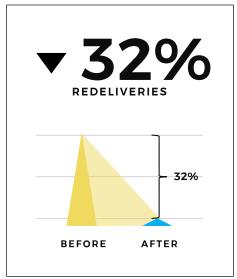
THE SOLUTION

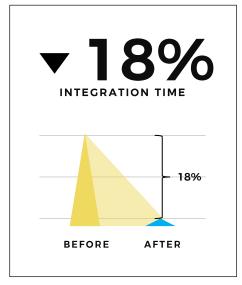
The catalogue of services developed in the project allows the use of services independently or jointly with other services adding written code, with the aim of creating new applications.

To ensure users of services regarding the quality and safety thereof, was set in the project, a Certification Service Quality and Safety, in which a process of publishing services defined and applications, high level operates as follows:

- Development of the service/application. In this phase, the software vendor produced the digital service or application to be inserted into the catalogue.
- Request for publication.
- the managers of the catalogue, using Kiuwan, verified that the quality and safety of the service/application code was in accordance to ISO/IEC 25010 standard. If the indicators of maintainability, reliability, portability, efficiency and safety reached the levels required for publication, it went to the next phase. Otherwise, the service/application provider returns it with the flaws and vulnerabilities found for correction, and delivery of a new release.
- Publication of the service/application so that it is available and usable by any company in the consortium.







THE RESULTS

- Certification automation of 100% of web services and applications generated by software vendors' project.
- Creation of mechanisms to ensure that for each new release, the SLA quality and safety standards established for the application or web service software provider is met. At the date of this publication, it has managed to get 41 items in the catalogue, 38 were accepted and only 3 rejected.
- Creation of mechanisms to identify poor programming practices, and provide the necessary information to the providers for resolution (reports of defects and vulnerabilities). As a result, the number of providers redeliveries decreased by an average of 32%.
- Reduction of the allocation process of solving task defects and vulnerabilities through automated action plans Kiuwan facilitates the management of software refactoring in order to achieve the established indicators. The overall rate of software providers improved 27% in average.
- Reduction of 18% in the integration time of web services and applications created for the project.

