

Task 7.1 Methodology and research framework

The task 7.1 achieved the result of defining a unique research framework able to specify quality measures and identify measurement processes, in order to provide concrete, pragmatic and immediately applicable indications to the partners involved in the PortForward project for the implementation of new technologies.

The evaluation process so articulated will allow the partners, during the execution of the project, to identify the main specifications that must be respected in the implementation of a technological innovation. This process will ensure consistency between *technology* and *strategy* of the organization, so that the investments planned and made are aligned with the real needs defined during the designing phase of the project. In addition, this process supports a close interaction among the different actors involved in the activities in order to facilitate a better understanding of the reciprocal needs.

The definition of the model is the basis for the elaboration of the following deliverables foreseen by WP7. The correct development of the different phases of the implementation process of each use case will allow to validate both the technological solutions for each of them and the developed of the implemented technological platform, which represents the core element of the PortForward project.

Part of the proposed model refers to ISO/IEC 9126 (Colonese, 2006), which sets out the quality standards for software. The tasks and the processing of their deliverables are based on the methodology shown in the *Figure 1*.

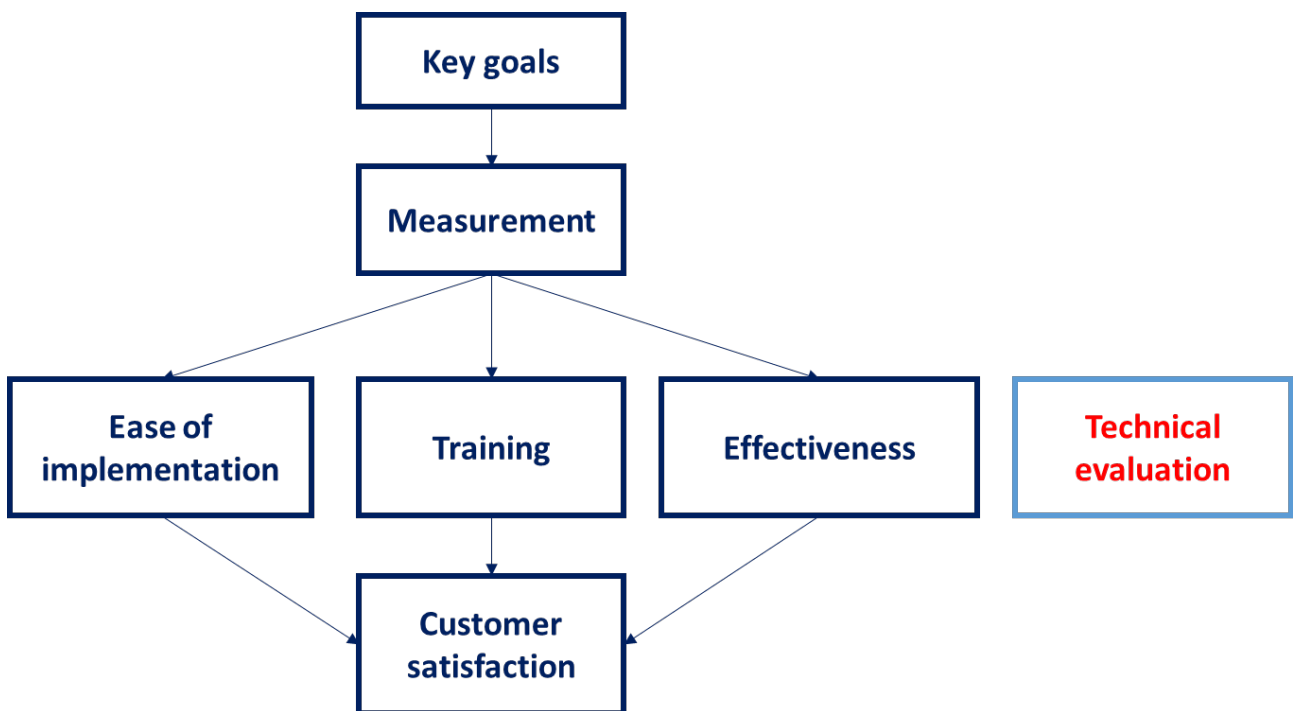


Figure 1 - Proposed methodology (Use case dimensions)

Success of each use case of the PortForward project derives from the quality of the process for its development. The quality depends on the maturity of the organization that produces it, understood as the competence of the people, the effectiveness of the processes and the use of appropriate methods, techniques and tools.

The following **Figure 2** shows the influence of the technology development process on the quality of the process to be improved.

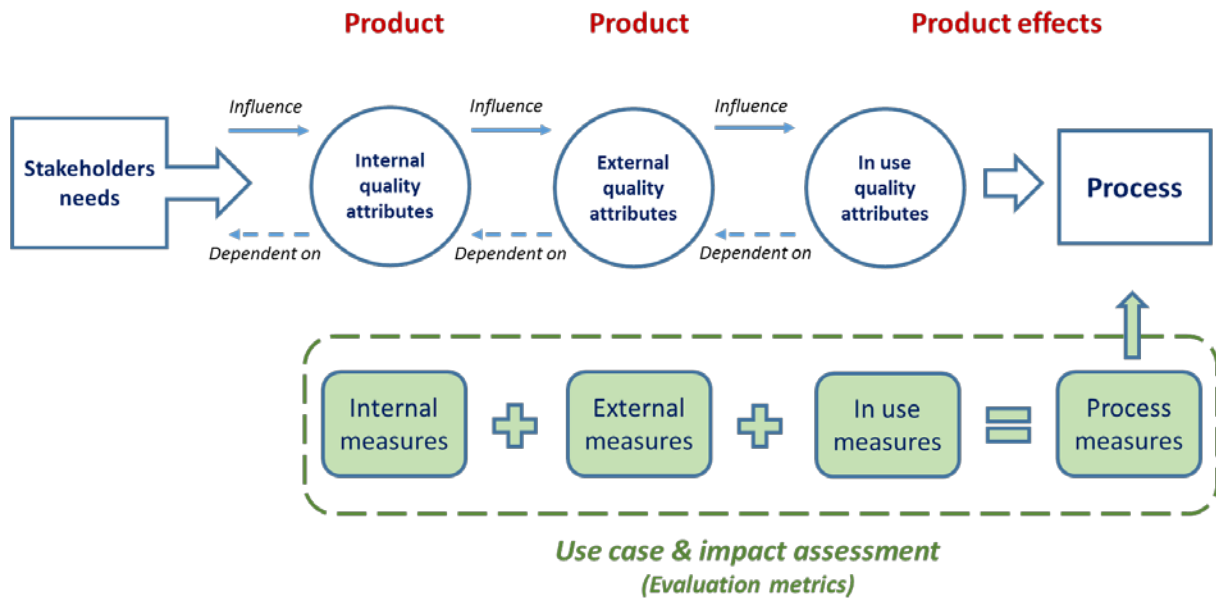


Figure 2 - Use case impact assessment metrics