Carlo Amati is an expert of monitoring systems and data analysis at the Italian Ministry of Economic Development. After following the implementation of an investment program for the completion of unfinished projects, he is now responsible for the forecasting system of the expenditure of public investments. Among his other interests are database integration and predictive modeling. In the past he also worked on software reliability models and on the optimization of neural networks algorithms.

Operational Tools for Strategic Decisions on Public Investments

Abstract:
In Italy there has been a wide debate on the duration of implementation of public investment projects and more in general on the effectiveness of development policies. On the one hand there is a common awareness that it often takes much too long to complete a planned infrastructure; on the other hand there are lots of monitoring systems that extensively collect lots of information on projects implemented with public funding.

In response to the need for knowledge and informed decisions on public investments, rather than common awareness and data repositories not thoroughly exploited, we developed two tools that show how large databases on public investments can be transformed into supports for operational and strategic decisions.

Starting from an application to the Italian case of our concept of a monitoring system on public investments, we present the forecasting system of the expenditure of public investment projects and the dashboard of the duration of project stages.

Both tools are built on past performance of public investment projects as recorded by the various monitoring systems, with the aim of transforming collected data into ready-to-use knowledge.

The forecasting system yields the distribution of expenditure for a specific project over time, given the project’s characteristics and the date when the project is handed over to the contractor; it allows an optimal financial planning of the resources for all levels of stakeholders.

The dashboard is an interactive tool that, given the project’s characteristics, shows the envisaged duration of a project’s main implementation stages (design, procurement and works) within a range of normality; it is a helpful tool for benchmarking and for project selection.