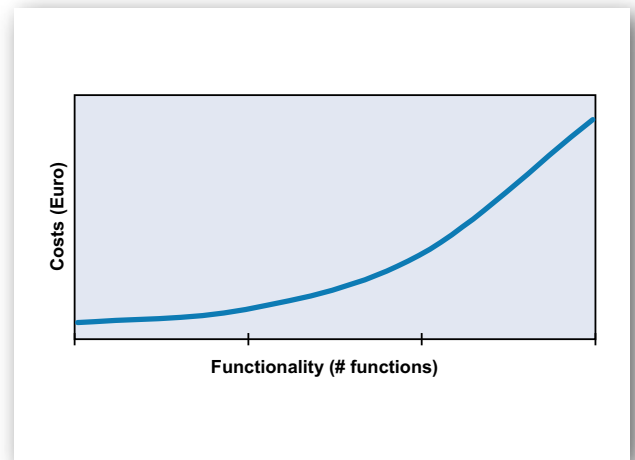
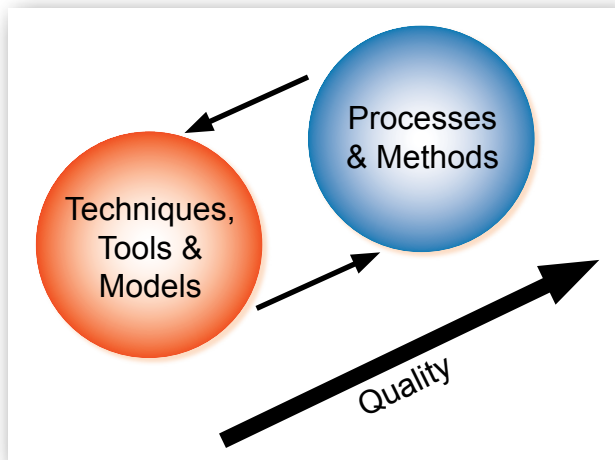




# SERIOUS

## Software Evolution, Refactoring of Operational Usable Systems

In recent decades European industry and research paid much attention to new software engineering methods and technologies. Applying these was often restricted to only new systems, with little attention paid to introducing new technologies in existing software-intensive systems.



### Objectives

SERIOUS aims at improving techniques to smoothly integrate software analysis and software refactoring techniques included in the day-to-day software process, leading to truly evolutionary software-engineering.

SERIOUS aims to define various quality aspects in such detail that they can already be applied and used in the early phases of software development process in order to support software evolution.



The figure shows the progress of an evolutionary development process.



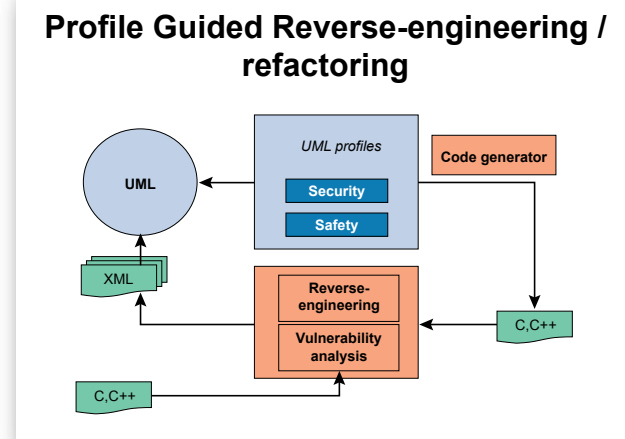
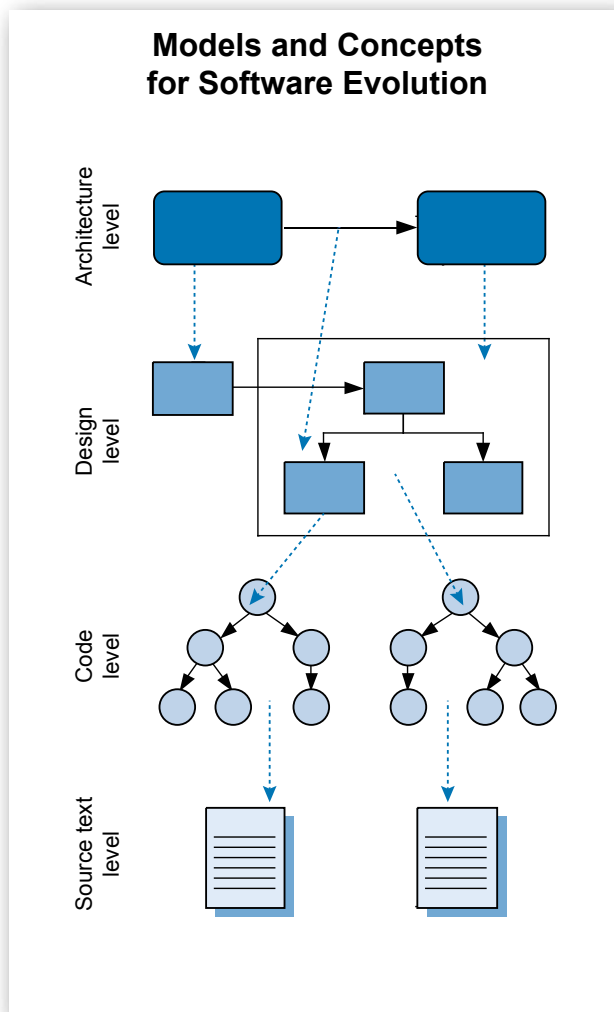


# SERIOUS

## Software Evolution, Refactoring of Operational Usable Systems

### Major achievements in the first year

- State of the Art descriptions of **Technical Evolution**, **Evolutionary Software Engineering**, and **Quality-Driven Evolution**
- **Evolutionary Development Pattern Template**
- Technology disseminations through conference publications, workshops and conference courses in industry, and doctorate seminars
- Initiation of several large scale industrial case studies



### Next steps

SERIOUS continues to work on:

- Refactoring handbook
- Development pattern handbook
- System security and behaviour profiles
- System quality metrics and quality-driven refactoring

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