Iterative Methodologies to manage web-based software: Focus on OpenUP/Basic

Nowadays, many software are web-based products. They tend to be more and more equivalent to their "desktop-installed" counterparts.

In addition to new opportunities, this new paradigm software development has led to new constraints and new project management challenges. Indeed, heavy-weight development processes such as Waterfall are not fitted to the reactivity required by such web-based products: these products require the adaptability of iterative software development processes. Many different iterative methodologies exist, each focusing on different values. Among these methodologies, OpenUP/Basic is a subset of RUP (or its open-source version counterpart OpenUP).

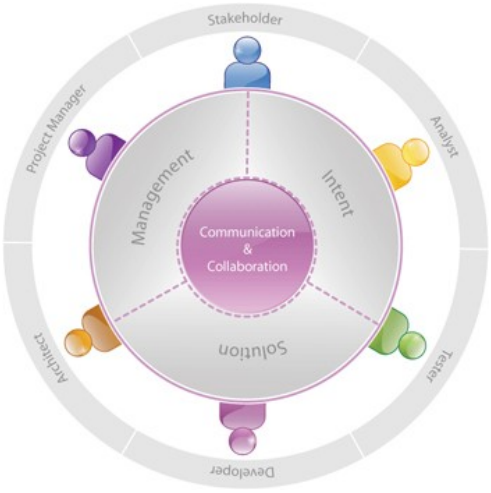
OpenUP/Basic

OpenUP/Basic is a lightweight iterative software development process targeted to small and collocated teams, it is **minimal, complete, and extensible.**

OpenUP/Basic is composed of 4 core concepts, 6 roles, 18 tasks and 20 artifacts.

Its iterative cycle is composed of 4 phases:

- **Inception** - understand the project scope, the objectives and the stakeholders priorities.
- **Elaboration** - establish the baseline of the system architecture, focusing on the most architecturally delicate parts to tackle the most important risks first.
- **Construction** - design, implementation and tests of the functionalities have to be made in this phase. This part relies on the underlying architecture created during elaboration phase.
- **Transition** - transfer the product to customers/users (training, feedback and last changes, documentation).



The 4 areas of content and roles of OpenUP/Basic

Questions and Answers...

Many questions, such as the impact on communication and quality disciplines, common traps to avoid with OpenUP/Basic, scaling of teams in such an environment and the impact of mixing roles are raised by such methodologies and need to be answered.

Conclusion

The Agile philosophy has a tremendously positive impact on software development and project management today. Depending on the constraints (organizational and technical) of a software project, some of the Agile disciplines can be synergistically adopted to maximize software development efficiency and stakeholder value.