CAMINAO

A FRAMEWORK FOR SEAMLESS IMPLEMENTATION

OF MDA & CMM

CAMINAO PROJECT: SCOPE & OBJECTIVES

Scope

Full Lifecycle Application Management from requirements to deployment, for Products, Projects, & Processes

Objectives

Achieve for Software Engineering the results obtained in Civil Engineering and Manufacturing in terms of efficiency, transparency, predictability, etc.

Solution

A Framework where Products, Projects and Processes could be defined using the same complete and coherent development semantics

CURRENT SOLUTIONS

Environments & Tools

LIMITS OF CURRENT SOLUTIONS

CAMINAO BENEFITS

CURENT SOLUTIONS: METHODS

One-fits-all

- Unified modeling & administrative process
- Compulsory organisation at corporate level
- Best Practices but Ambiguous Principles
- Multiple Semantics for contents
- Redundancies and overhead for management & tools

None-fits-all

- Domain Specific approach with limited modeling
- Cooperation-based organisation at project level
- Best Practices & Common sense Principles
- Multiple Semantics for contents
- Suited for standalone projects & experienced teams

CURRENT SOLUTIONS: ARCHITECTURES



LIMITS OF CURRENT SOLUTIONS

No integration at content level

- Manual mapping between development flows (UML) and work units
- Plethora of data without consistent semantics
- Elaborate reports without targeted & differenciated application

Manual input of indicators

- Biased & subjective estimators
- Fuzzy estimators

Overheads for dedicated layers

- Dedicated organization for process assessment
- Dedicated tools for process metrics

CAMINAO FRAMEWORK

Scope, Objectives & Benefits

Complete & Consistent Development Semantics

Open & Versatile Architecture

Caminao Support for ALM & CMMI

SCOPE, OBJECTIVES, BENEFITS

Application Life Cycle Management

- Lean, Fit & Just-in-Time development processes
- Built-in Metrics & Monitoring of development flows
- Built-in Traceability & Quality checks of deliverables

Information Systems Governance

- Seamless integration of reporting with Application Lifecycle
- Reliable & unbiased indicators
- Dynamic Risk & ROI management

Capability Maturity Model Integration

- No overhead: seamless integration with Application Life cycle
- Differenciated: Products, Tasks, Processess
- Progressive: continuity with legacy organization
- Cross feedbacks between continuous and staged implementations

CAMINAO FRAMEWORK: COMPLETE & CONSISTENT DEVELOPMENT SEMANTICS



APPLICATION LIFECYCLE MANAGEMENT & DEVELOPMENT PROCESSES



PRODUCTS: MODEL DRIVEN ARCHITECTURE (MDA)



PROJECTS: DEVELOPMENT FLOWS & WORK UNITS

Standard work units associated with developement flows are combined to build projects



PROCESSES: DEVELOPMENT PATTERNS & STRATEGIES



- Development Patterns characterize project objectives
- Development Strategies are tree templates used to build projects



CAPABILITY MATURITY MODEL



CAMINAO & CMMI



CAMINAO ARCHITECTURE

Open & Versatile

Plugins & User Interfaces

Functionnal Modules

OPEN & VERSATILE ARCHITECTURE

- XMI for Integration with Environments
- Graphical Interfaces for Dashboards & Editors
- Plugins for others Tools



FUNCTIONAL MODULES FOR ALM SUPPORT

- Complete & Consistent Development Semantics for Products, Projects & Processes
- Seamless Workflow for a Global Delivery Model



FUNCTIONAL MODULES FOR CMMI SUPPORT



CONCLUSION: CAMINAO BENEFITS

Standard & Non ambiguous

- No proprietairy solution
- No best practices, no subjective estimators
- Complete & consistent development semantics

Open & Integrated

- No specific tool but a solution to integrate existing ones
- Compatible with any XMI tool
- Support of any method or organization

Progressive

- No rupture with legacy environments
- Smooth learning curve based on continuity & self education
- No dedicated layer