

Seminar , 3 day(s)
Ref : RBA

Participants

This seminar is for all information-systems managers who are seeking to concretely understand information-systems architecture.

Pre-requisites

Basic knowledge of the IS Components.

Next sessions

Brussels

apr. 24 2012, jun. 19 2012

Enterprise Architecture

OBJECTIVES

The evolution of information technology and the rapid development of Web-based services have given rise to new approaches that allow for the introduction of architecture that is more adaptable, upgradable and likely to satisfy a company's need for flexibility. What are the efficient approaches to software architecture? How can we manage the complexity of the existing software assets? How can we take advantage of what the new concepts in service-architecture have to offer? These are the stakes of IS architecture.

1) Enterprise Architecture Issues

2) General presentation of generic models and general approaches

3) Modeling and mapping

4) The four layers of the IS

5) Modeling tools

6) The Enterprise-Architecture Project

1) Enterprise Architecture Issues

- The need to master increasingly complex information systems; the company as part of an ecosystem.
- The stakes of Enterprise Architecture: managing the complexity; knowledge management; communicating; combining efforts; organizational constraints; guiding technological choices...
- A new definition of Enterprise architecture: from theoretical vision to on-the-ground reality; the benefits of service architecture (SOA) in architecture procedures.

2) General presentation of generic models and general approaches

- Organizing IS layers; a general understanding of the classical EA model and the relationships among IS layers; examples.
- Determining a new frontier between information system and computer system.
- The IS Enterprise-Architecture process: the classical approaches, critical analysis, and emergence of a "third way." Application examples.
- Enterprise architect, architect, and specialist: their roles, hierarchical positions, skills, respective contributions within the management process, within the model.

3) Modeling and mapping

- The role of mapping in the Enterprise Architecture Process: the steps of IS transformation; producing a global graphical representation; some best practices for successful IS mapping.
- The City Planning Metaphor: the metaphor's origin and stakes; applying Comprehensive Development Area Map and building-permit principles to the IS; the notions of areas / neighborhood/block.
- Enterprise-architecture rules: instructions for relevant implementation.
- A suggested blended-method.

4) The four layers of the IS

The layers and their different levels

- The business layer: Taking "missions" and "strategy" into account in the analysis, examples of modeling and of implementing the strategic stakes. Taking the organization into account: the process, the profession, the activities; organizational charts: people, sites, macro-processors, professions, activities, procedures, KPI. Example.
- The information-system layer: From the business process to service identification; importance and contribution of the notion of service to IS software architecture; rules for identifying and conceiving services; examples of mapping.
- The application layer. The application level: the principles of service architecture. The notion of service: going from the notion of service (weak coupling, contract display, etc.) to the notion of software component (physical unit of implementation), service typology. Concepts: N-tiers of intermediaries; interface between the profession and the service orchestrator. A new conception of applications and their tools (BNP, workflow, EAI, ESB, etc.). Examples of application mapping from real-life missions. Diagram of the application environment, application description template. The software level: examples of graphical representation and of taxonomy (nomenclature).
- The infrastructure layer: definition; real-life examples of graphical representations.
- Case Studies: In order to concretize the knowledge thus gained, participants will consider a case study.

5) Modeling tools

- Synthesis and examples of products (i.e., tools) on the market.
- Tool stakes, benefits and limits.
- How to organize ourselves to use these tools: contributions, roles and responsibilities of each player.

6) The Enterprise-Architecture Project

- How to organize the project.
- Objectives, deliverables, organizing the teams, role distribution, steps.
- Risk management and key success factors.