Abstract

This article positions the system architecture process in a wider business scope. This positioning is intended to help understanding the processes in which the system architect (or team of system architects) is involved. It focuses on an organization that creates and builds systems consisting of hardware and software. Although other product areas such as solution providers, services, courseware, et cetera also need system architects, the process structure will deviate from the structure as presented here.
Financial Characterization of Decomposition

Management

Cashflow Generation

Tomorrow's Cashflow

Assets

Process Decomposition of a Business
3 Gerrit Muller

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PDBprocessDecompositionByValue
Customer Oriented Process: Depends on geography, customer base, and supply chain.

Product Creation Process: One per entity to be developed, where such an entity can be a product family, a product, or a subsystem.

People and Technology Management Process: One per “competence”, where a competence is a cohesive set of technologies and methods.

Policy and Planning Process: One per business. This is the pro-active integrating process.
The Value Chain and the Opposite Feedback Flow

Policy and Planning Process

Customer-Oriented Process

Product Creation Process

People, Process, and Technology Management Process

Customer

Feedback

Value

Support

Information

Product

Technical Product Documentation

Customer Needs and feedback

Product Needs and feedback

Business Drivers

Product roadmap

Budget, plan

Technology, Process, and People roadmaps

Budgets

People, Technology, and Process

Budget

Product

Technical Product Documentation

Information

Product Support

People, Technology, and Process

People, Technology, and Process

People, Technology, and Process

People, Technology, and Process
Decomposition of the Customer Oriented Process

Customer-Oriented Process

Order Acquisition

Order Realization

Service Support

Material Order Product

Information Order Support

Order

Product

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Extended with Generic Developments

Policy and Planning Process

Customer-Oriented Process

Product Creation Process

Generic Developments Creation Process

People, Process, and Technology Management Process

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Gerrit Muller

Process Decomposition of a Business

PDBprocessDecompositionExtended