

A Single Page Generic Business Architecture

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Business Architecture (BA), in its infancy, is often seen as merely a complement to IT Enterprise Architecture (EA). On the other hand, business disciplines such as business, process and quality management attempt to define a business architecture by modeling enterprise processes.

What is Business Architecture?

In brief, business architecture is the enterprise structure and operation represented by its business functions, flows and information related to it. A business architecture defines the main enterprise components in interactions delivering value to stakeholders.

In particular, what we need from a business architecture is a single picture showing all key business functions that structure the Enterprise and core business flows that implement the Enterprise operation. Nevertheless, to develop a full BA, each and every function and flow has to be further expanded, documented, and roadmapped until it properly supports the needs and vision of enterprise stakeholders.

Why Business Architecture?

A business architecture enables the understanding and as such the improvement of the Enterprise operation. Business Architecture is the most important layer or component of an Enterprise Architecture (EA). This is because it shapes the people and technology layers. It makes possible the alignment of the technology and organization resources to the delivery of products and enterprise goals. Business functions and processes dictate the type of technology and organization that implement them. How can we select the right technology if we do not comprehend the business operation it implements? How can we optimally shape our organization if we do not understand the business structure?

Business architecture enables the structuring and assembly of the many existing business, technology and organization views into a single consistent and integrated enterprise architecture. Without this top level architecture, stakeholders and architects would keep reinventing the Enterprise components and business flows, only to add to the disjointed stack of existing designs.

But what are the Essential Parts of an Enterprise?

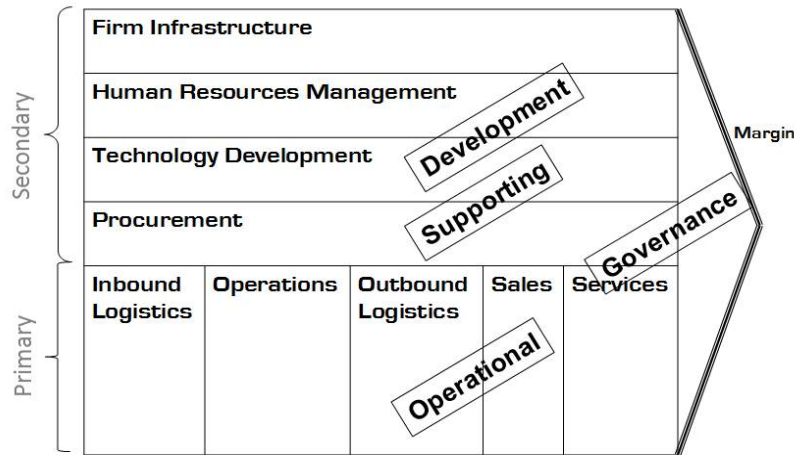
At the beginning of the 80s, Michael Porter suggested that any Enterprise consists of two categories of activities:

- Primary activities, which are the operational processes that deliver the product, such as Inbound Logistics, Operations, Outbound Logistics, Sales, and Services
- And Support activities that are all other supporting activities, as, for example, Human Resources, technology development, procurement, etc.

Taking into account the dynamics of today's economy, the Development activities are worth a category in themselves since a great chunk of them, such as strategy and business development, new products, and capabilities development, or R&D, ensure the competitive edge of the Enterprise and its continuity.

In a world that spins faster and faster, more and more activities are outsourceable and outsourced. Even Operations, once a core activity, is outsourced today. This is why the only part that stays with the Enterprise today is a function newly added to the model, the Governance, that coordinates all other activities and ultimately identifies the company even when everything else is outsourced.

Michael's Porter Value Chain



This is how the GODS Enterprise structure came into being. GODS stands for: Governance, Operations, Development, and Support. Since primary activities are often outsourced to specialized firms, they become autonomous chain links in what Porter called Value Systems. GODS generic business architecture is an extension of the Value Chain concept.

GODS Enterprise Structure and Porter's Value System



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The Enterprise has to research the market to understand need, create demand for products, forecast and plan production accordingly, deliver and sell products, provide after-sales services and re-start the business cycle.

The Operations function maybe further subdivided in three chains in the operations value system:

1. Marketing and Planning
2. Production and Delivery
3. Selling and Servicing.

The GODS Single Page Generic Business Architecture

The resulting picture is the generic one page GODS business architecture consisting of the main business functions and flows that illustrate the Enterprise structure and its operation.

The generic business architecture further decomposes Michael Porter's Value System to show the critical enterprise functions and flows of a business cycle: Planning, Demand Creation, Production, Sales and Order Fulfillment, Revenue Accrual, and After-Sales Services.

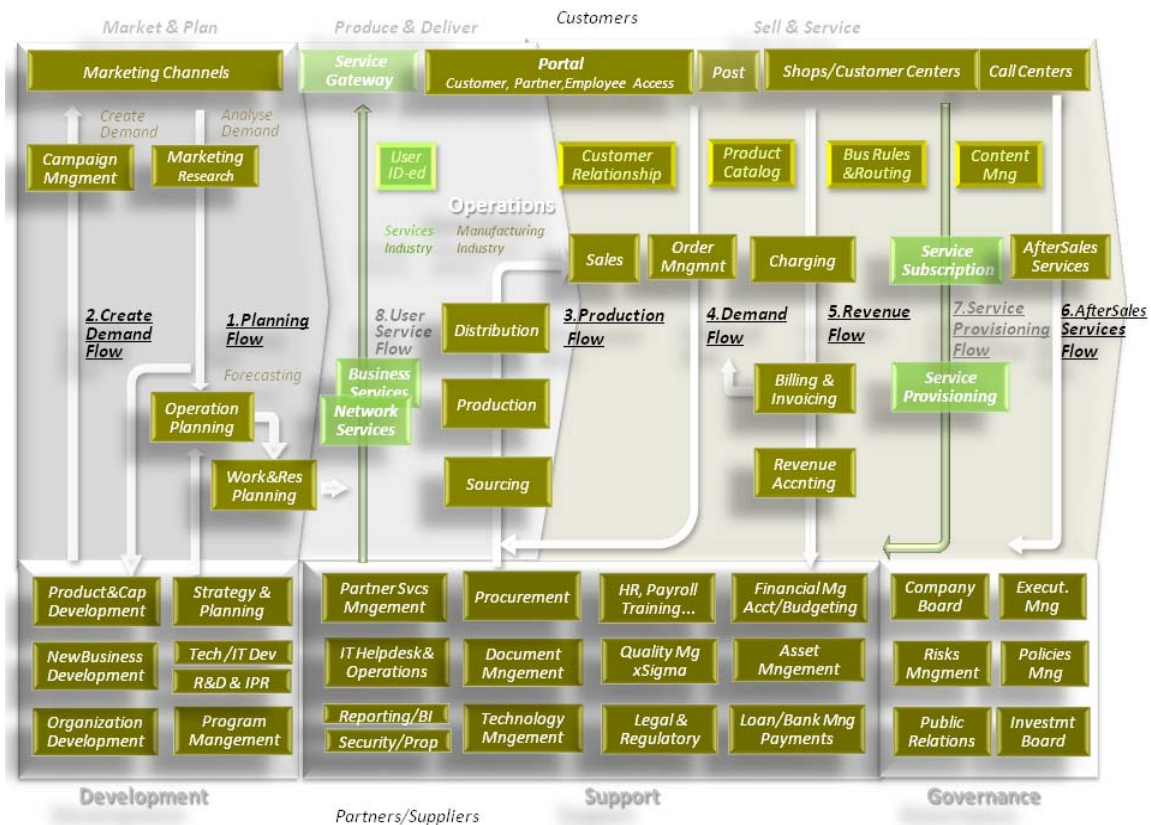
The GODS generic business Flows:

1. The **Planning Flow** that begins with the market investigation, followed by forecasting; this Flow prepares all Operational, Development, and Support cycles.
2. The **Demand Creation Flow** stimulates the market, through various channels, to acquire the products.
3. The **Production Flow** or Supply Chain delivers the Products, from sourcing to distribution.
4. The **Demand Flow** or Sales and Ordering is the process through which the customers obtain the products.
5. The **Revenue Flow** or Money Flow charges the customers at sales and ordering, bills and invoices them, and accrues the revenue attained for the firm.
6. The **After-Sales Flow** or Customer Services depicts the customers' feedback/complaints, product returns, and repairs Flows.

The **Services Industry Flows** are slightly different:

7. The **Service Provisioning (Subscription) Flow** describes how the customer acquires membership to a scheme, or subscribes to a service.
8. The **Service Delivery Flow** depicts how the customer, once identified, claims and uses the service, often provided by a business partner; analogue to the Production Flow.

The one page generic GODS business architecture is building on Porter's Value Chain and System concepts; it consists of the key enterprise functions that form the enterprise structure and enterprise flows of the business cycle, that deliver value to stakeholders.



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Benefits of the GODS Generic Business Architecture Model

Here are a few benefits for business modeling:

- It is complying to IEEE/ANSI 1471 since it consists of both business functions and flows, that is components in relationships, rather than either capability maps or business flows in separation.
- It makes distinction between business capabilities, processes and flows that are not clearly distinguishable today in other business modeling approaches.
- It aims to be complete at the top in that it describes all categories of functions of a typical enterprise Value Chain (as GODS), and all flows of a typical business cycle.
- It represents the customer's interaction and channels consistently - at the top of the diagram - for every flow of the Value System so that one can trace and improve the customer journey from prospect to after-sales.
- It represents the top tier of an EA framework, elucidating the first steps of an EA development
- It is technology and organization neutral in that it does not contain elements of them; nevertheless, the IT architecture can be readily aligned to the BA within the same EA. Architectural Views can be linked to BA to reveal necessary detail, systems and organization roles that execute the business architecture functionality.
- It supplies the functional vocabulary and business objects repository.

- It represents a reference architecture that can be tailored to industry and company to create a specific framework for own business operation discovery, documentation and roadmapping. Your practical business architecture would be a customization of it, representing your own Enterprise as a common model shared around the Enterprise. It would be the single most used artifact of an EA.
- Ultimately, it enables the fusing of the current business modeling methods in a single approach uniting the Business Capability Maps of EA with the Value Chains and Business Models...of Business Management and Value Streams of xSigma and Quality Management disciplines.

And benefits for enterprise stakeholders:

- It reaches a wide audience besides the typical operations/production, support and IT functions since it addresses most other Enterprise activities such as R&D, product development, marketing, sales, customer services, finance, etc.
- It relieves the tension between the business and IT that have now the same terms of reference. Any stakeholder needs a picture to understand how the Enterprise operates. As such, business people and IT would talk on and build from the this same single page BA picture.

Practical Use Cases:

- Single page reference architecture for development of specific business architectures for industry and firm.
- Top tier of an Enterprise Architecture framework.
- Business Functions Map design for technology resources and organization alignment.
- Key business flows (Value Streams) discovery for process analysis and improvement for BPM and Quality Management efforts such as xSigma.
- Business and Operating Models mapping, analysis and implementation.

How to use the One Page Generic Model to develop a Full Enterprise Architecture

The GODS generic one page Business Architecture may be exploded into a full Business and Enterprise Architecture when employing a proper EA framework.

Various stakeholders in business and IT could structure and link their own architectural views to the one page business architecture. BPM and xSigma people would expand business flows for process improvement and automation, organization improvement groups would align organization to operation, business development people would configure new business models, executive management would pinpoint issues and IT would discover, map, document, roadmap and plan every IT system in the Enterprise.

IT systems and technology can be mapped to the business flows they execute and as such their performance evaluated by business. Systems serving Service Provisioning, Content Management, User Identification... could be linked and aligned to the corresponding business functions needs, goals and strategy. A system can be analyzed now in the context of the business functions and flows it serves.

On a practical plane, to develop the Enterprise Architecture from this business architecture, you will have to

1. Customize this business architecture to illustrate your own Business Operation.
2. Align the Technology and Organization Architectures to the Business Architecture.

3. Map the Strategy objectives to the overall Architecture to enable strategy execution and transformation of the Enterprise.

The EA FFLV method, described in References, provides an EA Development Process, Framework and Metamodel, Reference Models, and Design Method for an Enterprise Architecture that integrates this generic model with the technology and people organization architectures. In general though, any EA framework may be used in conjunction with the generic business architecture.

Notes:

- The Development, Support, and Governance Flows, are not shown since they are typically contained within corresponding business functions.
- There are a few typical utility functions that are supporting the interaction with customers, such as Customer and User Authorization, Products Catalogue, Business Rules, and Request Routing, etc.
- Enterprise stakeholders, beside customers and partners/suppliers are not considered in the picture to avoid cluttering. Still, the enterprise interacts with such external stakeholders as labor and capital markets to acquire resources and is affected by regulation and competition, trends and and new technology.
- Business Flows might have been called Value Streams, processes, workflows, or Value Chains, but this terminology was deliberately avoided since it comes from different domains with various baggage and meanings.
- Functions are alternatively called capabilities (maps) in EA approaches.
- The generic business architecture model is going through an evolution process like most other enterprise modelling approaches.

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