

Business Architecture: Scenarios & Use Cases

This white paper was developed as a result of OMG wiki postings between Dec. 2007 and March 2008. It presents a series of business architecture scenarios that will be used as input to Business Architecture Working Group planning discussions.

Overview

Creating a set of standards for business architecture requires a discussion of the types of scenarios or use cases that could benefit in some way from the application of business architecture disciplines. These scenarios provide an overview of a cross-section of situations that businesses typically encounter and a discussion of how business architecture disciplines help address solutions to these issues. The following list of offers some common scenarios that business encounter and the role of business architecture from a solutions perspective.

Merger & Acquisition Planning & Deployment

Scenario Overview

Companies undergo mergers on a fairly regular basis. The typical merger or acquisition brings another company under the umbrella of another company. This may have a significant impact, such as two banks merging into one, or is may be of a lesser impact where a conglomerate brings a related company under its wing. In either case, one company will need to merge redundant operations, financial functions, business units and other aspects of the enterprise with the newly acquired entity.

Role of Business Architecture

Merger and acquisition planning is an executive activity. However, the operational inputs to these plans as well as the activities that result from the invocation of these plans require information about an enterprise's business architecture. This includes identifying all aspects of a business that overlap with the merged / acquiring entity so that management can articulate and rollout a complete operational deployment plan.

Consider the merger of one insurance company with a property and casualty business being incorporated by a larger entity with many lines of business. All P&C functionality and operational capabilities, including the relationship between business unit components and IT components, must be identified for subsequent merger deployment.

Elements of Business Architecture Involved

The business factors that should be considered as part of the business architecture in the merger and acquisition planning and deployment scenario are as follows.

- Organizational capabilities (or functions) relating to the P&C business
- Organizational units that perform these capabilities
- All business processes related to the P&C business and supporting functions
- Business rules relating to the P&C business
- Common set of semantic used by P&C business
- Supplier / partners that extend the virtual enterprise in the P&C business
- All IT related assets that support the P&C business

In addition to the identification of the above elements of the business, management requires an enterprise map identifying the relationships of the above organizational elements.

Business Unit Consolidation

Scenario Overview

Significant functional redundancy or overlap exists in many larger organizations. Consider a telecommunications that has emerged from a series of acquisitions or other evolutionary steps. It may have a dozen or more billing and service centers that service overlapping customers and regions. Processes, semantics and systems typically differ, which confuses and frustrates customers, drives up business costs and drive down the ability to service those customers.

Or consider the insurance company that has redundant sales, product management, policy management and claims units servicing the exact same customers. Such an organization does not know that it has multiple policies with the same customer and cannot leverage this information in its marketing or service efforts. These same factors make either very difficult or prohibitively expensive to adjust to changes in customer profiles.

A third example involves the government agency that is running concurrent financial applications across various business units, making it difficult to obtain a single source of truth about a particular set of financial data. Each of these examples signifies how redundant business units and business functionality can result in major challenges to an enterprise.

Role of Business Architecture

Fixing processes, data or systems will not address the aforementioned challenges because there are silos of problems that need to be addressed holistically. The role of business architecture in such a scenario is to enable management, architects and analysts to visualize the redundancies and their impacts from a cross-functional, cross-disciplinary perspective. This would include governance structures and related risk and costs of continuing the status quo. In addition, business architecture would support consolidation option analysis and related benefits.

In addition, business architecture plays a role in driving the consolidation related changes

back into IT, versus IT driving the changes back into the business units. In this example, business architecture would simulate various organization unit, functional capability, business process, information and related changes and use the retooled business architecture to drive consolidation requirements into the application and data architecture.

Elements of Business Architecture Involved

The business factors that should be considered as part of the business architecture in this scenario are as follows.

- Organizational units that are engaged in redundant behavior
- Functional capabilities that overlap
- Overlapping information semantics
- Redundant business processes running in the overlapping business units and
- User views and user-based shadow systems involved in the redundant processes
- Mapping of business architecture artifacts to redundant data structures and applications within the IT architecture

New Product & Service Rollout

Scenario Overview

Organizations roll out new products and/or services on a regular basis. The impact of these rollouts is difficult to predict and typically results in costly coordination or, worse, missteps. Consider an insurance company that must rollout a new insurance product across multiple regions. Such an effort typically crosses multiple business lines, teams, disciplines and even organizational boundaries.

A new product or service launch typically begins with market research, design, engineering, rollout planning and eventually the actual rollout itself. While some large organizations may have this process well established, many others do not. Even in situations where companies have a repeatable process, not all of the pieces always come together.

A typical scenario begins a product or service launch plan by engaging marketing, product design and other key players. In many cases, the launch plan would need to engage multiple internal business lines but also external suppliers or business partners. The plan also typically must engage IT. Product launches and other business plans have either been delayed or derailed because of inadequate IT engagement.

Role of Business Architecture

In a new product / service rollout, every critical aspect of a business must be engaged at the appropriate point. In the above scenario, this would include product management, policy management, marketing, sales, billing, service support, distribution partners, IT units and a variety of other potential aspects of the enterprise.

Without a business architecture visualization of how the main elements in this scenario link back to the concept of a product, much of the work is either recreated every time a launch is planned, mapped out on paper and not maintained, or done haphazardly resulting in inefficient and ineffective launch results. Business architecture visualization can provide this mapping.

Elements of Business Architecture Involved

The business factors that should be considered as part of the business architecture in this scenario are as follows.

- Organization unit and functional capability identification and mapping
- Mapping of products and services to organization unit
- External suppliers / partners involved in a given product / service
- Processes engaged in a given product / service support role
- User interfaces and shadow systems used by those processes
- Information about a product / service that is impacted by a new rollout
- Relevant projects that may be impacted across business and IT
- Mapping between above business artifacts to impacted applications, data structures and other aspects of the IT architecture

Introduction of a New Line of Business

Scenario Overview

Introducing a new line of business requires coordination across a variety of business lines and IT functional units. Consider a scenario where a bank wants to move into a personal lines business, either through expansion or acquisition. Such a move would need to consider where current business units, functions, processes and information may be leveraged and where unique infrastructure would need to be established.

Such an assessment and selected leveraging of existing assets is rarely done. On the contrary, many organizations across a variety of industries have a tendency to clone an existing business unit, functionality and IT environments and then customize these assets to fit the new business. This has typically resulted in suboptimal solution.

For example, consider the health insurance provider that added a life and disability line to their portfolio. The life and disability lines were driven through existing health insurance business units, business processes, information models, systems and data architectures. This company spent the better part of a decade working around inadequate business processes and missing information, driving up operational costs and driving down policyholder satisfaction. This could have been avoided had this company visualized and integrated the new product line into the business and IT architectures using more systematic approaches.

Role of Business Architecture

Business architecture can play an important role in line of business rollout. Understanding where current functional capabilities, organizational units, processes and information can be leveraged in support of this new business unit is the first step. The second step would involve simulating the impact of the introduction of this new line of business on existing infrastructures and determining where that infrastructure needs to be augmented. Finally, the business / IT architecture alignment strategy would be based on visualization and simulation of the projected impacts of this new line of business on business architecture artifacts and corresponding IT architecture artifacts.

Elements of Business Architecture Involved

The business factors that should be considered as part of the new line of business scenario are as follows.

- Business units and functional capabilities impacted by or that could be leveraged by the new line of business
- Cross-functional business processes that requiring modification to support new line of business
- Information to be modified or added to support new line of business
- IT architecture artifacts that need to be updated or added based on business architecture mappings

Consolidating Suppliers Across the Supply Chain

Scenario Overview

Suppliers and business partners touch many aspects of the enterprise. This includes the outsourcing of services as well as the supplier of products and materials. The services outsourcing sector has expanded over the years and many organizations tend to buy multiple services from multiple sources. In some cases, several lines of business may utilize the same supplier or several suppliers for the same thing. In one case the enterprise may be suffering high costs or discontinuity from a single provider. In the second case, high costs and discontinuity may stem from redundant supplier relationships.

Consider a telecommunications firm that uses many sources of customer support services. In one actual situation, a business was contacted 6 separate times by 6 separate support centers to say that a services contract had been inadvertently modified. Each unit had access to different records and were apparently using different systems. There was no way to correct this according to the service center representatives. This organization needed a map of what was going on with service support centers.

Role of Business Architecture

Extending the visualization of governance structures, which include organization units and functional capability mappings, beyond the walls of the enterprise creates a virtual view of the business architecture. In the above scenario, a business architecture

visualization map would need to be extended to include the customer service functional capability and all internal and external suppliers that provide this function.

In addition, the organization should be able to visualize the overlapping or redundant processes, information, products, systems and data that is used by these organization units. Once this visualization is in place, management can establish a strategy to standardize, streamline and even consolidate these complexities to driven down costs and increase customer service.

Elements of Business Architecture Involved

The business factors that should be considered as part of the business architecture in this scenario are as follows.

- Internal and external business units that support the functional capability called customer service
- Extended business processes supporting this capability within each organization unit
- Information unique to this support function
- IT architecture artifacts that map to each organization unit, process and information required to support customer service

Outsourcing Your Purchasing Function

Scenario Overview

Assume a manufacturing company wishes to outsource its purchasing function. This would require management to understand where purchasing is perform. This company will need to determine requirements, move those requirements, processes and related information to an outsourced vendor, and then deactivate those purchasing functions within each of the business units performing those functions. Assuming that purchasing is performed in a highly distributed fashion, it may be difficult to see where this should all occur without an architectural view of the business. Failure to do so would result in splintered purchasing, replicated functionality and high implementation costs.

Role of Business Architecture

The role of business architecture in this scenario is to provide rapid analysis input into where purchasing is performed organizationally, how processes differ or are the same across functional silos, which information is used and how IT supports this purchasing environment. In addition, business architecture should support the aggregated views of purchasing and the simulation of what would need to change if purchasing was consolidated into a new, eternal organization unit.

Elements of Business Architecture Involved

The business factors that should be considered as part of the business architecture in this scenario are as follows.

- All organization units linked to the purchasing functional capability
- A map to the business processes used by these organization units that support or impact purchasing
- The purchasing information used by each of these units
- A link between the above business architecture artifacts and related IT artifacts

Shutting Down a Line of Business

Scenario Overview

Consider an insurance company that plans to shut down its personal lines unit. All organization units, processes, systems and data structures impacted by such a move would need to be identified so this could be done very systematically. The impacts may not be clear without a map of the business architecture and the ability to visualize what shutting down a line of business may entail or who it would impact.

Role of Business Architecture

Shutting down a line of business requires identifying all functional capabilities that support that line of business and making the appropriate changes to the organization units, processes and information to be deactivated. A business architecture map showing these relationships would provide the basis for planning this deactivation effort. In addition, planners could build simulation models to determine the impact or ripple effects on other internal or external organization units.

Elements of Business Architecture Involved

The business factors that should be considered as part of the business architecture in this scenario are as follows.

- All organization units linked to the personal lines functional capability
- A map to the business processes used by these organization units that support or impact the personal lines business
- The policyholder or other information used by each of these units
- A link between the above business architecture artifacts and related IT artifacts