

IT Enterprise Architecture Overview

The term Enterprise Architecture brings to mind big IT departments with massive data stores and complex systems, and there is no disputing that companies with a large IT footprint require serious attention to future systems roadmaps. IT architectural planning at the “enterprise level” is equally important for small and mid-sized companies who want to make strategic investments that meet future business needs with maintainable systems.

What situations drive the need for IT Enterprise Architectural assessment and planning?

Sometimes the catalyst is at the fundamental ERP level. Business growth or M&A mandate a choice for a more robust system or a decision between two foundation systems. The selection of a scalable ERP system that can be implemented and maintained with minimal customization is critical to business success and will be the driver for IT’s overall system roadmap. It is essential that this decision be made in the context of an overall Enterprise Architecture (EA) plan.

Often, without the EA standards, even more confusing problems and choices are confronted at the next tier - supporting applications. ERP is in place, maybe an upgrade is in order, and an IT department realizes that too many customizations were made, that corollary applications, systems and data interfaces exist and must be tested and retrofitted. What to do? Data synchronization and mastery of business critical data may be inadequate. Up or down stream timing and accuracy are unsatisfactory, reports are complex to assemble and arrive too late for business response. Middleware is suggested as a panacea, or may already be in place, and that becomes yet one more production interface to manage. Whenever possible, the right decisions must be made in advance to prevent this complexity. Where it exists and must be remedied, careful migration plans are essential for business continuity.

Confusion in just one key area can also cause an IT department to see the need for architectural simplification and centralized standards. Often this is the result of inheriting systems that users initiated. Poorly integrated CRM approaches, intra and extranets gone wild with isolated applications, content and document managements systems where nothing can be found, multiple collaboration systems – these cause business confusion and cost, and they require that IT “pull up a level,” look at the big picture, define some rules and help the business users move to more workable platforms. Having a solid architectural approach in place allows IT to assist the business when users begin to realize that ad hoc pilots and local systems have grown to the point of requiring integration and standardization.

Business continuity and security planning can drive architecture reassessment, too. The complex and highly interfaced legacy systems may be operating well enough for the time being, but when analysis is done for disaster recovery, it proves to be very expensive to provide the redundancy required to meet risk-assessment or insurance demands. A security vulnerability assessment may

pinpoint interfaces or standards deficiencies that are not acceptable and must be remedied.

These challenges exist whether IT services are performed internally or a SaaS approach is taken. In fact, many companies find themselves constrained by outsourcing: they are limited to the interfaces and integration supported by their SaaS vendor or service provider. That may be fine, and serve as an effective way to minimize complexity, but it is something that should be assessed in advance and mapped against future business needs to prevent surprises. Your Enterprise Architecture direction needs to synch with those of your service and applications vendors and common criteria must be applied.

The StrataFusion Group has experts to assist in creating the overall Enterprise Architecture plan from the ground up, or in assessing the current plans or installed base and tuning. We have worked with a number of CIOs to evaluate their Enterprise Architecture programs and implement long-term improvement plans. The Enterprise Architecture Practice also interfaces closely with Strata Fusion's [IT Portfolio Management Practice](#) and the [PMO Practice](#).

IT Enterprise Architecture Service Details

The High Level Enterprise Architecture Method

A question commonly asked by business executives is how to get started with an Enterprise Architecture function in your IT organization, and how to sustain it. The first step is to define some business-level Critical Success Factors for your IT environment to determine what will be expected of IT in the next 3-5 years.

Next you must establish a baseline assessment of where your systems are today and define and prioritize the gaps in expectations. Then, "target" architectures must be assessed to define what future Enterprise Architecture meets the business need, with a realistic look at costs involved. Analysis of the gaps and target direction allow you to develop a plan to move you towards an optimal architecture in the future: bringing in new technology and retiring old systems that are costly to maintain.

Finally, you need to a roadmap to call out the milestones to help you accomplish your desired future state, including the staff and budget required to follow your plans and achieve the target architecture for your enterprise.

StrataFusion Group Services

We offer a comprehensive service to

1. Assess your current in-place architecture and roadmap
2. Provide directional recommendations and solutions when there is a need for
 - a. Initial or replacement technology and system criteria definition and selection

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- b. Overall IT Roadmaps and Plan creation or tuning
 - c. Enterprise and/or Infrastructure architecture simplification or upgrade
 - d. Migration planning for system simplification and consolidation at the Enterprise, system, or application level, e.g., CRM suite, reporting, collaboration, extranets and e-business
 - e. Regular oversight and participation in Architecture committees
 - f. Direction and standards in key architectural areas
 - g. Integration of Security or DR planning
 - h. Assessment of vendor compliance
3. Assist in organization design and development – staffing or sourcing Solutions Architect roles, governance team recommendations, and skill-building
 4. Coordinate with Portfolio Management
 5. Provide a single engagement or regular review and coaching for your IT Organization

CIO Challenges Where SFG can assist:

- Company could not deliver new product without added reporting, and too much was riding on the project.
- Choice of ERP, next level systems which drive direction for interoperability, APIs
- Definition of approaches for Data Management and Reporting Strategies
- Standards, criteria for selection of new technology and prioritization of projects
- Inclusion of Security Architecture and principles
- Consideration of backup and recovery, data center configuration
- Assessing total impact of a new “good idea” against defacto or established guidelines
- Choosing right-sized systems for business need and IT maintainability, especially at junctures of major growth or business change
- Coaching, creating architecture teams and developing Solutions Architects
- Incorporating governance and project gating, and milestone review
- Consolidating and simplifying existing applications and systems configurations
- Designing the network for the future
- Intra/Extra and Internet directions which incorporate appropriate privacy, security, identity, and content management

Our program is based on principles developed by StrataFusion Partners, Steve Zoppi, Maureen Vavra, and Mark Egan. This group has authored the books, “*CIO Wisdom*” and “*The Executive Guide to Information Security*.” StrataFusion has successfully implemented programs at many of the leading companies in Silicon Valley.

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Our IT Enterprise Architecture program is complemented by our Information Security program. Our Security Practice is led by Mark Egan who served as Symantec's CIO for over 6 years and was responsible for their information security program. Mark has worked with several Bay Area companies to implement effective security programs and is a frequent speaker on security best practices. He can be reached at mark.egan@stratafusion.com for more information on our Information Security services or visit our Partners page for his background information.

IT Enterprise Architecture Success Stories

Business Problem:

- A medium-sized product development firm with a heavily customized older ERP system chartered a large project to move to a new ERP platform. This was needed to provide revenue reporting for new products that required added accounting capability. A middleware product was determined to be the solution for data migration issues. The mission critical project was created to migrate data, install a new ERP, and add new middleware into the current production system. New product delivery for the company was dependent upon delivery of this project, which became stalled in a series of data management issues.

Challenges:

- Company could not deliver new product without added reporting, and too much was riding on the project.
- Middleware solution was architecturally sound, but sequenced migration of data, testing and tuning were essential.
- ERP decision was solid, but additional decisions and standards were needed to ensure the new systems were deployed with the correct timing and older systems were "grandfathered" and turned off.
- A sequenced plan was needed to migrate to the new systems.

Results:

- New product was isolated from the new ERP system and reporting was handled in another manner for the interim.
- Data and message analysis was undertaken of entire legacy ERP, and an Enterprise Architecture created.
- A multi-phase conversion and migration plan established - with no system changes or new functionality installed during the migrations.
- Organization is one year into successful multi-year phased plan.
- Enterprise Architecture document used as ongoing standard framework for solutions architects designing changes.

Improvement Process:

- Assessed existing ERP strategy and implementation plan, concurred.
- Completed comprehensive system and development team organizational assessment to identify legacy databases and systems in place, staffing required and risk factors.
- Interviewed clients and business-facing IT Strategists for direction and priorities.
- Recommended Governance Board to oversee Program Management and priorities and manage user expectations
- Recommended organization changes to align like functional systems and developers
- Coached architects and business analysts in creating of multi-year roadmap for migration of systems and in creating a governance team

IT Enterprise Architecture Success Stories

Business Problem:

- As a result of recent mergers and acquisitions, a high technology client found itself with multiple CRM, ERP and reporting systems of varying degrees of complexity and age. They implemented a business-facing team of IT Strategists to work close to the functional business units to plan for new systems and simplified business processes, but the IT team working behind the scenes was too fragmented to be able to provide basic services – and overwhelmed by the creative solutions that were being proposed.

Challenges:

- Company could not pull timely and consistent reports due to disparate data sources
- Centralized ERP decision had been made with no migration strategy to move from antiquated existing systems and data stores
- Multiple systems were supporting similar functions, like Marketing, completely differently, so business processes were unnecessarily complex
- Company was growing rapidly in some areas and information technology group was under considerable pressure to scale systems to support the business
- Cost containment was critical and the cost of maintaining separate systems was escalating
- Several older systems were on unsupported levels with outmoded databases and hardware.

Results:

- Organizational recommendations were made: re-align the IT department to manage client functions in focused groupings. Business analyst and solutions architect support was strategically placed and augmented by consultants where needed.
- Groups were tasked with rationalizing business processes and data needs and developing plans and priorities to move application areas to ERP or related adjunct systems

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- Plans were prioritized based upon system prerequisites and business need
- Corporation is in year 2 of a 5 year plan and on track

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IT Enterprise Architecture Success Stories

Business Problem:

- A hardware and technology firm had one document management, two content management, and three collaboration systems installed, plus an active system of file server storage and millions of pages of content on an intra and internet. There were major problems finding and updating anything.

Challenges:

- It department installed overly complex content management system that very few people could use.
- Same product was also inefficiently deployed as a document management system.
- Three different collaboration systems were trialed, one by IT and the other two by local departments in the organization, and were still installed.
- Proprietary translation software was positioned in front of content served from an overseas installation.
- Money ran out after the first phase of a \$4M Intranet rewrite project when just the “look and feel” had been done by no major content migrated.

Results:

- Installing a major search tool allowed users to quickly find “lost” content. The tool was used to access and clean up old media on the Intranet and help with migration.
- Creating a basic Information Architecture set the stage for new media storage and simplified content management for new releases.
- Use cases for major collaboration tasks permitted the creating of some common

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structures and rules regarding set-up of collaboration tools. Usability improved and one of the systems was retired.

- The translation software company went out of business and saved everyone a lot of trouble.

Improvement Process:

- Identified from the phase I Intranet project the Information Architecture and basic site design. Mandated its implementation going forward.
- Created simple use cases for collaboration.
- Eliminated one content system and migrated/archived data from the retired one.
- Installed search appliance and used search as a way to find and archive or migrate content.