

ARCHITECTURE
A WHITE PAPER SERIES

Enterprise Architecture Assessment and Set-Up

A Tool for Transforming Organization

Atos | **Syntel**

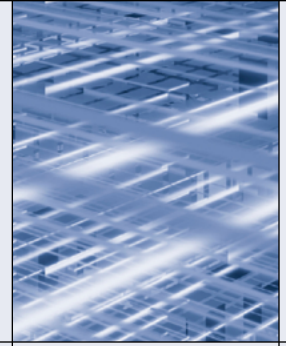


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Introduction to Enterprise Architecture

Enterprise Architecture (EA) is not just an approach to fix a single problem — it helps develop an entire ecosystem to run the business smoothly. EA encompasses IT services, processes, and infrastructure even considering multiple systems and multiple functional groups. EA as a practice has been around for many years, but in the recent past it has once again been favored by C-level executives as an important initiative.

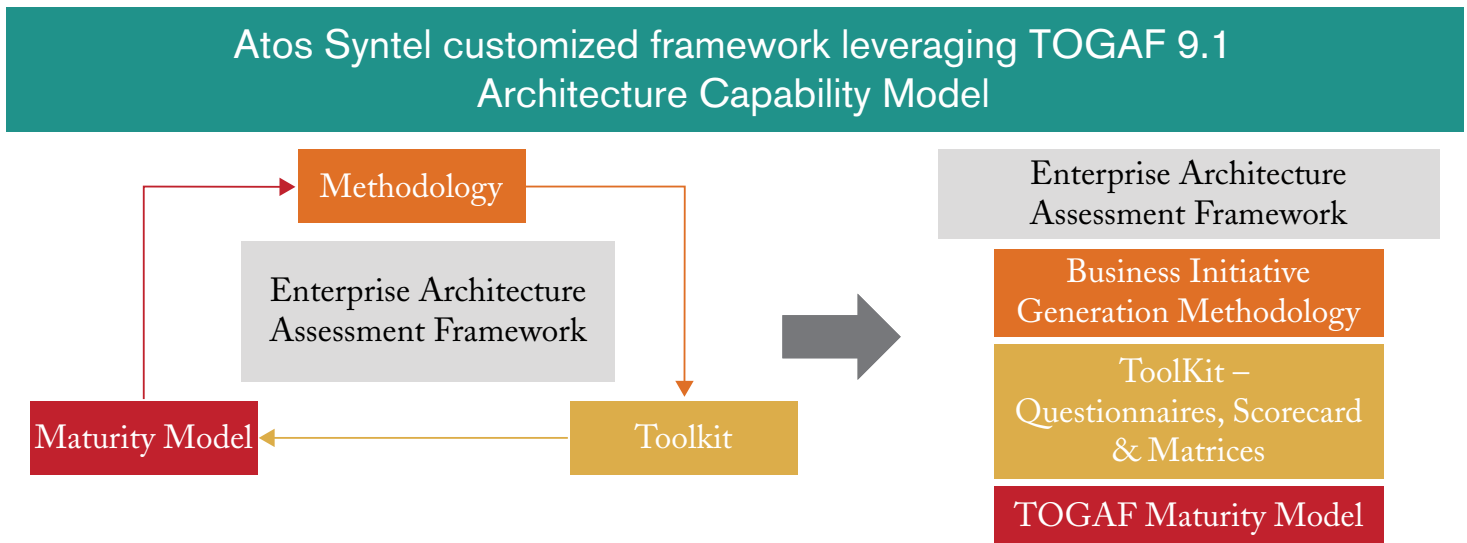
It is responsible for optimizing manual and automated processes into an integrated environment that supports a company's business strategy and enables enterprises to respond quickly to changes in their business. EA delivers the critical balance between driving innovation through relentless customer focus and ensuring strong alignment between business values and IT assets through a broad understanding of customer priorities, IT portfolios and collective domains of influence.

This whitepaper will analyze the approach to set up an EA practice, industry challenges, EA assessment and various toolkits. With a standard EA framework or a hybrid EA framework (combination of TOGAF and Zachman), an organization can achieve benefits such as:

- IT strategy aligned with business strategy
- Efficient operational governance and regulatory compliance
- Faster response to changes in business strategy and operational processes
- Improved quality in business and IT services
- Reduced risk for future investment
- Rationalized application portfolios
- Large implementations
- Faster, simpler and cheaper procurement

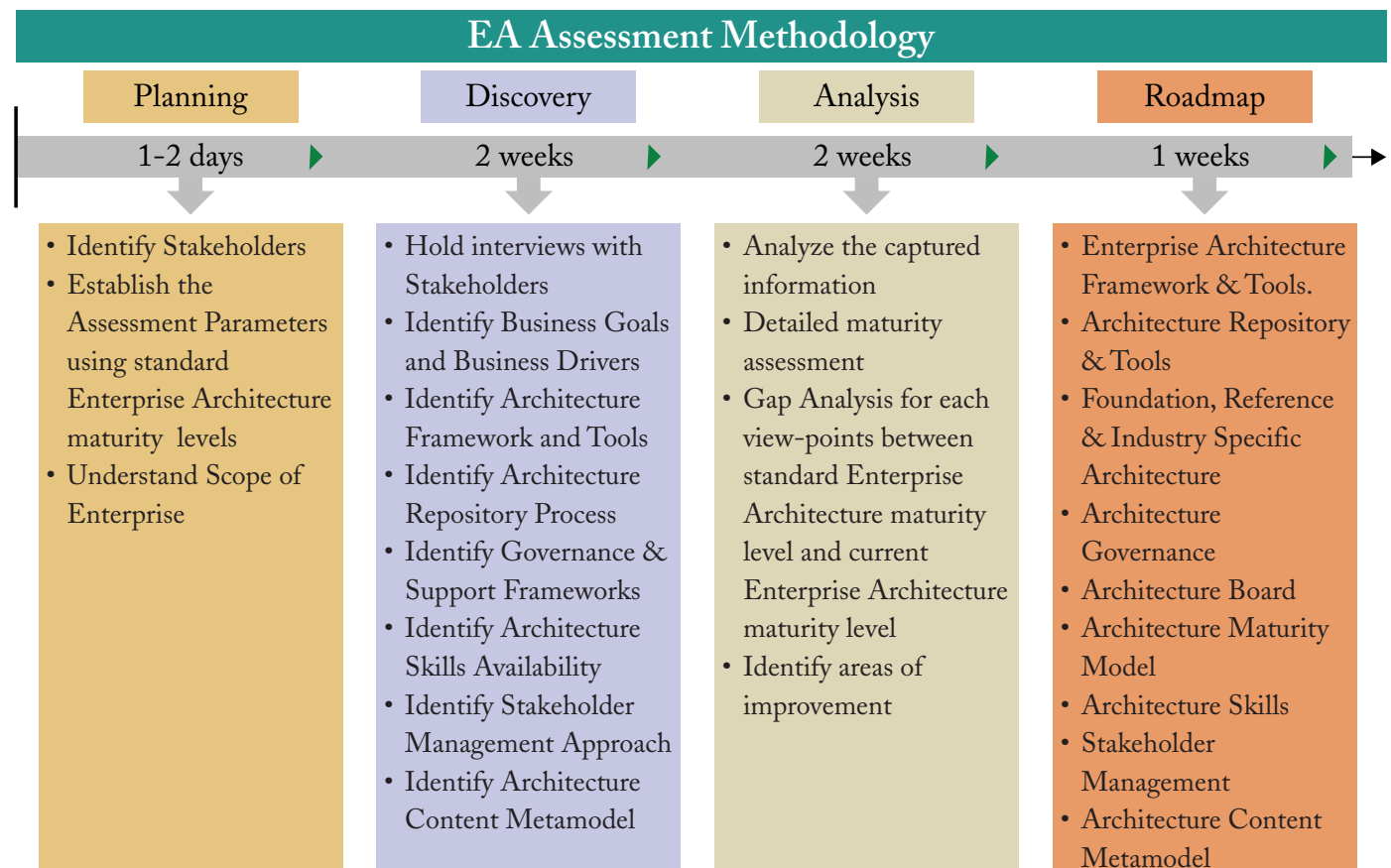
2. EA Assessment Framework

Atos Syntel follows a structured approach to conduct EA assessments using the Business Initiative Generation methodology. During the assessment process, the team leverages standard toolkit elements such as questionnaires, scorecards and metrics, as well as TOGAF (v9.1) to gauge an organization's maturity level.



• METHODOLOGY

The assessment exercise is divided into four phases — planning, discovery, analysis, and roadmap definition.



Planning: In the planning phase, we establish assessment parameters to assess the organization's enterprise architecture maturity level. Appropriate stakeholders are identified and the scope of assessment is finalized.

Discovery: The focus is on conducting interviews with stakeholders to gather information about the current enterprise architecture organization and to understand the vision for the enterprise architecture organization.

Analysis: In this phase, the information captured is analyzed in order to determine the maturity level of the current enterprise architecture organization. Gap analyses are performed for each view-point between the target and current maturity levels to identify areas for improvement.

Roadmap: At this stage, Atos Syntel and the client jointly define a strategy and roadmap for achieving the targeted maturity level, and a roadmap is proposed for establishing an EA organization governance process.

During assessment focus on the following areas:

Enterprise Architecture Framework

- Identify and tailor EA framework
- EA tools

Architecture Repository

- Architecture landscape
- Reference library
- Architecture content metamodel
- Standards
- Governance log

Architecture Capability

- Architecture governance
- Architecture board
- Architecture maturity model
- Architecture skills framework

Stakeholder Management Approach

- Identify stakeholders
- Classify stakeholder positions
- Create stakeholder map

• **TOOLKIT**

Atos Syntel has developed a comprehensive set of assessment toolkit components including questionnaires, scorecards and matrices that will be used to assess the client's EA maturity.

Questionnaires

Uses a pre-defined set of assessment parameters to conduct stakeholder interviews.

Scorecard

Takes responses from stakeholder questionnaires and provides a weighted numerical rating for evaluating enterprise architecture maturity.

Metrics

Summarizes findings into a detailed graphical report on the current and target state of different elements of the enterprise architecture organization.

Questionnaire:

The assessment questionnaire is categorized into different architectural dimensions, which are used to collect inputs from stakeholders. Included below is a sample questionnaire for a specific dimension of EA assessment.

Category	S. No.	Criteria	Remarks
Architecture Vision & Planning	1	Business Goals	1. Are the business goals identified for the project? 2. Is the architecture vision aligned with the business goal?
	2	Architecture Principles	1. Are the architecture principles defined for the project? 2. Do these principles adhere to the enterprise architecture principles of the organization?
	3	Architecture Governance	1. Are the important stakeholders from business and IT identified? 2. Is the scope of the architecture activity clearly defined? 3. Is the architecture development methodology defined and agreed upon? 4. Are architecture/design checkpoints clearly defined in the project plan?
	TOTAL		
Architecture Viewpoints and Artifacts	1	Business Architecture	1. Does the architecture document business process flow diagrams (current and target state) for all critical business processes? 2. Are techniques such as 'Business Scenarios' used to illuminate the key business requirements and the implied technical requirements for IT architecture?
	2	Application Architecture	1. Is the architecture divided into logical layers and sub-systems? 2. Does the architecture capture all use-cases and functional requirements by mapping them to sub-systems/components? 3. Are proper design patterns utilized? 4. Are industry standard architecture styles such as SOA, EDA used? 5. Are all components loosely coupled? 6. Can all services/components be scaled out horizontally?

Scorecard:

Scorecard matrices are used to assign weights to individual criteria during the enterprise architecture maturity evaluation. The scoring system can be customized according to the client's enterprise architecture vision and priorities, with the primary stakeholder able to decide and distribute these weights (which sum to 100% per category) according to their needs. Below is a sample of the scorecard for a specific dimension of an enterprise architecture assessment.

Architecture Score Matrix				Cycle 1 (Date:)		Cycle 2 (Date:)	
Category	S. No.	Criteria	Weightage (in %)	Score	Comments	Score	Comments
Architecture Vision & Planning	1	Business Goals	30.00%	5			
	2	Architecture Principles	30.00%	4			
	3	Architecture Governance	40.00%	5			
	TOTAL		100.00%				
Architecture Viewpoints and Artifacts	1	Business Architecture	25.00%	3			
	2	Application Architecture	25.00%	4			
	3	Data (Information) Architecture	25.00%	5			

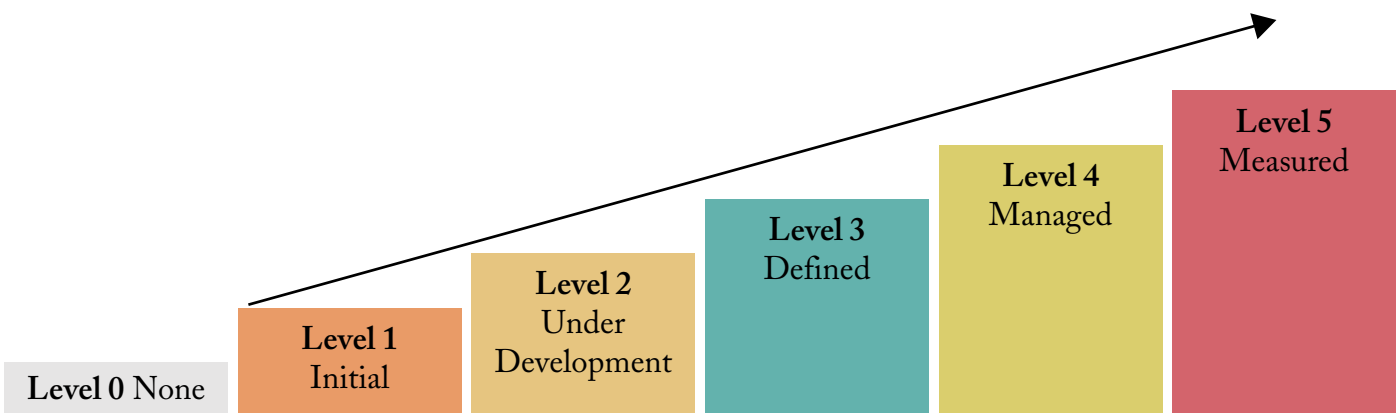
Summary Report:

During the analysis phase, the enterprise architecture team summarizes the maturity assessment using inputs from scorecards and other toolkit elements to complete an evaluation matrix.

This assessment provides recommendations and a roadmap for the EA framework and tools, architecture repository, reference and industry-specific architecture, architecture governance, architecture board, architecture skills, stakeholder management, and content meta model.



• MATURITY MODEL



Elements that need to be evaluated during EA maturity assessment include:

- Architecture process
- Architecture development
- Business linkage
- Senior management involvement
- Operating unit participation
- Architecture communication
- IT security
- Architecture governance
- IT investment and acquisition strategy

3. EA Practice Set-Up

As part of long-term support, Atos Syntel engages closely with clients during the establishment of an EA practice. Key focus areas include setup, repository building, and especially IT strategy, governance, and EA lab.



IT Strategy is essential to any effective EA implementation. It is driven by the enterprise's vision, mission, strategy, and goals. The strategy should be aimed at reducing the risk of new investments and achieving a better return on existing investments. An effective IT strategy can help reduce IT operations cost through lower software development, support, and development costs, and can provide a better understanding of the importance of business-IT alignment by involving key business stakeholders.

Governance frameworks help organizations define EA governance and compliance review processes. It also includes defining templates and artifacts to be used throughout the process. The key element in a successful architecture governance strategy is establishing an organization-wide architecture board to oversee the implementation of the strategy.

An **EA Lab** is essential to be competitive in today's marketplace. Organizations need to keep inventing and evolving, and it is important to evaluate new technologies and identify their impact on IT and business operations and cost. This can also involve upgrading to new technologies to improve business agility and conducting proofs-of-concept on new technologies and business solutions.

EA Practice	Long Term Partnership Plan
IT Strategy <ul style="list-style-type: none"> • Portfolio Consolidation • Web and IT Modernization • SMAC enablement • SOA enablement • Business – IT alignments 	<ul style="list-style-type: none"> • Consolidation & simplification of current IT landscape • Modernize applications to embrace technology disruptions and address future needs & business vision • Help in social, mobile, analytics and cloud journey
EA Governance <ul style="list-style-type: none"> • EA Repository • Architecture Compliance • Standards & Guidelines • Regulatory Compliance 	<ul style="list-style-type: none"> • Building and maintaining enterprise architecture repository & reference library • Better governance and enforcement of architectural standards & regulatory compliance • Identify and tailor EA Framework & tools
EA Lab <ul style="list-style-type: none"> • Technology Evaluation • Technology Refresh Plan • Proof of Concept • Knowledge & Asset Management 	<ul style="list-style-type: none"> • Evaluation of various “state of the art” and future ready technologies and creating risk mitigation PoC. • Reduce TCO due to introduction of reusable components.

As part of Atos Syntel's methodology for EA assessment as well as our long-term partnership plan, we provide our clients with the following artifacts and documentation for successfully establishing an EA practice:

Artifacts	Documentation
Enterprise Architecture Template	Collates the outputs produced at every phase of EA implementation, helps define the architecture content meta model.
Architecture Governance Process Template	Defines quality gates, assists with risk monitoring, and enables compliance reviews to ensure that design and implementation are in-line with the strategic and architectural objectives.
Responsibility Assignment Matrix	Defines participation of various roles in completing tasks or deliverables for a project or business process.
Architecture Skills Template	Provides tables matching roles with skills and proficiency levels within each skill category, helps identify current architecture capabilities and improvement plans.
Stakeholder Map Template	Identifies and classifies stakeholders and documents stakeholders' key concerns, enabling business-IT alignment.
Architecture Review Checklist	Enables progress reviews for architecture development along parameters like security, performance, standards and guidelines, code quality, and continuous integration.
Product Evaluation Artifacts	A comprehensive set of evaluation criteria that enable a metrics-driven scoring framework to evaluates a tool's value proposition and ability to deliver critical foundational features.

4. Conclusion

A well-run EA practice helps CXOs fine tune their business to accelerate changes in the organization's business processes to support effective business growth in the marketplace.

One of the most effective ways to leverage the power of EA is to engage with a partner that can assist with a data-driven, product and technology-agnostic EA assessment that can deliver a clear-eyed view of an enterprise's EA maturity and determine the most logical path forward.

Partners like Atos Syntel accomplish this through a robust methodology and flexible toolkits that accelerate the process, followed up by a long-term partnership approach that will enable the resulting EA organization to continue to deliver value and agility in years to come. To learn more about Atos Syntel's EA services, visit www.atos-syntel.net

about Us:

Atos Syntel is a leading global provider of integrated information technology and knowledge process services. Atos Syntel helps global enterprises evolve the core by leveraging automation, scaled agile and cloud platforms to build efficient application development and management, testing and infrastructure solutions. Our digital services enable companies to engage customers, discover new insights through analytics, and create a more connected enterprise through the internet of things. Our "Customer for Life" philosophy builds collaborative partnerships and creates long-term client value by investing in IP, solutions and industry-focused delivery teams with deep domain knowledge.

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