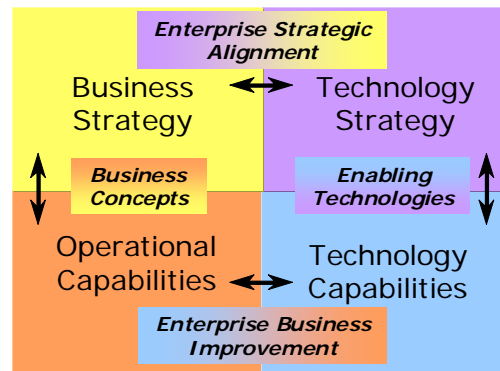


Preface

Enterprise Architecture is a complete expression of the enterprise; a master plan which “acts as a collaboration force” between aspects of business planning such as goals, visions, strategies and governance principles; aspects of business operations such as business terms, organisation structures, processes and data; aspects of automation such as information systems and databases; and the enabling technological infrastructure of the business such as computers, operating systems and networks.



In a modern enterprise, a rigorously defined enterprise architecture approach is necessary to be able to capture a vision of the "entire organisation" in all its dimensions and complexity.

Enterprise Architecture (EA) is a Program (EAP) supported by processes, methods, tools and frameworks, which are able to coordinate the many facets that make up the fundamental essence of an enterprise at a holistic way.

An Enterprise Architecture establishes the organization-wide roadmap to achieve an organization's mission through optimal performance of its core business processes within an efficient information technology (IT) environment. Simply stated, Enterprise Architectures are “zoning or city plans” for systematically and completely defining an organization's current (baseline) or desired (future) environment and the transformation path between. Enterprise Architectures are essential for corporate governance, change management and portfolio management as well as for sourcing situations where (parts) of the business and or IT are co located at a third party. This is accomplished in a coherent set of landscapes of business & IT, expressed in business elements (e.g., vision & strategy, business functions / activities, information flows, and systems environments) and technical elements (e.g., software, hardware, communications, networks), and includes a transition plan from the current environment to the future environment.

If defined, maintained, and implemented effectively, these zoning- city plans assist in optimizing the interdependencies and interrelationships among the business operations of the enterprise and the underlying IT that support these operations. It has shown that without a complete and enforced EA (Strategic) Business Units of the enterprise run the risk of buying and building systems that are duplicative, incompatible, and unnecessarily costly to maintain and interface.

For EA's to be useful and provide business value, their development, maintenance, and implementation should be managed effectively. This Enterprise Architecture Good Practices Guide is intended to assist in defining, maintaining, and implementing EA's by providing a creative but disciplined and rigorous approach to effective EA management.

The Need for this EA Good Practices Guide

While EA frameworks and models provide valuable guidance on the content of enterprise architectures, there is literally no guidance how to successfully manage the process of creating, changing, and using Enterprise Architecture. This guidance is crucially important. Without it, it is highly unlikely that an organization can successfully produce a complete and enforceable EA for optimizing its business value and mission performance of its systems. For example, effective development of a complete EA needs a corporate commitment with senior management sponsorship. Enterprise Architecture development should be managed as a formal program by an Enterprise Architecture Department that is held accountable for success.

Since that EA facilitates change based upon the changing business environment of the organization, the enterprise architect is the organization's primary change agent.

Effective implementation requires establishment of business and system compliance with the enterprise architecture, as well as continuous assessment and enforcement of compliance. Waiver of these requirements may occur only after careful, thorough, and documented business case analysis. Without these commitments, responsibilities, and tools, the risk is great that business changes or new systems will not meet organizations business needs, will be incompatible, will perform poorly, and will cost more to develop, integrate, and maintain than is warranted.

Background

The content of this Enterprise Architecture Good Practices Guide is based on the set of EA guides that the Institute For Enterprise Architecture Developments has developed over the past years. Several contributions from practitioners are added to these popular guides based on their experiences with these guides. Contributions to the EA community from the US CIO Counsel as well as the US Architecture Working Group are approved over the past years, refined based on good practices and included in this guide. New EA applications are also added to this guide as well as example results from several EA programs.

We will thank all the researchers and practitioners for their contributions and we hope with this guide to set a complete standard to manage the Enterprise Architecture Practice.

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1 Introduction

1.1 Purpose

The purpose of this guide is to provide guidance to organization's in initiating, developing, using, and maintaining their enterprise architecture (EA) practice. This guide offers a set of Enterprise Architecture Good Practices that have proven their benefits to organizations and that addresses an end-to-end process to initiate, implement, and sustain an EA program, and describes the necessary roles and associated responsibilities for a successful EA program.

Enterprise Architecture is a complete expression of the enterprise; a master plan which “acts as a collaboration force” between aspects of business planning such as goals, visions, strategies and governance principles; aspects of business operations such as business terms, organization structures, processes and data; aspects of automation such as information systems and databases; and the enabling technological infrastructure of the business such as computers, operating systems and networks.

1.2 Scope

This guide focuses on EA maturity, processes, results, frameworks, methods, tools, and roles and responsibilities. While this guide addresses the enterprise life cycle, it describes in detail how the EA programs and processes relate to solution architecture, enterprise program management, and budget planning and investment processes.

The breadth and depth of information presented here should be tailored to your own organization. Some detailed explanations and examples are presented in the appendices, and references to supplementary material are included in the text or bibliography. Feel free to individualize these examples as needed.

1.3 Audience

This guide is intended primarily for organization enterprise architects tasked with the generation and institutionalization of EA's as well as management of EA departments, CIO's and students. This document provides guidance to organizations that currently do not have EA's and those that can benefit from improvements in their EA methods for development and maintenance. For organizations without an EA, this document provides useful guidance to the organization Head and the Chief Information Officer (CIO) for educating and obtaining key stakeholder commitment in establishing an effective EA.

Although the guide specifically addresses the roles and responsibilities of major players in the enterprise architecture development process, it is also a handbook for anyone who needs to know more about the EA process. Regardless of your role or responsibility – if you are involved in the enterprise life cycle, this guide is for you.

1.4 Guide Overview

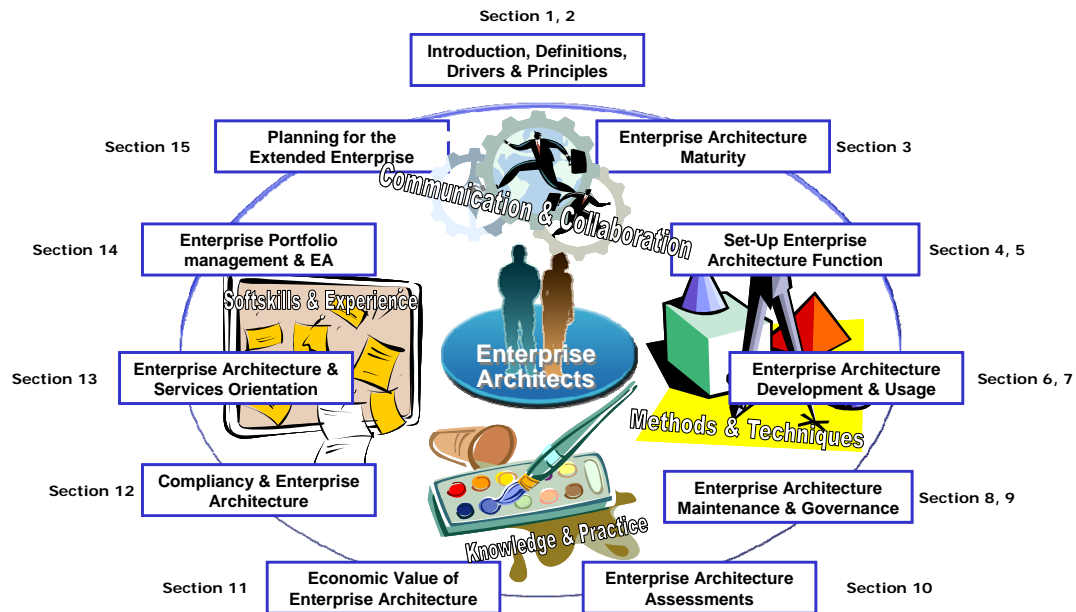


Figure 1. EA Domain Section Overview

1.5 Guide Sections

This guide is organized as follows:

Section 1:	Introduction	Defines the purpose, scope, audience, and organization, of the guide.
Section 2:	Definitions, Drivers, and Principles	Presents the context for the EA process, i.e., principles and legislative drivers, and defines the architecture development, implementation, and maintenance process.
Section 3:	Determine Enterprise Architecture Maturity	Describes and defines EA maturity models to determine the EA maturity of organizations as baseline for setting up the EA program
Section 4:	Set-Up an Enterprise Architecture Program	Defines EA program procedural steps to initiate the program, typical EA organization, and results of the EA.
Section 5:	Define an Enterprise Architecture Process and Approach	Defines a process for creating an enterprise architecture.
Section 6:	Develop the Enterprise Architecture	Provides the procedural steps for developing current and future architectures and a transformation plan.
Section 7:	Use the Enterprise Architecture	Demonstrates how the EA process interacts with Budget planning and investment control and with the Systems Life Cycle.

Section 8:	Maintain the Enterprise Architecture	Discusses processes and procedures to maintain EA results throughout the EA life-cycle process.
Section 9:	Enterprise Architecture Governance	Explanation about different EA governance structures, like centralized decentralized and federated EA governance.
Section 10:	Enterprise Architecture Assessment	Explanation how to assess EA results like EA programs, EA processes and content.
Section 11:	Economic Value of Enterprise Architecture	Explanation how to set up an EA Value Measurement Program to show the Economic Benefits of EA.
Section 12:	Compliance and Enterprise Architecture	How to deal with compliance issues when defining and developing your future EA.
Section 13:	EA & Services Orientation	All you need to know about Enterprise Architecture & Service Orientation as an enterprise architectural style.
Section 14:	Enterprise Portfolio Management & EA	The role and function of EA as the foundation of Enterprise Portfolio Management.
Section 15:	Planning for the Extended Enterprise	Explanation about the role and function of EA in Business Innovation.
Section 16:	Summary	Presents highlights of the EA guide and provides final recommendations for the initiation and implementation of a successful EA program.
Section 17:	References & Bibliography	Provides a list of key documents used and referenced during the development of this guide and other informative source documentation.
Section 18:	Related Links	Provides a list of URL's related to topics addressed in this guide.
Section 19:	About the Author	Background information about the Author.
Appendix A:	EA Roles and Responsibilities	Provides a concise description of key personnel roles and responsibilities for EA development, implementation, and maintenance.
Appendix B:	Term & Definition	Provides a definition of terms used within this guide.
Appendix C:	Acronyms	Provides a list of all acronyms used within this guide.
Appendix D:	Sample Guiding Principles	Describes the essential sample guiding principles that are a starting point in the enterprise architecture program.
Appendix E:	Views & Viewpoints in Extended EA	Description of the concepts of EA viewpoints sets and the usage related to the key stakeholders.
Appendix F:	E2AF Essentials	Principles & guidelines in the construction of the Extended Enterprise Architecture Framework.

Appendix G: Enterprise Architecture Tool Selection Guidelines	Guidelines in the selection of EA Tools. Questionnaire to tune to organizations own purpose as selection tool for EA support.
Appendix H: EA Quality of Services	Description of the EA space Ufo method to define the required Quality of Services in EA.
Appendix I: TOGAF ADM	Description of the TOGAF ADM process.
Appendix J: Example of Enterprise Architecture results	Provides a list of EA sample results from real life EA programs.
Appendix L: EA Modelling	Explanation about the Archimate EA modelling language.
Appendix M: Other EA books in this series	Other EA Books in this Series: How to survive in the jungle of EA frameworks & The Economic Benefits of EA.

Table 1. EA Sections Overview

1.6 How to Use this Guide

This guide is a “how-to” manage the EA practice manual for enterprise architects and stakeholders in the initiation, development, use, maintenance, governance and positioning of EA’s.

Several real life examples as well as methods & techniques are described in such a way that the reader will find guidance in “how-to-do”.

To find answers to your specific needs or questions, please consult the following table for frequently asked questions. These and many other questions are answered throughout this guide.

Question	Section
1. Why to set up an EA practice?	2.0
2. What are the primary benefits of using an EA?	2.0
3. What are the legislative drivers and mandates for using an EA?	2.0
4. What is the Enterprise Life Cycle?	2.0
5. Why to define the EA maturity?	3.0
6. How to define the EA maturity?	3.0
7. How to initiate an EA Program?	4.0
8. How to get buy-in from Top Management?	4.0
9. How to establish management structures?	4.0
10. How to define the appropriate EA Program activities?	4.0
11. How to define the intended goals & objectives?	5.0
12. How to define the scope of EA programs?	5.0

13. How to use select & use EA frameworks?	5.0
14. How to analyze the stakeholders & define the related viewpoints?	5.0
15. How to define your guiding principles?	5.0
16. How to define the appropriate EA process?	5.0
17. How to determine the appropriate EA results?	5.0
18. How to select an EA toolset?	5.0
19. What is a current or baseline enterprise architecture?	6.0
20. What is a future enterprise architecture?	6.0
21. How do I create a current or future enterprise architecture?	7.0
22. What is a transformation plan?	6.0
23. How do I transformation from the current to the future?	6.0
24. How does the EA process relate to the Budget Planning process?	7.0
25. Who is responsible for enterprise architecture policies?	7.0
26. Who is responsible for the EA?	7.0
27. How does one market the selected approach to senior executives?	7.0
28. How is the EA used within the Budget Planning process to justify information technology investments?	7.0
29. How do enterprise architecture processes relate to other enterprise activities?	7.0
30. How does a project manager or solution architect ensure alignment to the EA when proposing a new project?	7.0
31. How do I maintain the EA as the enterprise evolves?	8.0
32. How to control & oversee the EA Program	8.0
33. What EA governance structure fits best our organization?	9.0
34. How to assess EA Programs & Results?	10.0
35. How to define the Economic Value of EA?	11.0
36. How to comply to rules & regulations?	12.0
37. How to learn more about the Compliance Aware Reference Architecture?	12.0
38. What about EA en Services Orientation?	13.0
39. How to support Enterprise Portfolio Management?	14.0
40. How to align EA with EPM?	14.0
41. How to plan for the Extended Enterprise?	15.0
42. How to manage adaptiveness & flexibility?	15.0
43. Where to find more info?	17.0
44. What are the organizational roles and responsibilities when developing and maintaining an EA?	Appendix A
45. Where to find an explanation of terms & definitions?	Appendix B
46. What are EA guiding principles?	2.0 and Appendix D
47. Where to find more about EA Viewpoints?	5.0 and Appendix E

48. Where to learn more about the background of the E2AF?	5.0 and Appendix F
49. Where to find guidelines for EA Tool selection?	5.0 and Appendix G
50. How to define the EA Quality of Services / Space Ufo Method?	Appendix H
51. Where to find more info about TOGAF ADM?	5.0 and Appendix I
52. What do enterprise architectural results look like?	5.0 and Appendix J
53. What about EA Modelling languages?	Appendix K
54. Are there more EA books in this series?	Appendix L

Table 2. EA Questions