ACM Tech Pack on Enterprise Architecture

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Introduction to Enterprise Architecture:

Although there is a number of ways to define Enterprise Architecture, the benefits that a successful EA implementation can bring to a company are undeniable. In order to be successful and make proper decisions, organizations need to have access to accurate information and the ability to communicate these elements throughout the enterprise. Enterprise Architecture is the mechanism that allows organizations to achieve this. By enabling high-quality and reliable information, Enterprise Architecture allows organizations to respond to business needs and change more efficiently. By the same notion, this communication allows for a business to plan across its various divisions (most of the time between the IT division and business division). This allows for business stakeholders to understand the impact of complex IT projects on the business and what benefits will be realized. Also, Enterprise Architecture will allow for the standardization of terms for this collaboration between business and IT. By being able to provide a common language in which business and IT can communicate, EA allows for two different, yet influential divisions to work together.

Historically, the benefits of EA have been seen in the IT field. This is due to its technical origins. With this, EA has been associated primarily with efficiency in the sense of cost reduction. As EA has evolved into a business process, the expectations of EA have evolved as well.

The following list of topics is organized into the various fundamentals of Enterprise Architecture. Each section is prefaced with a basic description as well as the purpose of each topic.

FOUNDATIONAL CONCEPTS

Enterprise Architecture has become a popular topic in recent years and has become a critical component for organizations in a variety of different industries. The value and benefits an EA implementation can bring to an organization is great; however, it takes an extended period of time to realize these achievements. Therefore, it is imperative to have the ability to properly convey the meaning of EA to the necessary parties/stakeholders. In order to create this business case, an understanding of basic foundational concepts is required.

Gartner Clarifies the Definition of the Term 'Enterprise Architecture'

Anne Lapkin, Philip Allega, Brian Burke, Betsy Burton, R. Scott Bittler, Robert A. Handler, Greta A. James, Bruce Robertson, David Newman, Deborah Weiss, Richard Buchanan, Nicholas Gall. 12 August 2008. Gartner Clarifies the Definition of the Term 'Enterprise Architecture'. Gartner Research.

Abstract: Gartner clarifies their definition of Enterprise Architecture. In defining Enterprise Architecture as a process, this article summarizes the difference between EA as a verb and a noun, the role of the architect and the overall process of EA, and finally, the various outputs an Enterprise Architecture should produce.

Importance: Illustrates an accepted definition of the Enterprise Architecture concept. By doing this, the article looks to reduce conflict over the definition of EA and provide a common understanding that enables organizations.

Why Do Enterprise Architecture?

Robertson, Bruce. 12 August 2009. Why do Enterprise Architecture? Gartner Research.

Abstract: Gartner proposes a number of different approaches that can be used to justify the need for Enterprise Architecture. The overall goal is to illustrate the benefits of EA and also differentiate the process from other planning efforts. In order to achieve this, stakeholder understanding and buy-in is necessary.

Importance: Provides a number of ways to resonate the concept of EA with a wide range of stakeholders. The article suggests using simple approaches to proposing Enterprise Architecture instead of historical complex attempts that overwhelmed stakeholders.

[An Integrated View on Business- and IT-Architecture](#)

Abstract: The paper outlines the domains of enterprise architecture and fundamental design techniques. The consolidation of architecture description to three basic views is proposed. The component view describes the elements of architecture and their relationships. The communication view shows how the elements interact with one another. The distribution view describes how the elements are distributed in terms of location or organizational assignment. Key element of architecture design is to account for interdependencies among the building blocks of architecture. Blueprints are introduced as a means in planning the deployment of architecture on a large scale. They give a comprehensive view on the building blocks and how the interact. Blueprints show the effects of architecture design between business-, application-, and infrastructure architecture, thus providing an integrated view on architecture. The techniques introduced for architecture design are illustrated by using a selection of real life examples from an architecture design project.

Importance: Discusses the importance of design views as well as the basic EA concepts that are captured by the various design views.

ORGANIZATIONAL ALIGNMENT AND ENTERPRISE ARCHITECTURE

Historically, each business function that comprises an organization (marketing, accounting, finance, etc.) actively contributes to the flow of information. This information is then used for decision-making that can ultimately impact the organization as a whole. With information being needed within an organization as well as externally, it is imperative for architects to create a solution that will be able to facilitate business needs but at the same time be able to adapt to the market and meet future needs of the organization as well. This type of alignment of IT with business has been sought after for an extended period of time.

Enterprise Architecture is the tool that can make this type of organizational alignment a reality. Through EA methodologies and tools, strategic organizational alignment can become a reality.

[Information Systems Strategy: Reconceptualization, Measurement, and Implications](#)

Abstract: Information systems strategy is of central importance to IS practice and research. Our extensive review of the literature suggests that the concept of IS strategy is a term that is used readily; however, it is also a term that is not fully understood. In this study, we follow a perspective paradigm based on the strategic management literature to define IS strategy as an organizational perspective on the investment in, deployment, use, and management of IS. Through a systematic literature search, we identify the following three conceptions of IS strategy employed implicitly in 48 articles published in leading IS journals that focus on the construct of IS strategy: (1) IS strategy as the use of IS to support business strategy; (2) IS strategy as the master plan of the IS function; and (3) IS strategy as the shared view of the IS role within the organization. We find the third conception best fits our definition of IS strategy. As such, we consequently propose to operationalize IS strategy as the degree to which the organization has a shared perspective to seek innovation through IS. Specifically, our proposed IS strategic typology suggests an organization's IS strategy falls into one of the two defined categories (i.e., IS innovator or IS conservative) or is simply undefined. We also develop measures for this new typology. We argue that the proposed instrument, which was cross validated across both chief information officers and senior business executives, has the potential to serve as a diagnostic tool through which the organization can directly assess its IS strategy. We contend that our reconceptualization and operationalization of IS strategy provides theoretical and practical implications that advance the current level of understanding of IS strategy from extant studies within three predominant

literature streams: strategic IS planning, IS/business strategic alignment, and competitive use of IS.

Importance: This article discusses the concept of strategic alignment in the context of information systems. Through this context, the reader is able to gain a basic understanding of strategic alignment as well as relevant organizational and systems theory.

How enterprise architectures can support integration

Anaya, Victor, Ortiz, Angel. 2005.

Abstract: This article states the importance of Enterprise Architectures as a way to identify interoperability problems. Enterprise Architectures provide a common view of the primary resources of any enterprise (people, processes and technology) and how they integrate to provide the primary drivers of the enterprise. The authors of this work sketch an example where different kinds of integration problems are detected. Tracing enterprise information is mandatory to manage enterprises. Therefore, in this work there are identified and established different types of alignment relationships between the artifacts composing an Enterprise Architecture.

Importance: In addressing common problem areas experienced in terms of integration, this article provides a number of approaches to these areas with their related advantages and disadvantages.

Strategic IT planning as change specification

Shu, William S. 2008.

Abstract: Prioritizing strategic plan executions and determining the most appropriate models and architectures for IT plans, as well as temporally

sequencing and reconfiguring the latter for optimal solutions, can be tough without a supporting tool. This article therefore proposes a model where strategic plans are simple processes whose basic actions are events that change the states of institutional components and alter organizational structure. Therein, the strategic planning process, plan execution, and routine daily tasks are carried out, conceptually, in the same manner. Furthermore, the plans themselves may be reconfigured or modified according to changing organizational and architectural models for IT activities. The work assumes a formal model of time that enables one to track institutional transformations over time. Hence, the model underpins IT governance issues and tool support to investigate possible future scenarios of what could happen, analyze past activities of what happened, or just perform routine duties.

Importance: Proposes a different model in which to achieve strategic IT alignment and discusses how it can be implemented within an organization's current state.

Using a common architecture in Australian e-Government: the case of smart service Queensland

Abstract: In this paper, we present the findings of a case study which examines the use of enterprise architectures in the context of the development and implementation of an Electronic Government (e-Government) Services Delivery initiative by the Queensland State government of Australia. The paper employs strategic alignment theory to critically examine the progress of the initiative from the development of public policy and business case documents, through to the pilot program, and progressive implementation of an electronic government environment that includes a number of redesigned Internet gateways, integrated contact (call) centres, electronic kiosks, and web-enabled customer service counters. The case is also compared with similar e-Government initiatives and

provides an interesting example of how governments can use the electronic domain to service a diverse range of clients in a large and wide spread community.

Importance: Illustrates the various stages of strategic alignment within real-world context.

CVS IT Chief on the Remedy for Business-IT Alignment

Wailgum, Thomas. CVS IT Chief on the Remedy for Business-IT Alignment. CIO.com. 29 March 2010. Retrieved on July 8, 2011.
http://www.cio.com/article/588467/CVS_IT_Chief_on_the_Remedy_for_Business_IT_Alignment

Summary: This article provides background into CVS Caremark's innovative approach to strategic alignment and the success they have had in recent years with their new approach. In interviewing CIO Stuart McGuigan, the author is able to shed some light on CVS's new approach to alignment through discussing Governance, the theory that IT is seen as a business entity instead of a separate department, and an example of an IT-oriented business project recently implemented by CVS Caremark.

Importance: Discusses the new theory that IT is a business-oriented department and should be considered a business department. The article also highlights the success of this theory through CVS Caremark's current standings.

Enterprise architecture: business and IT alignment

Pereira, Carla Marques, Sousa, Pedro. 2005.

Enterprise architecture: business and IT alignment. Proceedings of the 2005 ACM symposium on Applied computing. pg. 1344-1345. DOI= 10.1145/1066677.1066980.
http://portal.acm.org/citation.cfm?id=1066980

Abstract: Organizations have existing systems infrastructure that are the result of decades of one-by-one implementations of specific solutions. As organizations, products, customers and technologies continue to change at an increasingly rapid rate, managers have sought overviews that will allow them to understand how Business and IT within their organization fits together. Enterprise Architecture is a representation of the organization to enable the planning of the organization

changes. It includes the current and future business objectives, goals, visions, strategies, informational entities, business processes, people, organization structures, application systems, technological infrastructures, and so on. In this paper, we show how the alignment between Business and IT can be disaggregated into four different dimensions and we present some heuristics to ensure such alignment.

Importance: The paper discusses the previously mentioned four dimensions as well as the definition and justification for each heuristic.

[Competing Perspectives on the Link Between Strategic Information Technology Alignment and Organizational Agility: Insights from a Mediation Model](#)

Abstract: Strategic information technology alignment remains a top priority for business and IT executives. Yet with a recent rise in environmental volatility, firms are asking how to be more agile in identifying and responding to market-based threats and opportunities. Whether alignment helps or hurts agility is an unresolved issue. This paper presents a variety of arguments from the literature that alternately predicts a positive or negative relationship between alignment and agility. This relationship is then tested using a model in which agility mediates the link between alignment and firm performance under varying conditions of IT infrastructure flexibility and environmental volatility. Using data from a matched survey of IT and business executives in 241 firms, we uncover a positive and significant link between alignment and agility and between agility and firm performance. We also show that the effect of alignment on performance is fully mediated by agility that environmental volatility positively moderates the link between agility and firm performance, and that agility has a greater impact on firm performance in more volatile markets. While IT infrastructure flexibility does not moderate the link between alignment and agility, except in a volatile environment, we reveal that IT infrastructure flexibility has a positive and significant main effect on agility. In fact, the effect of IT infrastructure flexibility

on agility is as strong as the effect of alignment on agility. This research extends and integrates the literature on strategic IT alignment and organizational agility at a time when both alignment and agility are recognized as critical and concurrent organizational goals.

Importance: Goes into considerable depth concerning the problem of agility versus alignment. Provides findings and support for the focus on agility in volatile markets.

[Better Business-IT Alignment Through Enterprise Architecture: An Actor-Network Theory Perspective](https://www.aogea.org/system/files/private/2011-1.pdf)

Abstract: Enterprise architecture has attracted the attention of information systems (IS) academics as well as information technology (IT) and business professionals. While enterprise architecture has been proposed as a solution to the business-IT alignment problem, there is little theoretical basis that would explain how enterprise architecture work can lead to better alignment. Here we draw on the Actor-Network Theory (ANT) to highlight the role of enterprise architecture in achieving and sustaining such alignment. Specifically, we argue that enterprise architecture work helps to achieve agreement and thus alignment of the interests of internal actors within the context of enterprise interests and inscribes such agreement into architectural artifacts. Such artifacts can then be used in negotiations with external parties, such as IT vendors, thereby protecting the interests of the enterprise. Enterprise architecture work is also likely to reduce the likelihood of members of the enterprise, such as IT staff, from forming close ties with external parties, such as IT solution vendors, at the expense of the interests of the enterprise. We argue that this would result in stronger business-IT alignment. We conclude by highlighting two important goals of enterprise architecture as viewed through the ANT lens: (1) to help achieve an alignment of interests within the enterprise, and (2) to serve as a tool for protecting the interests of the enterprise in internal and external negotiations. These in turn

point to the importance of the soft skills of enterprise architects and the need for clear and readily understandable enterprise architecture artifacts.

Importance: Shows the relationship between EA and business alignment in terms of being a socio-technical network. In displaying this relationship, the article illustrates the connection of soft skills with the success of effective communication between IT and business.

The Enterprise Architecture "Stack"

An Enterprise Architecture assists organizations with understanding the structure of the enterprise and how it works. This roadmap assists with planning for business and technology change. Due to this, EA is a crucial part of technology planning, architecting, and decision-making for an organization. The EA "Stack" is a model used to represent the different "layers" of an enterprise arranged based on level of detail.

Defining the Discipline of Application Architecture

Blechar, Michael J., Bradley, Anthony, Sholler, Daniel. 12 June 2008. Defining the Discipline of Application Architecture. Gartner Research. Accessed on May 26, 2011.

Abstract: Application Architecture is the process of designing relevant IT artifacts that will serve as guidelines for following application development and deployment. This article provides a general overview of the Application Architecture discipline as well as how it fits into Gartner's EA framework. Furthermore, it defines the role of the application architect and examples of how application architecture fits into decision-making for organizations.

Importance: Application architecture is directly related to Enterprise Architecture and is a vital part of developing the future solution an enterprise is looking for.

Gartner Defines Enterprise Information Architecture

Gall, Nicholas, Lapkin, Anne, Newman, David. 20 February 2008. Gartner Defines Enterprise Information Architecture. Gartner Research. Accessed on May 26, 2011.

Abstract: This article discusses the importance in Enterprise Information Architecture as a part of the EA process. Through dissecting Gartner's definition of

EIA, the article is able to give a broad overview of what EIA is, why it is necessary, and how it will impact the organization.

Importance: EIA is one of the three main EA viewpoints along with Enterprise Business Architecture and Enterprise Technical Architecture. EIA is becoming a major focus of business stakeholders and was projected to become as important to EA as technical architectures.

Planning for Enterprise Architecture

According to Wikipedia, "Enterprise Architecture Planning is the planning process of defining rigorous descriptions of the structure of an enterprise, its decomposition into subsystems, the relationships between the subsystems, the relationships with the external environment, the terminology to use, and the guiding principles for the design and evolution of an enterprise. These rigorous descriptions are commonly known as architectures." The proper planning of the Enterprise Architecture process is critical to the success of the overall initiative.

Five Best Practices for Enterprise Architecture

Lapkin, Anne. 31 August 2010. Five Best Practices for Enterprise Architecture. Gartner Research. Accessed on May 26, 2011.

Summary: Today, most EA implementations struggle to deliver value to their organizations while others thrive. Gartner uses this article to measure the maturity of various organizations which in turn determines their success. Based on the results of the maturity assessment, there were five best practices that were found. These five best practices would be able to provide benefits to EA implementations that were currently not utilizing them.

Importance: The five best practices that were proposed in this article have the capability to improve upon an EA implementation. These methods also do not have specific requirements. Instead, they are guidelines that will improve an EA program's effectiveness.

[Five More Best Practices for Enterprise Architecture](#)

Summary: Today, most EA implementations struggle to deliver value to their organizations while others thrive. Gartner uses this article to measure the maturity of various organizations which in turn determines their success. Based on the results of the maturity assessment, there were five best practices that were found. These additional five best practices would be able to provide benefits to EA implementations that were currently not utilizing them.

Importance: These additional five best practices that were proposed in this article have the capability to improve upon an EA implementation. These methods also do not have specific requirements. Instead, they are guidelines that will improve an EA program's effectiveness.

[Making the Business Case for Enterprise Architecture](#)

Abstract: Making the business case for enterprise architecture (EA); or a systematic approach to the alignment information technologies with business functions seems like a "chip shot" in today's cost-conscious business world. IT departments around the globe are continually seeking ways to reduce skyrocketing maintenance costs and to eliminate redundant legacy information systems. The business-side of the house is continually pressing for bigger, better, and faster technological capabilities in order to sift through and capitalize on the vast amounts of data that has been compiled. When a project comes along that addresses these concerns, one would assume that it would be a "slam dunk" for selection by the firm's governance board. Conceptually speaking, EA makes complete business sense as it has the potential to revolutionize how IT is conducted around the world; similar to how Toyota's Total Quality Management system revolutionized how manufacturing operations are performed. But what about the return-on-investment, total cost of ownership, and discounted cash

flows? Can an enterprise architecture program pass the rigorous financial tests of the reluctant-to-spend corporate bureaucrats? More importantly, can enterprise architecture survive the politics of a mature organization that is already set in their ways? This article applies the same analytical approaches that one would use in the selection of a new application or hardware to see how well EA holds up to the test. This work also addresses some of the key areas of contention that may arise when an organization begins to debate why they may or may not require an enterprise architecture program at their firm. Finally, several best practices are highlighted which identify the hallmarks of a well-implemented EA program.

Importance: Illustrates the importance of EA through a business perspective. The article discusses the traditional financial measurements as well as the relevant steps in developing a thorough business case for a new EA implementation.

Mapping Architectural Styles to the Enterprise Framework

Rosser, Bill. 8 August 2002. Mapping Architectural Styles to the Enterprise Framework. Gartner Research. Accessed on May 26, 2011.

Summary: This article discusses the concepts of Architectural Styles and Evolution and how they are related. While discussing the relationship between the two, each relationship is matched to a given architectural phase.

Importance: The concept of architecture is constantly changing. In order to adapt and evolve smoothly with this change, an organization must learn to adapt their architectural style.

Organize Your Enterprise Architecture Effort: Planning for EA Success

Robertson, Bruce, Weiss, Deborah. 18 September 2008. Organize Your Enterprise Architecture Effort: Planning for EA Success. Gartner Research. Accessed on May 26, 2011.

Summary: This article discusses the need for proper planning of an EA implementation in order for it to see long-term success. It provides a checklist of tasks related to this effort as well as some methods for starting correctly.

Importance: A properly planned and detailed implementation of EA can ensure that an EA program will be able to achieve its projected goals through sufficient

resourcing and a thorough game plan. This ensures that the architectural efforts are not wasted.

Organize Your Enterprise Architecture Effort: Tips for Game Planning and Launching the EA Program

Summary: This article describes a number of roadblocks EA implementations encounter during the planning stages of the program. The areas are divided into planning issues, process issues, and execution issues. For each area, the article discusses ways to avoid a given roadblock.

Importance: The journey to a successful EA program starts at the planning stage. With a properly planned program, an organization will more likely achieve the success they are looking for from their EA implementation.

Enterprise Service Oriented Architecture (ESOA) Adoption Reference

Abstract: Summary form only given. In response to the current pursuit of achieving business agility and technology flexibility through SOA, this presentation provides insight and discussion regarding to what SOA is, what it really means to an enterprise, where it is right now, where it is leading to, how to practice it, the expected benefits, and how to calculate associated ROI. It includes discussion in SOA concepts, technologies, and best practices based on practice experience, survey from public sources, as well as initial ideas and contributions. SOA enables agile businesses through composable business processes and services that will be supported by flexible and composable IT services. The commonly accepted standards will ensure interoperability, shareability, and reusability. SOA can be applied to the full spectrum of enterprise business and IT, which include business service specification, IT strategic planning, enterprise architecture, solution development, and business operation. Also, SOA can be considered as a practical

modeling approach for enterprise architecture (EA) development. It can help to bridge EA with solution architecture and implementation by layered service descriptions across business modeling, application modeling, and technology implementation; so that it can help bring EA into reality. The ROI for SOA should consider the full spectrum of SOA benefits. A ROI reference matrix can be constructed based on the value proposition and IT strategic planning, which can provide guidance for iterative ROI assessment and performance measurement. The concept of SOA is not new, which can be traced back to the Common Object Request Broker Architecture (CORBA). The recent popular component-based and service-oriented architecture has extended its scope to business domain, which is reflected in Federal Enterprise Architecture (FEA). Web Services enable the SOA concept being applied in web environment. The content in this presentation includes SOA conceptual model, federated SOA service infrastructure, enterprise SOA layers, SOA service life cycle, etc. The recommended SOA adoption steps are discussed in three stages: SOA initiation, SOA workgroup formation, and SOA practice. SOA initiation includes SOA planning, and establish baseline for cross organizational SOA adoptions. The SOA workgroup usually will be an extension of existing EA team, and will serve as the core for SOA practice. The SOA practice includes the development and documentation of strategic plan, governance, and approaches; the extension of enterprise architecture; the coordination of cross organizational SOA implementation; service institutionalization; service extension for enterprise external services; etc. This presentation discusses SOA in widely covered topics and popular concerns. It consists of the combination of SOA current state studies and solution recommendations in moving forward, which can be served as a foundation reference in SOA adoption for an enterprise.

Importance: With SOA being a viable EA approach, this article discusses in detail the various principles of an SOA implementation. These basics are important to consider in planning and modeling a proper EA implementation for one's organization.

Enterprise Architecture Institutionalization and Assessment

Hyunkyung Song; Yeong-Tae Song; , "Enterprise Architecture Institutionalization and Assessment," Computer and Information Science (ICIS), 2010 IEEE/ACIS 9th International Conference

Abstract: The topic of enterprise architecture (EA) has been gaining significant attention from both academia and industry due to the inefficiency of current IT architectures to cope with rapid changes in business environment. In order to turn existing EA into efficient and agile one, it is necessary to institutionalize an EA based on well-established enterprise architecture frameworks (EAFs) into the enterprise. In this paper, we propose EA institutionalization processes and its metric based assessment for implemented EA based on the currently available EA frameworks. In the EA processes, we define institutionalization strategies specific to organizations' goals, target architecture based on their baseline architecture, and transition plan for institutionalization.

Importance: Discusses the important areas of consideration when implementing an EA program. An area of focus is the paper would be frameworks.

The Enterprise Architecture Governance Process

According to the Open Group, Enterprise Architecture is defined as "the practice and orientation by which enterprise architectures and other architectures are managed and controlled at an enterprise-wide level." By exploring basic concepts that are involved with EA governance as well as some common approaches, one can better understand the governance process.

Integrate EA and IT Governance Initiatives

Burton, Betsy, Bittler, R. Scott, Dreyfuss, Cassio. 4 April 2008. Integrate EA and IT Governance Initiatives. Gartner Research. Accessed on May 26, 2011.

Summary: This article discusses and defines both EA and the practice of Governance. Typically, governance is created without the influence of EA despite the fact that they work together within an organization. This article discusses how EA is different from Governance but also how they are related.

Importance: This article shows the relationship between two seemingly unrelated processes and the basic benefits.

[Enterprise Architecture: A Governance Framework Part I: Embedding Architecture into the Organization](#)

Aziz, Sohel, Obitz, Thomas, Modi, Reva, Sarkar, Santonu. 2007. Enterprise Architecture: A Governance Framework Part I: Embedding Architecture into the Organization. Infosys Technologies Limited. Accessed on May 26, 2011.

Summary: This first part of this report series starts by defining a working definition of EA. It discusses the various roles of EA-related positions as well as the various deliverables/communication structure used in an EA program. In doing so, the concept of governance is introduced and discussed in terms of an EA-specific implementation.

Importance: This first part was a necessary prerequisite for the following installment of the Governance Framework series.

[Enterprise Architecture: A Governance Framework Part II: Making Enterprise Architecture Work Within an Organization](#)

Aziz, Sohel, Obitz, Thomas, Modi, Reva, Sarkar, Santonu. 2007. Enterprise Architecture: A Governance Framework Part II: Making Enterprise Architecture Work within an Organization. Infosys Technologies Limited. Accessed on May 26, 2011.

Summary: The second part of this report series focuses on the governance framework. The primary area in which governance can influence is in the EA processes themselves. Each of these processes is shown to have subsections that correspond with areas of emphasis.

Importance: Governance is an imperative part of Enterprise Architecture and this series demonstrates an area of use, the potential benefits, and how to measure its success.

[Project Governance and Enterprise Architecture Go Hand in Hand](#)

Leganza, Gene. 19 December 2003. Project Governance and Enterprise Architecture Go Hand in Hand. Giga Research. Accessed on May 26, 2011.

Summary: This article discusses the concept of Governance on a project level while taking into account EA-based considerations. It discusses the goals of

project governance as well as the relationship between EA and project governance.

Importance: Illustrates the relationship between EA, governance, and IT projects. Defines and justifies the goals of Project Governance.

IT Portfolio Management: Implementing and Maintaining IT Strategic Alignment

Cameron, Brian H. 2006. IT Portfolio Management: Implementing and Maintaining IT Strategic Alignment. Idea Group Inc. Accessed on May 26, 2011.

Abstract: Information Technology Portfolio Management (ITPM) is a topic of intense interest in the strategic management of IT. In ITPM, IT synchronization with corporate business strategy is operationalized by the application of the principles of financial portfolio management to IT investments. This perspective is crucial to the continual alignment of business strategy and IT investments. Portfolio management is the discipline of managing projects together as a portfolio that meets stated corporate goals and objectives (Combe & Githens, 1999). It facilitates the optimization of resource allocation and development investment across multiple projects. This chapter investigates current techniques and issues for managing IT project portfolios and aligning those portfolios with the strategy of the business. The models and concepts presented are regarded as a starting point for dialogue and further research among IT project researchers and practitioners.

Importance: Illustrates the application of ITPM. In doing so this paper breaks the process down into stages and defines the required steps of each stages and why it is important.

Six Best Practices for Enterprise Architecture Governance

Bittler, R. Scott. 5 February 2009. Six Best Practices for Enterprise Architecture Governance. Gartner Research. Accessed on May 26, 2011.

Summary: Governance is seen as the deciding factor between creating a useful EA implementation and one that is considered "shelfware." Although governance has been important to EA, organizations still struggle in performing governance

effectively. According to research and surveys conducted, Gartner developed six best governance practices that should be followed by organizations.

Importance: Best practices serve as a way to provide companies a starting point to solving their current issues.

Enterprise Architecture and IT Governance: A Risk-Based Approach

Abstract: The USCP had enormous challenges with its IT Program and support to the internal and external stakeholders of the Department, because of a fragile IT infrastructure. The IT Program was not able to provide the basic assistance to the end-user, adequate reporting to middle and senior management, and lacked training of IT and end-user staff, to venture into the rapidly changing technologies in network management, operating systems, data security, risk management, and systems integration, as well as, the need for innovative data management. The need for these services were exacerbated by increased demands on the IT Services Group and budgetary pressures restricting the resources available to accomplish the mission until an IT Governance structure was adopted and the development and implementation of an Enterprise Architecture with corresponding Risk Management Planning was undertaken.

In order to overcome the inadequacies in the IT program, USCP established several ambitious goals for updating its Strategic Planning Process, developing and implementing an Enterprise Architecture and Risk Management Plan, setting up an IT Governance structure to provide the necessary standards and guidance, as well as the relevance, accessibility, and timeliness of its Information Technology support. The Office of Information Systems set out to transforming itself into a performance-based organization. The envisioned "to be" system architecture helped USCP focus scarce assets on prioritized application and infrastructure projects to directly support USCP mission requirements, both Operational and Administrative. Additionally an IT Security Program was

implemented to include compliance with FISMA [7]; established a Configuration and Change Management Board; instituted Earned Value Management techniques into project management activities, during the system acquisition process.

Importance: Serves as a case study example illustrating the need for a strong governance and risk management within an IT program.

Enterprise Architecture Governance: The Need for a Business-to-IT Approach

Schelp, Joachim, Winter, Robert. 2008.

Abstract: The importance of enterprise architecture is not only understood in corporate IS/IT departments. The numerous usage potentials for corporate planning as well as for compliance management, business continuity management, risk management etc. are successively discovered by the business side. In order to provide an aligned support instrument for IS/IT departments as well as business units and the corporate center, enterprise architecture management has to be anchored in IS/IT as well as in business. Clear and effective governance is required to assure consistency and timeliness of enterprise architecture process outputs. Based on a business-to-IT approach to enterprise architecture, governance practices in industry are analyzed, and initial findings are consolidated which contribute to design requirements for effective enterprise architecture governance.

Importance: This article discusses the other areas of an organization in which EA has influence. With this understanding, the article makes the case for effective governance practices and supports it with appropriate research.

Governance of Enterprise Transformation and the Different Faces of Enterprise Architecture Management

Abstract: Today, enterprises more than ever find themselves confronted with a constant need to transform themselves to better cope with current pressures and to prepare for future opportunities and challenges. Enterprise architecture management plays a crucial role in that context. It may not only aid in shaping the future enterprise, but it may also facilitate subsequent transformation governance. Based on the perception of enterprise architecture management as both a strategic and an operational exercise, this article distinguishes between four general modes of architectural transformation governance and presents the different faces of enterprise architecture management prevalent in these modes. In particular, this involves solution architecture, roadmapping, and business architecture activities.

Importance: Discusses the various approaches to governance and transformation as well as some of the relevant tools.

Enterprise Architecture Change Management

With Enterprise Architecture being a major transformation within organizations, it's important for EA to have well developed change management in order to facilitate smooth adoption and sustainability. Due to this, change management programs are at the core of many enterprise architecture implementations.

[How to Understand and Manage Organizational Change and Its Effect on People](#)

Dreyfuss, Cassio. 17 October 2005. How to Understand and Manage Organizational Change and Its Effect on People. Gartner Research. Accessed on May 26, 2011.

Summary: This article discusses the need for change management and its overall importance to an organization. It organizes change into three distinct categories: Impact of Change on People and Their Work, Building the Change Management Toolbox, and Choosing How to Apply the Tools.

Importance: Provides a changed management model that is clearly defined and is supported with articulated reasons.

[Rethinking Change: Practical Realities of Successful Transformation](#)

Morello, Diane, Olding, Elise. 6 February 2008. Rethinking Change: Practical Realities of Successful Transformation. Gartner Research. Accessed on May 26, 2011.

Summary: This article analyzes the concept of business transformation and how an organization can successfully accept change. With business transformation fundamentally altering how an organization does business, it therefore changes the company's market role and position. The article discusses how to prepare for change as well as how to actively involve employees in the transformation of the business. It also discusses several success criteria for business transformation.

Importance: Without proper changed management, business transformation would not benefit from long-term success.

[Successful EA Change Management Requires Five Key Elements](#)

Buchanan, Richard, Papegaaij, Bard. 9 November 2010. Successful EA Change Management Requires Five Key Elements. Gartner Research. Accessed on May 26, 2011.

Summary: This article discusses the various barriers to change and why it is important to overcome these issues. In doing this, the article discusses a possible framework that can be used to guide business transformation. If the given requirements of the framework are not met, an organization will suffer from one of the following fates: implementation errors, frustration, fear, or confusion.

Importance: Depicts how the necessary parts of a successful change management framework as well as the possible results if an organization fails to meet given criteria.

[Enablers and Challenges in Using Enterprise Architecture Concepts to Drive Transformation: Perspectives from Private Organizations and Federal Government Agencies](#)

Allario, F., Asfaw, T., Bada, A. (2009). Enablers and Challenges in Using Enterprise Architecture Concepts to Drive Transformation: Perspectives from Private Organizations and Federal Government Agencies. Journal of Enterprise Architecture, volume 5, number 3. pg. 18-28. Retrieved from: https://www.aogea.org/system/files/private/2009-3.pdf

Abstract: Federal agencies and private companies have many strategic initiatives they pursue in order to realize their visions. Due to the complexity of these initiatives, there is a growing need for research on how enterprise architects and leaders should go about leading modernization and transformational programs while executing strategic initiatives. Enterprise Architecture (EA) provides a foundation for high-performing organizations in driving transformation. However, little is said in the literature about how to do this. This article primarily examines the use of enterprise architecture concepts in transformational initiatives and captures the top key enablers and challenges identified by transformational teams in both the private and federal government sectors by conducting a combination of interviews, surveys, and review of documentation. Analysis of empirical data identified key enablers and challenges organizations face when using EA concepts in transformation. These are further classified under three categories: communications, process, and management support and structure. Based on the outcome, we provide a list of suggestions to consider before undertaking transformational initiatives using enterprise architecture. Finally, we conclude with a discussion of similarities and differences in enablers and challenges between federal government and private sectors which provide additional insight for transformational teams.

Importance: Discusses results of surveys concerning the enablers and hindrances of driving transformation in both private and federal sectors.

Enterprise Transformation to a Service Oriented Architecture: Successful Patterns

Abstract: This paper presents the initial findings from a series of case studies involving the enterprise transformation to Service Oriented Architecture. Ten large enterprises were studied to determine how they were able to convert their legacy IT architecture. Particular interest was paid to business models, governance, enterprise architecture, change management, risk management, and technology. These cases were used to form a predictive model of success factors in transformation.

Importance: Provides various views on the transformation process using the proposed model. Defines the various areas of importance for this model and provides their definitions as well as importance.

Building and Maintaining Enterprise Architecture

Defining a reason for Enterprise Architecture is a rather simple task. However, it is building and maintaining an Enterprise Architecture implementation that is difficult at times. For many implementations, the start is the most difficult part. Others approach an EA project in bits and pieces, which does nothing more than create a long list of things to do. By understanding basic concepts of building and maintaining Enterprise Architecture, an organization can avoid these pitfalls.

NASCIO Enterprise Architecture Maturity Model Version 1.3

NASCIO Enterprise Architecture Maturity Model Version 1.3. December 2003. National Association of State Chief Information Officers. Accessed on May 26, 2011.

Summary: This article is designed to advocate the NASCIO EA Maturity Model. After providing brief background information, each stage of the maturity model was defined in detail as well as their respective components.

Importance: Development of the Enterprise Architecture Framework is critical because it provides the rules and definition necessary for the integration of information and services at the design level across agency boundaries.

Chartering the Enterprise Architecture Program

Burke, Brian. 24 January 2006. Chartering the Enterprise Architecture Program. Gartner for IT Leaders. Accessed on May 26, 2011.

Summary: This article is dedicated to defining the need for a thorough EA charter. After defining the need for the charter, the various parts of the charter are then defined as well.

Importance: Shows the need of an EA charter and how it serves as a way to foster an agreement between high-level executives and the EA program.

Establishing and Maintaining Enterprise Architecture Momentum

Rollings, Mike. 8 August 2008. Establishing and Maintaining Enterprise Architecture Momentum. Enterprise Architecture Perspective. Burton Group. Accessed on May 26, 2011.

Synopsis: Various factors can impede an enterprise architect's progress, including limits on power and authority and fundamental flaws in approach. Strong executive leadership helps establish enterprise architecture momentum but it is not sufficient to cement the EA discipline into everyday use. The most effective way an enterprise architect can increase momentum and improve the enterprise from within is by knowing the business and IT strategy that the leadership wants to pursue, the organizational structure of the company, and the right people to talk to in the right way.

Importance: Demonstrates how an architect can progress an EA program. The article is similar to a best practices guide.

First 100 Days: The Agenda for First-Time Enterprise Architecture Development Efforts

Allega, Philip. 10 December 2008. First 100 Days: The Agenda for First-Time Enterprise Architecture Development Efforts. Gartner for IT Leaders. Accessed on May 26, 2011.

Summary: Currently, many organizations encounter the most problems in the early planning and artifact creation. In order to avoid these problems an agenda was developed by researchers at Gartner. This article defines the various milestones in their agenda and the subsections are related to the various tasks required for each milestone over the first one hundred days.

Importance: This agenda is able to guide early EA project teams in their initial work.

Second 100 Days for ETA: An Agenda for First-Time Enterprise Architecture Development Efforts

Allega, Philip. 12 December 2008. Second 100 Days: An Agenda for First-Time Enterprise Architecture Development Efforts. Gartner for IT Leaders. Accessed on May 26, 2011.

Summary: Currently, many organizations encounter the most problems in the early planning and artifact creation. In order avoid these problems an agenda was

developed by researchers at Gartner. This article defines the various milestones in their agenda and the subsections are related to the various tasks required for each milestone during the second one hundred days.

Importance: This agenda is a continuation of the first one hundred day EA agenda and continues the development of an early EA program.

How to Restart an Enterprise Architecture Program After Initial Failure

Zink, G. (2009). How to Restart an Enterprise Architecture Program After Initial Failure. Journal of Enterprise Architecture, volume 5, number 2. pg. 30-41. Retrieved from: https://www.aogea.org/system/files/private/2009-2.pdf

Abstract: This article discusses a number of common causes of Enterprise Architecture (EA) Program failures, which in total may be as high as 40% of all public and private sector efforts, due in general to poor execution and a failure to deliver value to the business. The author cites seven areas to address in restarting an EA Program after initial failure, which include: not understanding what EA is; unclear leadership; insufficient resources; the scope is too big; lack of perceived value; lack of use; and competition with other best practices. By mapping the positive and negative results of a failed initial EA Program to the seven common failure areas, an organization can develop an "Organization-Specific EA Implementation Strategy" (OSEAIS) to guide a restart. The OSEAIS provides a comprehensive vehicle for ensuring a common understanding, communication, training, committed leadership, resources, governance, and value delivery. When combined with a mature, proven EA framework and approach, the OSEAIS can provide a reliable method for ensuring the successful restart of an EA Program.

Importance: Provides a methodology to follow when redesigning an Enterprise Architecture Implementation. Illustrates common areas of importance in which EA implementations most commonly fail.

The Maturity of an Enterprise Architecture Is Key to Its Success

Burke, Brian, James, Greta A. The Maturity of an Enterprise Architecture Is Key to Its Success. Gartner Research. Accessed on May 26, 2011.

Summary: This article proposes the Architecture Program Maturity Assessment as a tool to monitor the maturity of an EA program. In doing so, the article also argues that there are eight main dimensions to EA maturity. It finally relates these dimensions back to the assessment model.

Importance: Illustrates how EA maturity has great influence over the effectiveness of an EA program.

Leadership, Decision Making, and Team Formation for Enterprise Architecture

Although Enterprise Architecture is based around transformation, there is still some debate over the role of EA professionals as leaders in the transformation of an organization. Also, it still has not been decided if these professionals should be involved in the business decision-making process. Due to these circumstances, it is important for EA professionals to understand leadership and the need for a proper team.

[Architecting for Participation: How Information-Sharing Environments Overcome Information Silos](#)

Gall, Nicholas, Newman, David. 15 December 2009. Architecting for Participation: How Information-Sharing Environments Overcome Information Silos. Gartner Research. Accessed on May 26, 2011.

Summary: Information-sharing environments increase the business value of information through the powerful network effect on the ability to share. This article is dedicated to the necessary steps and defining the frameworks in relation to a stable information-sharing environment. Areas of particular focus include the design of Enterprise Information and the managing of Enterprise Information. Other areas of discussion include the Enterprise Information Life Cycle as well as quality and information control within the proposed framework.

Importance: This article illustrates the importance of information sharing depending on the circumstances.

[Building the Enterprise Architecture Team](#)

Allega, Philip, Blanton, Cathleen E., 30 May 2008. Weiss, Deborah. Building the Enterprise Architecture Team. Gartner Research. Accessed on May 26, 2011.

Summary: Finding the most suitable members for an EA team can be quite problematic for organizations at times. Required skill sets are, at times, unclear. This article shows the basic skills and expected roles of a basic EA team as well as their relationship with the rest of an organization. Overarching skills and affinities are discussed as well for the EA team.

Importance: Illustrates the need for the right group of people to facilitate the development of a given EA program and its maturity.

[Determining the Right Size for Your Enterprise Architecture Team](#)

Burke, Brian, Short, Julie. 4 October 2010. Determining the Right Size for Your Enterprise Architecture Team. Gartner Research. Accessed on May 26, 2011.

Summary: Gartner uses this article to make suggestions on the size and composition of a given EA team. The article starts by listing a number of considerations that should be considered by an organization. The scope of a project and the dedication of each EA team member to the practice of Enterprise Architecture are some of the main areas of concern when choosing the core team.

Importance: The article brings to light the effect numbers have on the effectiveness of an EA team/program.

[Five Best Practices for Building the Enterprise Architecture Team](#)

Buchanan, Richard, Burton, Betsy. 29 January 2009. Five Best Practices for Building the Enterprise Architecture Team. Gartner Research. Accessed on May 26, 2011.

Summary: In order for an EA program to be effective, it is required that the right group of people be chosen to lead the organization towards its future state. In order to facilitate this selection, Gartner developed a series of five best practices to keep in mind while creating an EA team.

Importance: Illustrates the importance the EA team has on the developing and continued support of an EA program and its success.

[Future Research Topics in Enterprise Architecture Management—A Knowledge Management Perspective](#)

Abstract: Identifying, gathering, and maintaining information on the current, planned, and target states of the architecture of an enterprise is one major challenge of enterprise architecture (EA) management. A multitude of approaches towards EA management are proposed in literature greatly differing regarding the underlying perception of EA management and the description of the function for performing EA management. The aforementioned plurality of methods and models can be interpreted as an indicator for the low maturity of the research area or as an inevitable consequence of the diversity of the enterprises under consideration pointing to the enterprise-specificity of the topic. In this article, we use a knowledge management perspective to analyze selected EA management approaches from literature. Thereby, we elicit constituents, which should be considered in every EA management function from the knowledge management cycle proposed by Probst. Based on the analysis results, we propose future research topics for the area of EA management.

Importance: Discusses a number of areas that need to be addressed within various EA management approaches. Provides background concerning EA Management approaches and where the areas of interest originate from.

[Enterprise Architecture Management Patterns](#)

Abstract: This article introduces the concept of enterprise architecture management (EAM) patterns, a pattern-based approach for EA management.

Three different types of patterns are presented. M-Patterns document proven-practice methodologies to address typical problems in EA management. V-Patterns represent best-practice visualizations, whereas I-Patterns indicate information requirements for EA management. These patterns build up a pattern language for EA management, with an excerpt given in this article.

Importance: This new management approach takes into account the various needs of an organization and provides solutions through each of the patterns previously mentioned. The article goes into detail concerning each of these patterns and describes their respective uses, consequences, and solutions.

Enterprise Architecture Success Factors/Value and Risk Analysis for Enterprise Architecture

Success Factors are an integral part for proper EA management and improvement. If used properly, value measurements and metrics can greatly enhance the influence of an EA implementation. Today, it is of vital importance to understand the value EA brings to an organization. However, one of the common problems is how EA is perceived by business-oriented stakeholders. With an unclear image of EA benefits, it is rather difficult to justify the program as a whole. With the proper success metrics and measurements in place, this task becomes obtainable for EA architects.

[Performance Management Success Hinges on Four Basic Elements](#)

Burton, Betsy, Rayner, Nigel, Smith, Michael. 22 November 2006. Performance Management Success Hinges on Four Basic Elements. Gartner Research. Accessed on May 26, 2011.

Summary: After the basic functionality of performance management has been established, this article takes into account four key elements of a successful performance management instance. These four elements include business objectives, metrics, constituents, and communication. For each, their definition and impact with regards to performance management is explained.

Importance: Performance management has the ability to greatly impact an organization. Because of this, it is important to have a thorough understanding of what drives performance management itself.

[The Five Essential Metrics for Managing EA](#)

Scott, Jeff. 17 November 2009. The Five Essential Metrics for Managing EA. Forrester Research Inc. Accessed on May 26, 2011.

Executive Summary: Enterprise architects frequently ask what metrics they should use to demonstrate EA's progress and value to the organization. CIOs want to know what they are getting for their investment in EA, and EAs see metrics as an important tool for promoting their value. Yet establishing meaningful metrics remains challenging. Today, most EA teams report only on internal-activity-based metrics. The key to success is choosing a small number of metrics that provide a balanced view of EA's performance to EA stakeholders and the EA team. Every EA team should measure five metrics: strategy momentum, financial impact, customer satisfaction, skills and capability growth, and process improvement.

Importance: Utilizing proper metrics that resonate with business stakeholders is an important issue today. These metrics play a vital role in gaining continued support from an organization.

[Three Dimensions of Enterprise Architecture Process Metrics](#)

Weiss, Deborah. 5 May 2008. Three Dimensions of Enterprise Architecture Process Metrics. Gartner Research. Accessed on May 26, 2011.

Summary: Organizations find it difficult to develop metrics that directly meet the needs of a business value proposition. This article demonstrates a way to develop metrics whose purpose is to improve an EA program's performance through three key areas: process performance, increased organizational coverage, and EA content utility. Each process is defined and the basic goals of these metric categories are also defined in this article.

Importance: This article makes the argument that these three process areas will allow EA programs to continually drive improvement. Ultimately, this approach will help further align IT and business priorities.

[Marketing EA's Value: IT Must Understand the Value for EA Groups to be Successful](#)

Cullen, Alex. 3 January 2006. Marketing EA's Value: IT Must Understand the Value for EA Groups to be Successful. Forrester Research Inc. Accessed on May 26, 2011.

Executive Summary: Enterprise architecture (EA) groups believe their work is valuable — but they struggle with how to communicate this value to the rest of IT. Underlying this struggle is EA's focus on future options and improvements, while the rest of IT is focused on day-to-day concerns and quarter-to-quarter delivery. EA groups should employ techniques borrowed from marketing disciplines to refine their value proposition, sharpen their messages, and deliver these messages to the constituents they need as allies. This is not an academic exercise, as the EA group's influence and credibility depend on how these constituents perceive them.

Importance: Communication is one of the vital areas in which EA is expected to make an impact. Therefore, it is imperative for EA to be able to effectively convey its value to others that ultimately make the final ruling on the viability of an EA implementation.

[Build EA Artifacts That Matter](#)

Scott, Jeff. 15 January 2008. Build EA Artifacts That Matter. Forrester Research Inc. Accessed on May 26, 2011.

Executive Summary: Enterprise architects frequently ask Forrester which artifacts are most important to create and how they should be constructed. Though the answer to which artifacts are important varies by organization, there is a straightforward method for constructing artifacts that promotes enterprise architecture (EA) buy-in and drives architecturally aligned decisions. Effective communication begins with a foundation of well structured, highly targeted EA artifacts that connect with the readers' needs. Architects can ratchet up both their efficiency and effectiveness by designing artifacts that resonate with their constituents and prescribe specific action.

Importance: In order to prove EA value, it is necessary to obtain feedback from stakeholders outside of the EA program. With this in mind, it is important to build artifacts that effectively communicate EA value in terms that will resonate with the targeted audience and get them involved with the program itself.

[Issues in Enterprise Architecture Value](https://www.aogea.org/system/files/private/2010-4.pdf)

Abstract: What is the Enterprise Architectures value and how it can be assessed and demonstrated has been a topic subject to an interesting discussion among practitioners and researchers. Although this discussion has continued for several years, there is still no consensus about what the value of an Enterprise Architecture is and how it can be demonstrated. The lack of a clear understanding of the concept of value, the need to consider different views (of stakeholders) in assessing the value, the difficulty in identifying the key variables that contribute to the value and how and on what terms they should be measured and, finally, the organization's need to quickly prove the architecture's value are, in our opinion, the main issues contributing to the complexity and difficulty in assessing the Enterprise Architecture's value. In this article we discuss these main issues on value assessment and we make an introductory reference to an approach based on Enterprise Architecture value drivers that is being studied and which may be useful to mitigate these problems and, consequently, used in value assessment of Enterprise Architectures.

Importance: Illustrates the need for an EA value measurement program and some important value drivers along with issues being faced in obtaining measurements such as these.

[Why Enterprise Architecture Measurement Programs Fail: The Common Pitfalls](#)

Summary: Developing an effective EA value measurement program is rather difficult. With this understood, this article looks to debunk a number of the common mistakes organizations make when they are developing their measurement needs. Value measurement is vital to obtaining support from upper management but a balance must be maintained.

Importance: Effective EA implementations prove their value through the use of sound metrics and reporting systems. Through these methods, the impact should be easily visible to senior management.

Comparative Analysis of Popular Enterprise Architecture Frameworks and Methodologies

[Eight Hybrid Thinking Principles for Enterprise Architects](#)

Allega, Philip, Gall, Nicholas, Newman, David. 23 April 2010. Eight Hybrid Thinking Principles for Enterprise Architects. Gartner Research. Accessed on May 26, 2011.

Summary: In this article, Gartner defines their approach called "hybrid thinking." Hybrid thinking is a set of principles that helps organizations address problems that are highly complex and ambiguous, change constantly, and defy conventional problem-solving techniques. These eight principles are broken up into the following: Coordinate for the Outside In; Pursue a Portfolio of Strategies; Harmonize, Rather Than Optimize; Coordinate, Rather than Architect; Focus on Interactions, Not Interactors; Embrace a Different Approach to Standards; Encourage Continuous and Participatory Interaction; Focus on Business Outcomes, Not IT Outcomes.

Importance: This new approach allows organizations to address problems that were not previously solvable with past problem-solving conventions. The approach combines design thinking with other historical methods of thinking to develop these solutions.

[Ontology Driven Enterprise Architecture Framework](#)

Raghunathan, R. (2010). Ontology Driven Enterprise Architecture Framework. Journal of Enterprise Architecture, volume 6, number 2. pg. 24-29. Retrieved from: https://www.aogea.org/system/files/private/2010-2.pdf

Abstract: An ontology-driven enterprise architecture framework is presented that provides substantial benefits over conventional representations of traditional architecture domains such as business, data, application, and systems. These benefits range from the tractable synthesis of large and complex domains, improved architecture maintainability and evolution, and more effective analyses

of architecture improvement scenarios. An enhanced architecture meta-model is presented, followed by an ontology framework that emphasizes composition via sub-ontologies and normalization. Tools and techniques for ontology persistence, development, testing, reasoning, querying, and visualization that constitute the solution landscape are also discussed. Finally, a set of recommendations provides guidance on selecting the right mix of technologies and tools to compose and interpret enterprise solutions.

Importance: Provides another framework approach that effectively analyzes the effectiveness of an EA implementation while providing a model to follow.

Introducing Hybrid Thinking for Transformation, Innovation and Strategy

Summary: In this article, Gartner applies their "hybrid thinking" approach to transformation and change management within the context of Enterprise Architecture. Hybrid thinking is a discipline of disciplines that can be used to take on the "wicked problems" (or problems that are highly complex and ambiguous, change constantly, and defy conventional problem solving techniques). In this context, Gartner illustrates how hybrid thinking can address wicked problems but also how the approach itself can drive change within an organization as well.

Importance: With change and business transformation being a critical part of Enterprise Architecture, hybrid thinking is a relevant approach that can be utilized as well as a potential driver of change itself.

A Model for Characterizing the Influence of the Zachman Framework's Enterprise Architecture Perspectives

Abstract: Enterprise Architecture is a complex and daunting discipline that touches multiple aspects of an enterprise as well as people participating in various roles throughout the life cycle of the enterprise. The Zachman Framework

for Enterprise Architecture offers a formal and highly structured representation of an enterprise. The Framework's "Perspectives" correspond to specific stakeholder groups that play different roles in the implementation of an Enterprise Architecture. This article demonstrates that the influence that the Zachman Framework's Perspectives (rows) have on each other can be used to derive a rational allocation of stakeholders' skills and time that promotes specifications cohesion throughout the implementation of an Enterprise Architecture. We do so by prescribing upper bounds to stakeholders' relative degree of involvement based on the level of influence that they exert at any given point in time on Enterprise Architecture artifacts mapped to the Zachman Framework.

Importance: Discusses the related models of the Zachman Framework in detail while illustrating the relationships between stakeholders and the EA implementation. Through their analysis, the author provides preferred degrees of involvement for stakeholders.

Use TOGAF 9 as Your Next EA Framework
Peyret, Henry. 1 July 2009. Use TOGAF 9 As Your Next EA Framework. Forrester Research Inc. Accessed on May 26, 2011.

Executive Summary: An enterprise architecture (EA) framework describes the deliverables an EA function should produce as well as how to create these deliverables. A framework helps EA leaders organize their efforts as they work with their teams to fulfill the EA objectives and responsibilities. A recent Forrester survey reveals that TOGAF version 9, announced in 2009 by The Open Group, is generating a lot of interest in the EA community. TOGAF v9 describes an EA methodology, an EA content framework, reference models, an architecture capability framework, and a controversial Enterprise Continuum. Forrester recommends TOGAF, though we advise EA teams to plan to adapt TOGAF's various models, its Architecture Development Method (ADM), and its document templates to their organizational constraints and EA objectives.

Importance: Describes the thorough approach TOGAF 9 utilizes as an EA framework and how it can serve as a strong foundation for an organization's EA objectives.

Enterprise Architecture Book Sources

Achieving Service-Oriented Architecture: Applying an Enterprise Architecture Approach

Sweeny, Rick. (2010). Achieving Service-Oriented Architecture: Applying an Enterprise Architecture Approach. Wiley.

Review: This book reveals how you can set up your IT business organizations and practices to successfully implement and run your application development life cycle under an architecturally driven SOA paradigm. Author and SOA expert Rick Sweeney shows how you can transform your EA practice so that SOA is the predominant strategic approach for applications utilized in the company. Spelling out all the definitions and documentation needed to implement the approach, this how-to manual lets you see the entire architectural approach to SOA and what makes all the pieces of the approach fit and complement each other.

Importance: This book strategically combines the perspectives of enterprise architecture (EA) business organization with management practice, both critical to realizing SOA's full value.

Advances in Government Enterprise Architecture

Saha, Pallab. (2008). Advances in Government Enterprise Architecture. Information Science Reference.

Review: Over the past two decades, the government sector has emerged as the area of largest implementation of enterprise architecture - a critical success factor for all types, scales, and intensities of e-government programs. This book is a seminal publication in the emerging and evolving discipline of enterprise architecture (EA). Presenting current developments, issues, and trends in EA, this critical resource provides IT managers, government CIOs, researchers, educators, and professionals with insights into the impact of effective EA on IT governance, IT portfolio management, and IT outsourcing, creating a must-have holding for academic libraries and organizational information centers.

Importance: Serves as a reference for a wide variety of readers. Covers a broad spectrum of topics in terms of government implementations of EA.

Architecture Principles: The Cornerstones of Enterprise Architecture

Greefhorst, Danny, Proper, Erik. (2011). Architecture Principles: The Cornerstones of Enterprise Architecture. Springer.

Review: In this book, Greefhorst and Proper focus on the role of architecture principles. They provide both a theoretical and a practical perspective on architecture principles. The theoretical perspective involves a brief survey of the general concept of principle as well as an analysis of different flavors of principles. Architecture principles are regarded as a specific class of normative principles that direct the design of an enterprise, from the definition of its business to its supporting IT. The practical perspective on architecture principles is concerned with an approach to the formulation of architecture principles, as well as their actual use in organizations. To illustrate their use in practice, several real-life cases are discussed, an application of architecture principles in TOGAF is included, and a catalogue of example architecture principles is provided.

Importance: With this broad coverage, the authors target students and researchers specializing in enterprise architecture or business information systems, as well as practitioners who want to understand the foundations underlying their practical daily work.

The Art of Enterprise Architecture for Business Architects

Cooney, CJ. (2010). The Art of Enterprise Architecture for Business Architects. Real Engine.

Review: Enterprise Business Architecture is the business of alignment. In the real world, your enterprise's strategic goals are thwarted by a long list of things: economic turmoil, increasing complexity, rapid business and technological change, cut-throat competition, ever rising costs, strategy confusion, chronic project failures, and the vexing phenomenon known as the Business-IT gap. These forces throw your enterprise's strategic goals and strategic outcomes out of alignment. Unfortunately, there are no forces at work to naturally bring an enterprise back into alignment. This is why Enterprise Business Architecture is important, because: Enterprise Business Architecture is the only enterprise-scoped function dedicated to bringing all the parts of the enterprise into alignment with IT and enterprise strategy.

Importance: Put the tools and techniques of enterprise business architecture into the hands of business architects so that they can: understand their business; create strategic alignment in their organizations; take a leadership role in their

organizations, and help create organizations that generate value for clients, shareholders, stakeholders, and employees.

The Art of Enterprise Information Architecture: A Systems-Based Approach for Unlocking Business Insight

Godinez, Mario, Hechler, Eberhard, Koenig, Klaus, Lockwood, Steve, Oberhofer, Martin, Schroeck, Michael. (2010). The Art of Enterprise Information Architecture: A Systems-Based Approach for Unlocking Business Insight. IBM Press.

Review: Today, most companies fail to apply the information they already have, while struggling with the complexity and costs of their existing information environments. In this book, a team of IBM's leading information management experts guide you on a journey that will take you from where you are today toward becoming an "Intelligent Enterprise." Drawing on their extensive experience working with enterprise clients, the authors present a new, information-centric approach to architecture and powerful new models that will benefit any organization. Using these strategies and models, companies can systematically unlock the business value of information by delivering actionable, real-time information in context to enable better decision-making throughout the enterprise–from the "shop floor" to the "top floor."

Importance: This book deals with the planning and implementation of a successful EIA. Along with modeling techniques and implementation methods, the book also discusses integration and application of EIA using current technologies such as cloud computing and proper data management required for a Web 2.0 world.

Building an Enterprise Architecture Practice: Tools, Tips, Best Practices, Ready-to-Use Insights

Van den Berg, Martin, van Steenbergen, Marlies. (2010). Building an Enterprise Architecture Practice: Tools, Tips, Best Practices, Ready-to-Use Insights. Springer.

Review: This book provides practical advice on how to develop an enterprise architecture practice. The authors developed different tools and models to support organizations in implementing and professionalizing an enterprise architecture function. Coverage applies these tools and models to a number of

different organizations and, as a result, will help readers avoid potential pitfalls and achieve success with enterprise architecture.

Importance: This book clearly describes how to establish an architecture practice that delivers value for an organization. The authors demonstrate a wealth of experience and a deep understanding of the multifaceted nature of this challenging task and they provide sound advice on how to avoid the many pitfalls that may be encountered along the way. Recognizing that there is no "one-size-fits-all" approach, they show how to deploy a range of practical tools and approaches that will enable each organization to create its own road map to success.

Business Architecture: The Art and Practice of Business Transformation

McWhorter, Neal, Ulrich, William. (2010). Business Architecture: The Art and Practice of Business Transformation. Meghan Kiffer Pr.

Review: Organizations have grown so complex in recent years that it is difficult to visualize or understand how all of the parts fit together. At the same time, executives want to reshape and transform their organizations to be more competitive and more customer-centric. This requires that executives across business units view issues and solutions from a shared, enterprise-wide perspective. Business Architecture maps and documents the essence of the enterprise. The most important aspect of business architecture is enabling business executives, managers and professionals to take ownership and drive enterprise transformation, a role that has oftentimes been delegated by default to IT. Historically, the term "enterprise architecture" has a tendency to turn off business professionals because they immediately assume that the concept is an IT-focused creation. This is not an indictment of IT but rather a call to action for business executives to take ownership of business architecture and related business transformation strategies. The decisions that are made today can make or break organizations going forward into a complex, uncertain future.

Importance: The book discusses the various aspects of business architecture and how it is important to an organization. Important subject matters such as implementation, IT alignment, and various tools used in business architecture are all discussed.

Business Process Change, Second Edition: A Guide for Business Managers and BPM and Six Sigma Professionals

Harmon, Paul. (2007). Business Process Change, Second Edition: A Guide for Business Managers and BPM and Six Sigma Professionals. Morgan Kaufmann.

Review: Every company wants to improve the way it does business, to produce goods and services more efficiently, and to increase profits. Nonprofit organizations are also concerned with efficiency, productivity, and with achieving the goals they set for themselves. Every manager understands that achieving these goals is part of his or her job. In this balanced treatment of the field of business process change, the author offers concepts, methods, and cases for all aspects and phases of successful business process improvement.

Importance: This book provides a comprehensive view of business process management for all levels of an enterprise. From a business process standpoint the book effectively illustrates the importance of effective management for all employees.

Concepts in Enterprise Resource Planning

Monk, Ellen, Wagner, Bret. (2006). Concepts in Enterprise Resource Planning. Boston: Course Technology.

Review: In today's cutting-edge business world, enterprise resource planning (ERP) software plays a critical role. By bringing a company's many different functions together into one large integrated system, it creates an abundance of opportunities for growth and increased productivity. However, mastery of ERP is central to success and Concepts in Enterprise Resource Planning, Third Edition, provides the perfect tool for making sense of this vastly important technology. The book examines enterprise software in general and shows readers how ERP software can improve the functions of a company, how it can streamline operations, and how the functional areas of any package relate to each other.

Importance: Although this book discusses enterprise resource planning from an ERP perspective, the fundamentals outlined in the book can be translated to Enterprise Architecture as well.

Design of Enterprise Systems: Theory, Architecture, and Methods

Giachetti, Ronald E. Design of Enterprise Systems: Theory, Architecture, and Methods. CRC Press.

Review: Because enterprise systems are exceedingly complex, encompassing many independent domains of study, students must first be taught how to think about enterprise systems. Specifically written for advanced and intermediate courses and modules, this book takes a system-theoretical perspective of the enterprise. It describes a systematic approach, called the enterprise design method, to design the enterprise. The design method demonstrates the principles, models, methods, and tools needed to design enterprise systems. The author uses the enterprise system design methodology to organize the chapters to mimic the completion of an actual project. Thus, the book details the enterprise engineering process from initial conceptualization of an enterprise to its final design.

Importance: The book fills a need for greater design content in engineering curricula by describing how to design enterprise systems. Inclusion of design is also critical for business students, since they must realize the import their decisions may have on the long-term design of the enterprises they work with.

The Economic Benefits of Enterprise Architecture

Schekkerman, Jaap. (2005). The Benefits of Enterprise Architecture. Trafford Publishing.

Review: The main purpose of this book is achieving awareness at the management level as well as at the enterprise architect level about adopting an economic approach when dealing with Enterprise Architecture programs. This book explains the areas of economic benefits of Enterprise Architecture programs, the different views as well as a holistic approach to show the areas of economic benefits. Economic methods, models, and approaches are described in short to show how to quantify and manage the economic benefits of Enterprise Architecture programs as well as how Enterprise Architecture supports Enterprise Portfolio Management.

Importance: The benefits of an EA program are, at times, hard to realize. This book discusses the benefits an EA program can bring to an organization and how to effectively display them.

Enterprise Architecture A to Z: Frameworks, Business Process Modeling, SOA, and Infrastructure Technology

Minoli, Daniel. (2008). Enterprise Architecture A to Z: Frameworks, Business Process Modeling, SOA, and Infrastructure Technology. Auerbach Publications.

Review: To establish a framework for discussion, this book begins by evaluating the role of Enterprise Architecture Planning and Service-Oriented Architecture (SOA) modeling. It provides an extensive review of the most widely deployed architecture framework models. In particular, the book discusses The Open Group Architecture Framework (TOGAF) and the Zachman Architectural Framework (ZAF) in detail, as well as formal architecture standards and all four layers of these models: the business architecture, the information architecture, the solution architecture, and the technology architecture. The first part of the text focuses on the upper layers of the architecture framework, while the second part focuses on the technology architecture. In this second section, the author presents an assessment of storage technologies and networking and addresses regulatory and security issues. Additional coverage includes high-speed communication mechanisms such as Ethernet, WAN, and Internet communication technologies, broadband communications, and chargeback models.

Importance: Driven by the need and desire to reduce costs, organizations are faced with a set of decisions that require analytical scrutiny. This book examines cost-saving trends in architecture planning, administration, and management.

Enterprise Architecture: Creating Value by Informed Governance

Cloo, Jeroen, Land, Martin Op't Land, Proper, Eric, Waage, Maarten. (2008). Enterprise Architecture: Creating Value by Informed Governance. Springer.

Review: With this book, the authors aim to provide an overview of enterprise architecture including the process of creating, applying and maintaining it, thus taking into account the perspectives of CxOs, business managers, enterprise architects, solution architects, designers, and engineers. They explore the results

that are produced as part of an enterprise architecture, the process by which these are produced, and the role the architect plays in this process. As such, they do not describe a specific method for developing an enterprise (IT) architecture, nor do they define a specific modeling language for enterprise architecture; rather, they offer the reader a fundamental way of thinking about enterprise architecture, which will enable him or her to select and apply the right approach, architecture framework, and tools that meet the objective and context of the architecture work at hand. This approach is emphasized by discussion statements at the end of each chapter, sparking thoughts about benefits, shortcomings, and future research directions.

Importance: This book discusses the various stages and aspects of an EA implementation. The book focuses more on basic principles on which readers can develop their own EA program specific to their organization.

An Enterprise Architecture Development Framework

Grigoriu, Adrian. (2006). An Enterprise Architecture Development Framework. Trafford Publishing.

Review: The book attempts to answer a few of the common questions related to Enterprise Architecture (EA) and SOA. What are the issues? What is EA? Why should an organization consider EA? How to build the Enterprise Architecture and document it? What are the roadblocks, politics, governance, and the process and design method? How to measure the value delivered by EA and its maturity and how to select an Enterprise Architect? An innovative EA Framework, the associated metamodel and generic Enterprise Reference Maps (templates) for the business process, applications, and infrastructure layers are proposed. The framework looks like a content page showing the chapters of a book or, in this case, the components of the Enterprise Architecture without actually describing them but showing how they fit into the whole. The book then identifies and summarizes Best Practices in the Enterprise Architecture and SOA development, EA patterns, the integration to the mundane solution architecture, and delivery checklists.

Importance: The book takes an in-depth look at the questions it looks to answer. It breaks each question into basic, understandable pieces for the reader to comprehend. These questions are also important issues for organizations today.

Enterprise Architecture Good Practices Guide

Schekkerman, Jaap. (2008). Enterprise Architecture Good Practices Guide. Victoria. Trafford.

Review: The purpose of this guide is to provide guidance to organizations 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.

Importance: The book explores the essential parts of an EA implementation and discusses the reasoning behind each best practice.

Enterprise Architecture and Integration: Methods, Implementation, and Technologies

Lam, Wing. (2007). Enterprise Architecture and Integration: Methods, Implementation, and Technologies. IGI Global.

Review: Enterprise integration is a broad activity that involves solving a range of issues relating to business process definition, common data standards, architectural compatibility, technical interoperability, and organizational alignment. This text provides a detailed analysis of the important strategies for integrating IT systems into fields such as e-business and customer-relationship management. This Premier Reference Source supplies readers with a comprehensive survey of existing enterprise architecture and integration approaches, and presents case studies that illustrate best practices. It takes a holistic view of enterprise integration, describing innovative methods, tools, and architectures with which organizations can systematically achieve enterprise integration.

Importance: The book divides EA into four separate sections in which a number of contributors take stances on the related topics. The book concludes with a

series of case studies that illustrate the various points made within the previous chapters.

Enterprise Architecture Planning: Developing a Blueprint for Data, Applications, and Technology

Spewak, Steven H. (1993). Enterprise Architecture Planning: Developing a Blueprint for Data, Applications, and Technology. Wiley.

Review: More advanced than traditional system planning approaches, Enterprise Architecture Planning (EAP) outlines a stable business model independent of organizational boundaries, systems, and procedures; defines data before applications; and allows data to determine the sequence for implementing application systems. This book offers a common-sense approach to EAP and includes numerous examples of architectures, procedures, checklists, and useful guidelines.

Importance: This book discusses the importance and capabilities of proper Enterprise Architecture Planning. The book takes a step-by-step approach to implementing a proper EAP and discusses the necessary tools as well as the benefits.

Enterprise Architecture As Strategy: Creating a Foundation for Business Execution

Robertson, David, Ross, Jeanne W., Weill, Peter. (2006). Enterprise Architecture As Strategy: Creating a Foundation for Business Execution. Harvard Business Press.

Review: Enterprise architecture defines a firm's needs for standardized tasks, job roles, systems, infrastructure, and data in core business processes. Thus, it helps a company to articulate how it will compete in a digital economy and it guides managers' daily decisions to realize their vision of success. This book clearly explains enterprise architecture's vital role in enabling or constraining the execution of business strategy. The book provides clear frameworks, thoughtful case examples, and a proven-effective structured process for designing and implementing effective enterprise architectures.

Importance: The book goes into detail concerning the many aspects of Enterprise Architecture. In taking a step-by-step approach, it guides the reader through the various phases of an EA implementation.

Enterprise Architecture at Work

Lankhorst, Marc. (2009). Enterprise Architecture at Work. Springer.

Review: This book presents an enterprise modeling language that captures the complexity of architectural domains and their relations and allows the construction of integrated enterprise architecture models. It provides architects with concrete instruments that improve their architectural practice. Additionally, the book presents techniques and heuristics for communicating with all relevant stakeholders about these architectures.

Importance: One of the main aspects of EA today is effective communication. This book discusses important techniques for communication that an EA implementation relies upon.

Enterprise Security Architecture: A Business-Driven Approach

Clark, Andrew, Lynas, David, Sherwood, John. (2005). Enterprise Security Architecture: A Business-Driven Approach. CMP.

Review: Security is too important to be left in the hands of just one department or employee; it's a concern of an entire enterprise. Enterprise Security Architecture shows that having a comprehensive plan requires more than the purchase of security software; it requires a framework for developing and maintaining a system that is proactive.

Importance: The book goes into detail concerning proper security measures throughout each level of an organization. The book dissects the various levels of both an organization as well as security in order to develop a more comprehensive understanding.

Enterprise Ontology: Theory and Methodology

Dietz, Jan L.G. (2006). Enterprise Ontology: Theory and Methodology. Springer.

Review: The enterprise ontology, as developed by Dietz, is the starting point for profoundly understanding the organization of an enterprise and subsequently for analyzing, (re)designing, and (re)engineering it. The approach covers numerous issues in an integrated way: business processes, in- and outsourcing, information systems, management control, staffing, among other topics as well.

Importance: Researchers and students in enterprise engineering or related fields will discover in this book a revolutionary new way of thinking about business and organization. In addition, it provides managers, business analysts, and enterprise information system designers for the first time with a solid and integrated insight into their daily work.

Guide to Enterprise IT Architecture

Beveridge, Tony, Perks, Col. (2003). Guide to Enterprise IT Architecture. Springer.

Review: An up-to-date and comprehensive overview of information and database systems design and implementation. The book provides an accessible presentation and explanation of technical architecture for systems complying with TOGAF standards, the accepted international framework. Covering nearly the full spectrum of architectural concern, the authors also illustrate and concretize the notion of traceability from business goals, strategy through to technical architecture, providing the reader with a holistic and commanding view. The work has two mutually supportive foci. The first is information technology technical architecture, the in-depth, illustrative and contemporary treatment of which comprises the core and majority of the book; and secondly, a strategic and business context.

Importance: Although the book is focused around technical architecture, it takes into account the needs of a typical organization and addresses business and strategic alignment within the context of IT architecture.

Handbook on Enterprise Architecture

Bernus, Peter, Nemes, Laszlo, Schmidt, Gunter L. (2003). Handbook on Enterprise Architecture. Springer. 2003.

Review: This handbook is about methods, tools, and examples of how to architect an enterprise through considering all life cycle aspects of Enterprise Entities. It is based on ISO15704:2000, or the GERAM Framework. A wide audience is addressed, as the handbook covers methods and tools necessary to design or redesign enterprises, as well as those necessary to structure the implementation into manageable projects.

Importance: Although this book takes a specific framework into consideration, the basic tools and methods described are of value to a reader even if the GERAM framework is not the framework of choice.

Handbook of Enterprise Systems Architecture in Practice

Saha, Pallab. (2007). Handbook of Enterprise Systems Architecture in Practice. IGI Global.

Review: Enterprise architecture (EA) is the organizing logic for a firm's core business processes and IT capabilities captured in a set of policies and technical choices. The *Handbook of Enterprise Systems Architecture in Practice* provides a comprehensive and unified reference overview of the practical aspects of enterprise architecture. This Premier Reference Source includes a complete analysis of EA theory, concepts, strategies, implementation challenges, and case studies. The impact of effective enterprise architecture on IT governance, IT portfolio management, IT risks, and IT outsourcing are described in this authoritative reference tool.

Importance: Researchers and IT professionals will gain insights into how firms can maximize the business value of IT and increase competitiveness.

How to Survive in the Jungle of Enterprise Architecture Frameworks

Schekkerman, Jaap. (2006). How to Survive in the Jungle of Enterprise Architecture Frameworks. Trafford Publishing.

Review: This book explains the role of Enterprise Architecture Frameworks and shows the differences between the most popular Enterprise Architecture Frameworks available in the world today. Additional chapters address the most popular Enterprise Architecture tools on the market and their support of existing frameworks.

Importance: With a number of frameworks being promoted today, it is important for organizations to understand each framework thoroughly before making a decision. Understanding what makes these frameworks unique from one another is a key aspect that should be taken into consideration and it is the purpose of this book.

Introduction to Business Architecture

Reynolds, Chris. (2009). Introduction to Business Architecture. Course Technology PTR.

Review: Business Architecture is a disciplined approach to creating and maintaining business models that enhance enterprise accountabilities and improve decision-making. Business Architecture's value proposition, unlike other disciplines, is to increase organizational effectiveness by mapping and modeling the business to the organization's business vision and strategic goals. The book is an introduction to this burgeoning new field. It explains what Business Architecture is, what a good, sustainable one should include, and explains how to implement a business architecture practically within the reader's environment. Extensive examples and case studies are included to clarify points and demonstrate clearly to the reader how they too can begin to build business architecture within their organization.

Importance: Business Architecture is an essential part in Enterprise Architecture. Due to this, it is necessary for one to fully understand the business aspects of an organization in order to effectively achieve a level of strategic alignment.

An Introduction to Enterprise Architecture: Second Edition

Bernard, Scott. (2005). An Introduction to Enterprise Architecture: Second Edition. AuthorHouse.

Review: This book introduces the emerging profession of Enterprise Architecture from scratch. Dr. Bernard provides an easy to read, and understand, book that does not require an in-depth background in IT or management. The book begins with two case studies that provide background on the importance of EA as well as how you determine whether or not an EA is right for your organization. The remaining chapters discuss the development, use, and future of EA.

Importance: This book provides a cursory look at the vast topic of Enterprise Architecture; however, it allows readers with little to no background in EA to build a simple foundation on which to expand.

[IT Governance: How Top Performers Manage IT Decision Rights for Superior Results](#)

Ross, Jeanne, Weill, Peter. (2004). IT Governance: How Top Performers Manage IT Decision Rights for Superior Results. Harvard Business Press.

Review: Firms with superior IT governance have more than 25% higher profits than firms with poor governance given the same strategic objectives. These top performers have custom designed IT governance for their strategies. Just as corporate governance aims to ensure quality decisions about all corporate assets, IT governance links IT decisions with company objectives and monitors performance and accountability. Based on a study of 250 enterprises worldwide, IT Governance shows how to design and implement a system of decision rights that will transform IT from an expense to a profitable investment.

Importance: This book discusses the importance of effectively utilizing IT through the process of effective governance. Governance strategies, implementation methods, and related frameworks are all discussed.

[IT Portfolio Management Step by Step](#)

Handler, Robert, Maizlish, Bryan. (2005). IT Portfolio Management Step by Step. Wiley.

Review: As most industries evolve, they become increasingly commoditized and the IT industry is no exception. Aggressively investing in IT is the right answer in order to achieve competitive differentiation in the marketplace. Successful businesses have long realized that developing unique, innovative business and delivery models, as well as fostering a network of global partnerships, is the optimal way to deliver the results that global customers are looking for. IT Portfolio Management provides an all-inclusive approach and methodology on how to balance and align IT and business, and generate superior value and returns from IT investments while mitigating risk.

Importance: Portfolio management is a key technique in business today. As an alignment tool as well as an EA technique, it is important to understand how portfolio management works and the effects it can have on an organization.

Organization Modeling: Innovative Architectures for the 21st Century

Bhate, Anilkumar, Morabito, Joseph, Sack, Ira. (1999). Organization Modeling: Innovative Architectures for the 21st Century. Prentice Hall.

Review: This book discusses the discipline of object-oriented organization modeling focusing primarily on IT modeling as well as organizational and management frameworks. The book covers tools and approaches for modeling and transforming an organization's environment, goals, processes, information, and knowledge resources, structure, technology, and culture.

Importance: Modeling and frameworks are at the core of establishing an effective EA implementation. This book goes into detail concerning the theories around these areas.

The Power of Alignment

Labovitz, George, Rosansky, Victor. (1997). The Power of Alignment. Wiley.

Review: The Power of Alignment discusses the unique alignment approach developed by its authors. In doing so, the five key elements of focus are people, process, customers, business strategies, and leadership. This book takes into account a number of different industry leaders' perspectives as well. In the end, this book shows organizational leaders how to stay balanced while achieving new levels of performance/efficiency.

Importance: Alignment is at the center of Enterprise Architecture. In understanding different approaches to achieving alignment, an organization can determine its best fit strategy.

Requirements Analysis: From Business Views to Architecture

Hay, David C. (2011). Requirements Analysis: From Business Views to Architecture. Prentice Hall.

Review: Thousands of software projects are doomed from the start because they're based on a faulty understanding of the business problem that must be

solved. The solution is effective requirements analysis. In this book, David C. Hay gives you a comprehensive overview of the world's best requirements analysis practices, organized coherently to help you choose and execute the best approach for every project. In addition, he guides you through the process of defining an architecture–from gaining a full understanding of what business people need to the creation of a complete enterprise architecture.

Importance: Hay presents a comprehensive overview of the world's best requirements analysis practices, organized into a coherent architectural framework that helps analysts choose the best approach for each project, and execute it successfully. Hay helps current and prospective analysts focus more clearly on their goals: to accurately represent the business's fundamental structures, identify key information processing gaps, and discover which information technologies may best address them. He addresses requirements analysis from two viewpoints: the system development lifecycle and the architecture framework.

[Service-Oriented Architecture Governance for the Services Driven Enterprise](#)

Marks, Eric A. (2008). Service-Oriented Architecture Governance for the Services Driven Enterprise. Wiley.

Review: If you are leading the charge to adopt service-oriented architecture (SOA) within your enterprise, you know that successful implementation of SOA is challenging to the point that many organizations just avoid confronting the SOA governance issue altogether. Capturing a wealth of practical experience and lessons learned in what has become the hottest topic in business, Service-Oriented Architecture Governance for the Services Driven Enterprise insightfully presents a proven model of Enterprise SOA Governance, augmented by a governance modeling design framework and a body of governance modeling tools and techniques to meet all of your enterprise SOA governance requirements. Presenting a governance model assessment and design framework based on years of accumulated experience from the trenches of enterprise SOA governance, this book uniquely distills the complex dynamics of SOA and governance to equip you

in implementing SOA governance that reflects your organization's strategic and business focus.

Importance: This book covers the business, organizational, process, compliance, security, and technology facets of SOA and IT governance. This book provides a comprehensive enterprise view of governance from a strategic and tactical perspective, as well as modeling and planning tools to help evolve a company's ongoing governance requirements. Written by Eric Marks and the industry's leading SOA authorities, this essential book provides a refreshing business-driven perspective to SOA and IT governance.

The SIM Guide to Enterprise Architecture

Kappelman, Leon A. (2009). The SIM Guide to Enterprise Architecture. CRC Press.

Review: A project of the Society for Information Management's Enterprise Architecture Working Group and edited by Leon A. Kappelman, The SIM Guide to Enterprise Architecture provides insights from leading authorities on EA, including John Zachman, Larry DeBoever, George Paras, Jeanne Ross, and Randy Hite. The book supplies a solid understanding of key concepts for effectively leveraging EA to redesign business processes, integrate services, and become an Information Age enterprise. Beginning with a look at current theory and frameworks, the book discusses the practical application of enterprise architecture and includes a wealth of best practices, resources, and references. It contains the SIM survey of IT organizations' EA activities, which provides important metrics for evaluating progress and success.

Importance: EA lets CIOs integrate technology with business vision and is the roadmap for implementing new systems, changing behavior, and driving value. This book explores the vision, foundation, and enabling technology required to successfully transform organizations with enterprise architecture.