objectives

properties

components

functions

services

SELECTING AN
ENTERPRISE ARCHITECTURE
METHODOLOGY

ENTERPRISE ARCHITECTURE
EACOE
CENTER OF
EXCELLENCE

**ENTERPRISE ARCHITECTURE CENTER OF EXCELLENCE**

A Ratings and
Evaluation Handbook

ENTERPRISE ARCHITECTURE

EACOE

CENTER OF
EXCELLENCE

# SELECTING AN ENTERPRISE ARCHITECTURE METHODOLOGY

This handbook provides an evaluation framework for selecting an Enterprise Architecture methodology. It presents key questions along with rating scales to help you identify strengths and weaknesses in methodologies you may be reviewing for your organization.

The handbook begins with a perspective setting discussion on methodologies. It then introduces five categories you should consider when selecting a methodology. Each category contains specific criteria stated in question form. Each question is followed by a brief discussion that helps you rate the methodology. The handbook concludes with charts you can use for making quantitative evaluations and for comparing methodologies.

## How This Handbook Can Help Your Organization

Every organization needs an effective Enterprise Architecture methodology, but selecting the best methodology remains a challenge. An Enterprise Architecture methodology is not easily exchanged if it does not meet expectations. Implementing a methodology represents a long-term commitment that requires investment in education, and a certain change in culture.

Enterprise Architecture methodology selection is a serious step that should be taken based on quantitative evaluation rather than the influence of clever sales tactics or non-vetted reviews. This handbook is designed to help you rate an Enterprise Architecture methodology based on a specific set of criteria. Evaluating and comparing methodologies in this way can help your organization make a quality selection.
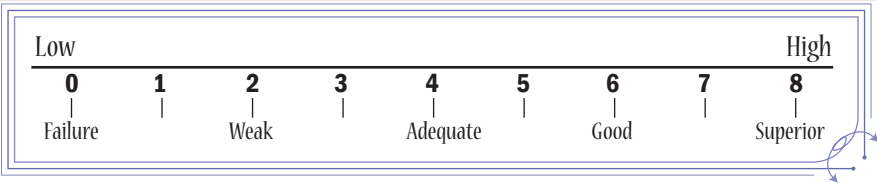
## Effective Enterprise Architecture Development

Enterprise Architecture plays a critical role in today's business environment, directly affecting a corporation's ability to compete. As a result, organizations responsible for the development and evolution of complex strategies and systems experience pressure to improve both the quality and productivity of their work. However, effective and efficient systems development / evolution remains an elusive goal.

Today, organizations often rely on technologies to produce higher quality systems in less time. While some of these technologies deliver necessary automation for systems organizations, they are just that—technologies and tools. Tools record, validate, and report on business and development decisions that have been made. But you cannot expect a tool to tell you which systems to build, what the systems must do, how they should be designed, etc. Effective systems development requires a process that guides system decisions such as these. This process must evolve with the changing needs of the systems community and reflect improvements in methods, techniques, standards, and available technology. Such a process is the modern Enterprise Architecture methodology.

## How To Use This Handbook

This handbook is designed to help you evaluate an Enterprise Architecture methodology on a quantitative basis. Twenty six distinct criteria are divided into five categories—objectives, properties, components, functions, and services. Each criterion is presented in the form of a question, followed by a discussion to guide you in evaluating the methodology under review. An eight point rating scale—like the one shown here—is provided for each question.

| Low | | | | | | | | High |
|---|---|---|---|---|---|---|---|---|
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| Failure | | Weak | | Adequate | | Good | | Superior |

To better interpret the "low" and "high" points, guide words specific to each question appear on each rating scale. All questions may be weighted according to the specific needs of your organization. After you finish rating all twenty six criteria, your scores can be transferred to the charts on pages 22-23. These charts allow you to add up the Enterprise Architecture methodology scores and to make overall evaluations and comparisons.

## Let's Begin...

Selecting an Enterprise Architecture Methodology

## OBJECTIVES

*Objectives reveal the intent of the methodology—what it claims to accomplish and what the practitioner may expect of future releases. An effective Enterprise Architecture methodology should meet the <u>four</u> <u>objectives</u> presented in the section.*
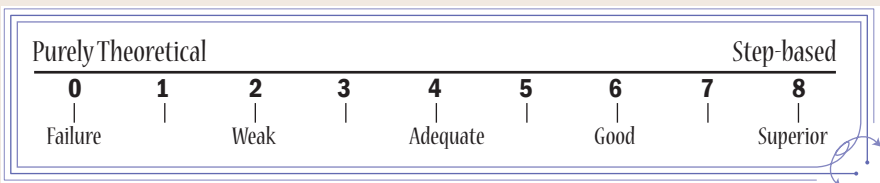
### GUIDE THE ENTERPRISE ARCHITECTURE DEVELOPMENT PROCESS

1. Does the methodology identify the steps necessary to produce each deliverable of Enterprise Architecture development/evolution? The methodology practitioner should be able to easily determine and execute the steps necessary to produce a selected deliverable.

   Low rating methodologies may contain the necessary details within a narrative, but fail to present the details in a step-by-step manner. High rating methodologies guide the Enterprise Architecture development process with explicit steps that define:

   - What must be done?
   - Why is the step done?
   - What is produced?
   - When should it be done?
   - How long will it take?
   - How should it be done?
   - Who will do it?
   - Which tools are to be used?

RATING SCALE **1**
## Guide Process

| Purely Theoretical | | | | | | | | Step-based |
|---|---|---|---|---|---|---|---|---|
| **0** | **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** |
| Failure | | Weak | | Adequate | | Good | | Superior |

Selecting an Enterprise Architecture Methodology

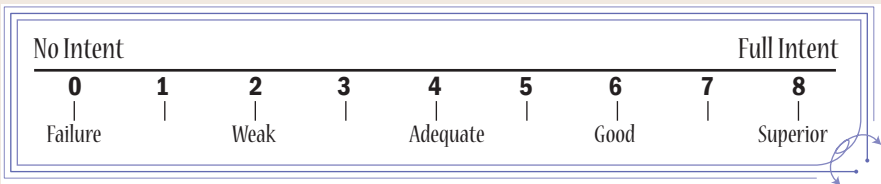## SERVE AS A CENTRAL ENTERPRISE KNOWLEDGE ENCYCLOPEDIA

2. Does the Enterprise Architecture methodology house and deliver the details necessary for developing/evolving the business and systems?

The methodology should intend to be the single place where practitioners house policies, standards, methods, techniques, etc.  A methodology that does not allow an organization to tie its naming conventions to deliverables, for example, will discourage its use.

Low rating methodologies force users to cross-reference and consult related documents to assemble the complete picture. High rating methodologies link this information electronically for easy access.

---

RATING SCALE 2
## Centralize Knowledge

| No Intent | | | | | | | | Full Intent |
|---|---|---|---|---|---|---|---|---|
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| Failure | | Weak | | Adequate | | Good | | Superior |

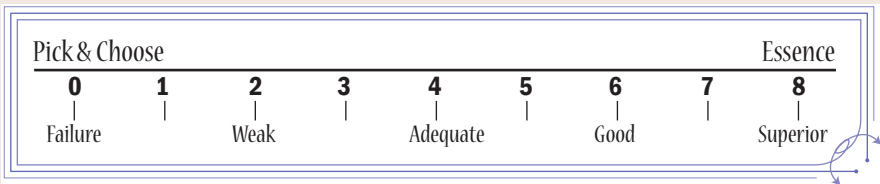## SIMPLIFY THE ENTERPRISE ARCHITECTURE DEVELOPMENT PROCESS

3. Does the methodology simplify the Enterprise Architecture development and evolution process?

Some methodologies are developed with the notion that bigger is better, offering a vast quantity of detail but often containing unnecessary or weak content. In contrast, when the focus is on quality, detail is provided only to accomplish demonstrated utility.

Low rating Enterprise Architecture methodologies contain overwhelming content. In many cases, the content is redundant (repeated information) or is based on a bulky design—a design that contains an excessive ratio of audit and / or review steps for each productive step. High rating methodologies employ an economy of expression by getting to the point, setting out essential steps, and progressively exposing detail.

---

RATING SCALE *3*
### Simplify the Process

| Pick & Choose | | | | | | | | Essence |
|---|---|---|---|---|---|---|---|---|
| **0** | **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** |
| Failure | | Weak | | Adequate | | Good | | Superior |

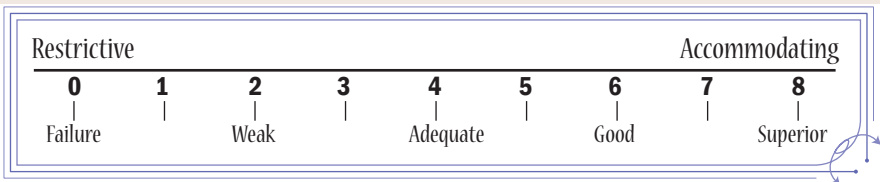## STANDARDIZE THE ENTERPRISE ARCHITECTURE DEVELOPMENT PROCESS

4. Does the methodology encourage and provide the means to implement a standard approach to Enterprise Architecture development?

An Enterprise Architecture development methodology should drive standardization. It should establish and encourage a consistent vocabulary. It should provide the means to create a standard project approach for accomplishing each of a variety of Enterprise Architecture projects, such as Enterprise Wide, Business Specific, System Specific, Segment Specific, etc.

Low rating Enterprise Architecture methodologies force the practitioner organization to conform to its standards. High rating methodologies supply a standards baseline (starting point) along with mechanisms to adapt the methodology to reflect the standards and practices of the using organization.

---

**RATING SCALE 4**
## Standardize the Process

| Restrictive | | | | | | | | Accommodating |
|---|---|---|---|---|---|---|---|---|
| **0** | **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** |
| Failure | | Weak | | Adequate | | Good | | Superior |

---

# PROPERTIES

*Properties reveal the inherent qualities of an Enterprise Architecture methodology and are useful in identifying potential strengths and weaknesses. Six distinct properties are considered in this section.*
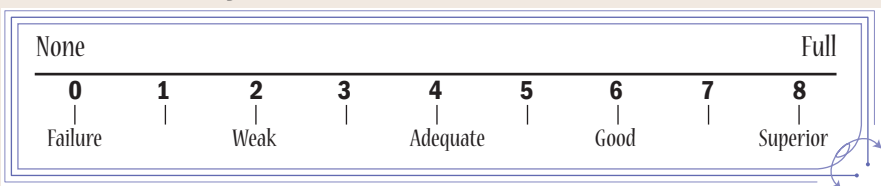
## CUSTOMIZABILITY

5. Can any aspect of the Enterprise Architecture methodology be customized to meet specific standards and practices of the using organization?

   Studies indicate that most organizations either "shelve" or customize a methodology within eighteen months after installation. A customizable methodology is one that can be modified, in place, and retain all of the features and functions of its original form.

   The lowest rating Enterprise Architecture methodologies are simply not accessible in electronic form and fail to incorporate necessary functions to support customization. A high rating methodology treats customization as a key design requirement and can answer yes to the following questions without diluting its basic features and functions:

   - Can the names of methodology components be changed to those the practitioner organization is more familiar with?
   - Can the descriptions of methodology components be changed?
   - Can new components be added and related to existing components?
   - Can component definitions (designs) be altered, extended, or deleted?
   - Can new paths be defined to describe unique uses of the methodology?
   - Can the underlying methods and deliverables be changed?

---

**RATING SCALE 5**
## Customizability

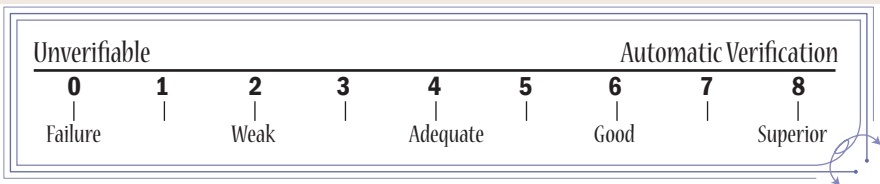| None | | | | | | | | Full |
|------|---|---|---|---|---|---|---|------|
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| Failure | | Weak | | Adequate | | Good | | Superior |

Selecting an Enterprise Architecture Methodology

6. Can changes to the Enterprise Architecture methodology be verified as correct?

An Enterprise Architecture methodology with inconsistencies will be rejected quickly by the developing community. If the methodology is customizable, corrections can be made, but the question remains—are those changes correct? To allow for verifiable correctness, a methodology must be formally defined. This means that the methodology vocabulary is described via an underlying model (or equivalent) to ensure terms are uniquely defined and consistently related. Likewise, methodology processes (its methods) are formally defined to ensure that each method produces a deliverable that contributes to the Enterprise Architecture development/ evolution process.

The lowest rating methodologies are not expressed in a formal model and act as a barrier to verification. Low rating methodologies have no means to assist in verifying correctness. High rating methodologies are designed using formal models and reside in an environment that "understands" the models. This provides the opportunity to conduct verification of the methodology when it is first developed, and as it undergoes change.

RATING SCALE 6
## Correctness

| Unverifiable | | | | | | | | Automatic Verification |
|---|---|---|---|---|---|---|---|---|
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| Failure | | Weak | | Adequate | | Good | | Superior |

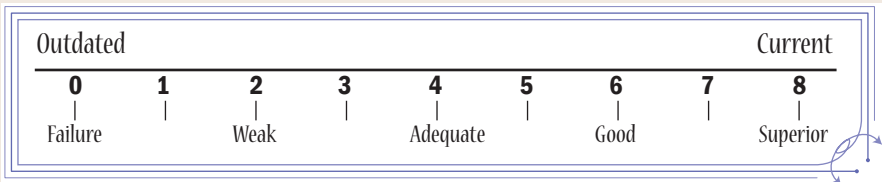Selecting an Enterprise Architecture Methodology

7. Does the Enterprise Architecture methodology support current techniques and technology or is it based upon outdated practices?

New techniques are introduced, and methods change to better support new processes, methods, technologies, repositories, re-engineering, etc.

Low rating Enterprise Architecture methodologies are based on outdated philosophies that have "evolved" from outdated practices, which limit their effectiveness. High rating methodologies assume the existence of such practices as:

- Facilitated Interactive Environments

- Minimizing Interview Sessions

- Time Boxed Architecture Development

- Architecture Model and Implementation Model Differentiation

- Initiative Development Orientation

- Business and Technical Engineering Integration (cross business areas /data and process sharing)

- Model-Based Development (use of modeling formalisms)

**RATING SCALE 7**
## Compatibility

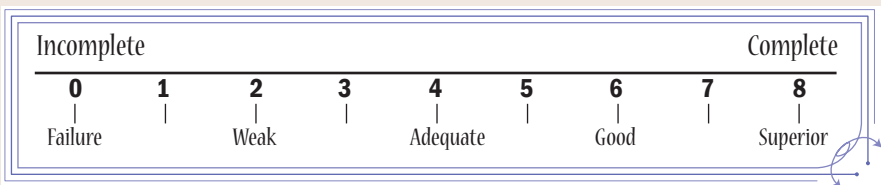| Outdated | | | | | | | | Current |
|---|---|---|---|---|---|---|---|---|
| **0** | **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** |
| Failure | | Weak | | Adequate | | Good | | Superior |

## COMPLETENESS

8. Does the Enterprise Architecture methodology cover all aspects of the activities—from Models to Roadmaps?

An effective Enterprise Architecture methodology should address all the needs of an organization. Low rating methodologies focus on a portion of the lifecycle, such as technology design and construction. High rating methodologies incorporate the following phases:

- Planning—analysis and modeling of the business (organization) to determine which projects to deploy, which business areas they affect, and when to deploy them.

- Analysis—discover, structure, detail, and verify business requirements for a particular business area.

- Design—engineer a system design from the business requirements.

- Construction—translate the system design into the solution system.

- Evolution—accept, consolidate, plan, and coordinate the release of changes to the deliverables of the above phases. Activities include change management, impact analysis, and change planning.

---

**RATING SCALE 8**
## Completeness

| Incomplete | | | | | | | | Complete |
|---|---|---|---|---|---|---|---|---|
| **0** | **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** |
| Failure | | Weak | | Adequate | | Good | | Superior |

---

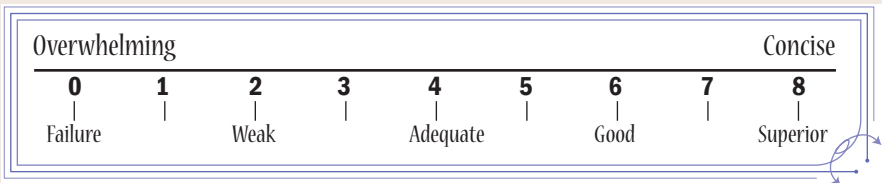Selecting an Enterprise Architecture Methodology

## CONCISENESS

9. Can the Enterprise Architecture methodology be realistically followed by the organization or does it present overwhelming complexity?

A methodology that simply houses all known knowledge of practices is ineffective as a coherent guide for Enterprise Architecture professionals. Effective methodologies must be both complete and concise.

Low rating Enterprise Architecture methodologies offer an array of sometimes conflicting approaches from which the practitioner may choose. High rating methodologies provide practiced approaches that are experiential based. Higher rating methodologies present a consistent philosophy that is succinctly expressed.

### RATING SCALE 9
## Conciseness

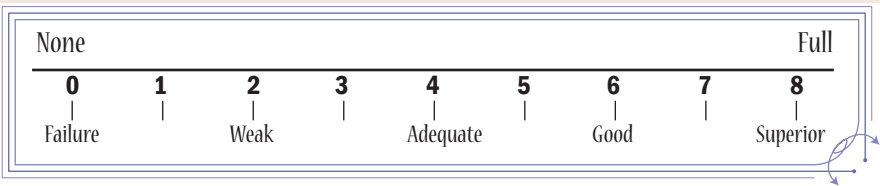| Overwhelming | | | | | | | | Concise |
|---|---|---|---|---|---|---|---|---|
| **0** | **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** |
| Failure | | Weak | | Adequate | | Good | | Superior |

## ABILITY TO SUBSET

10. Can cohesive pieces of the Enterprise Architecture methodology be extracted for use on focused activities?

An effective Enterprise Architecture methodology supports paths that include methods and techniques designed to meet specific objectives, such as a path that guides the understanding of a business area. These paths should be easily extracted for use on focused activities.

Low rating Enterprise Architecture methodologies have limited or no support for subsetting. High rating methodologies allow the user to extract almost any coherent piece of the methodology. Once extracted, that subset can use the full features and functions of the methodology.

---

RATING SCALE 10
### Subsetting

| None | | | | | | | | Full |
|---|---|---|---|---|---|---|---|---|
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| Failure | | Weak | | Adequate | | Good | | Superior |

---

# COMPONENTS

*Components are the basic elements that represent the building blocks of the methodology. Components help reveal the capabilities of the methodology. This section looks at seven critical components.*
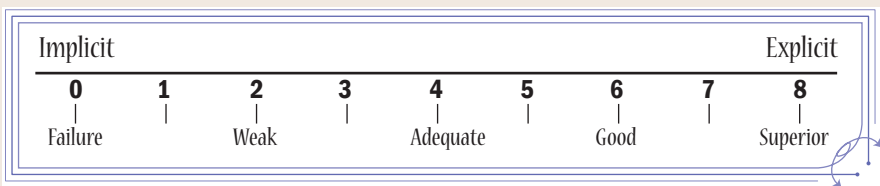
## DELIVERABLES

11. Is the Enterprise Architecture methodology driven by the production of deliverables?

The primary purpose of a methodology is to guide development and evolution activities. These activities are measured by the quality and timeliness of deliverables. An effective methodology establishes deliverables as its goals and focuses on their production. Full traceability of anything produced ensures no superfluous steps or deliverables occur or are produced.

Low rating Enterprise Architecture methodologies are deliverables-based with no clear and traceable relationships between each of the deliverables. The primary architecture of a high rating Enterprise Architecture methodology provides complete linkage and traceability between all deliverables. Other components (methods, techniques, roles, tools, objectives, etc.) of high rating methodologies support the development and evolution of deliverables.

---

RATING SCALE **11**
## Deliverables

| Implicit | | | | | | | | Explicit |
|---|---|---|---|---|---|---|---|---|
| **0** | **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** |
| Failure | | Weak | | Adequate | | Good | | Superior |

## METHODS

12. Is the Enterprise Architecture methodology organized in terms of discrete methods that are linked by the deliverables they produce?

A method is a process that produces a deliverable and methods are a key component of a methodology. Each method should have a purpose—to produce a deliverable. The methodology should incorporate precedence relationships among the methods to establish which serve as prerequisites for others.

A low rating Enterprise Architecture methodology has imprecise boundaries for its methods. High rating methodologies have crisply defined methods that are characterized by (as examples):
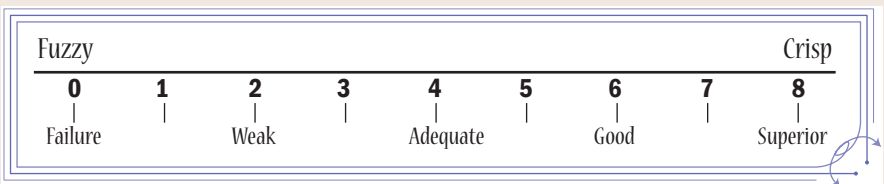
- Function—each method should perform one function. The function should be precise enough to be adequately profiled by its name in the form of a verb followed by a one or two word identifier.

  *Examples: Define Goals, Structure Models, Detail Definitions.*

- Deliverables(s)—ideally, each method produces one deliverable.

- Roles—the types of job functions (skills) required to perform the method.

---

**RATING SCALE 12**
## Methods

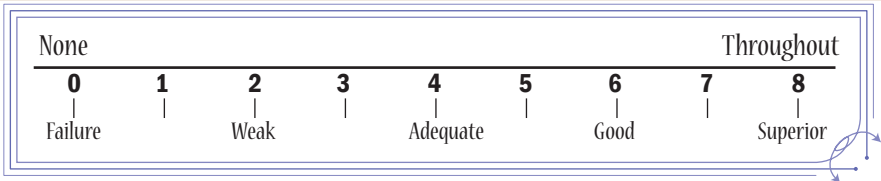| Fuzzy | | | | | | | | Crisp |
|---|---|---|---|---|---|---|---|---|
| **0** | 1 | **2** | 3 | **4** | 5 | **6** | 7 | **8** |
| Failure | | Weak | | Adequate | | Good | | Superior |

---

## TECHNIQUES

13. Does the Enterprise Architecture methodology provide techniques that describe how to conduct its methods?

A technique is a procedure that guides the execution of the method. A methodology's techniques incorporate empirically determined approaches that have proved effective in accomplishing the method.

Some low rating methodologies have no techniques at all, while others have trivial or poorly expressed techniques. High rating methodologies provide a dynamic collection of explicit techniques that are mapped to the methods they support.

RATING SCALE **13**
## Techniques

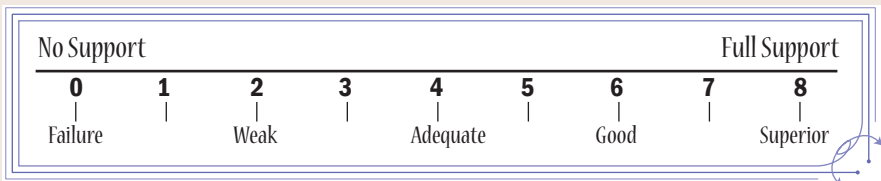| None | | | | | | | | Throughout |
|------|---|---|---|---|---|---|---|------------|
| **0** | **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** |
| Failure | | Weak | | Adequate | | Good | | Superior |

## STANDARDS AND PRACTICES

14. Can the Enterprise Architecture methodology embody the standards and practices of the practitioner organization?

Each organization has unique guidelines, such as naming conventions. These guidelines should be integral to the organization's Enterprise Architecture methodology.

Low rating methodologies impose standards on the using organization. High rating methodologies encourage the blending of organizational standards.

RATING SCALE **14**
## Standards

| No Support | | | | | | | | Full Support |
|------------|---|---|---|---|---|---|---|--------------|
| **0** | **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** |
| Failure | | Weak | | Adequate | | Good | | Superior |

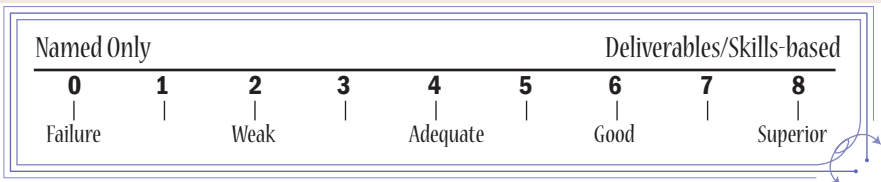Selecting an Enterprise Architecture Methodology

## Roles

15. Does the Enterprise Architecture methodology identify the roles (types of skills) that are involved in each method?

Methods are performed by various practitioners, each with specific skills. An effective Enterprise Architecture methodology links required skills with each method in order to identify appropriate roles. The roles reflect logical job functions such as Enterprise Architect, Data Architect, Logistics Architect, Process Architect, etc.

Low rating Enterprise Architecture methodologies have general and / or inconsistent role identification, or assume all tasks can be performed by one role. Treating the role as a key property of each method, high rating methodologies provide a means to tie the using organization's roles directly to the methods.

RATING SCALE 15
## Roles

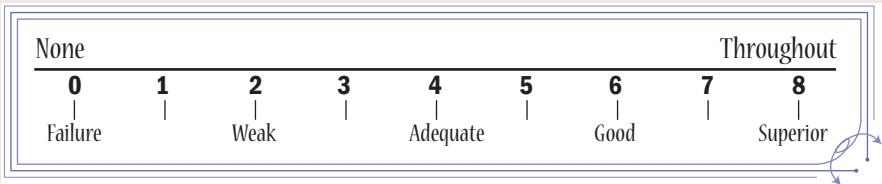| Named Only | | | | | | | | Deliverables/Skills-based |
|---|---|---|---|---|---|---|---|---|
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| Failure | | Weak | | Adequate | | Good | | Superior |

## SUPPORT TOOLS

16. Does the Enterprise Architecture methodology identify the support tools appropriate for the execution of each method?

Effective methodologies should assume and allow for the use of "human consumable" technologies to assist in the execution of its methods, and each method should identify the support tools required.

Low rating Enterprise Architecture methodologies ignore or implicitly suggest tools that are "IT" centric. High rating methodologies clearly identify recommended tools for each method.

RATING SCALE **16**
## Support Tools

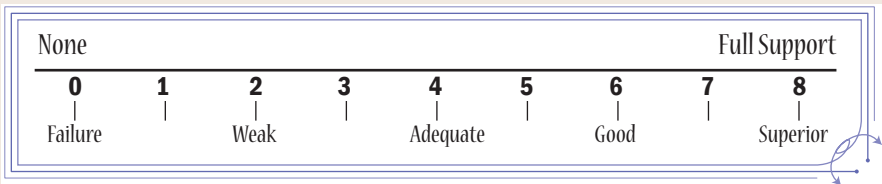| None | | | | | | | | Throughout |
|---|---|---|---|---|---|---|---|---|
| **0** | **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** |
| Failure | | Weak | | Adequate | | Good | | Superior |

## PATHS

17. Does the Enterprise Architecture methodology allow for predefined paths that accomplish specific objectives?

Since a methodology will rarely, if ever, be used in its entirety on a single project, it's critical that the practitioner be able to establish predefined paths. These paths represent standard structures that reflect sanctioned uses of the methodology within the organization.

Low rating Enterprise Architecture methodologies offer one path. High rating methodologies provide multiple paths and allow the practitioner to select a path, customize a path, or build an entirely new path to meet specific objectives.

---

RATING SCALE 17
### Paths

| None | | | | | | | | Full Support |
|---|---|---|---|---|---|---|---|---|
| **0** | **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** |
| Failure | | Weak | | Adequate | | Good | | Superior |

---

# FUNCTIONS

*Functions are the dynamic features of a methodology and help define such qualities as ease-of-use, flexibility, and extensibility. Four distinct functions are considered in this section.*
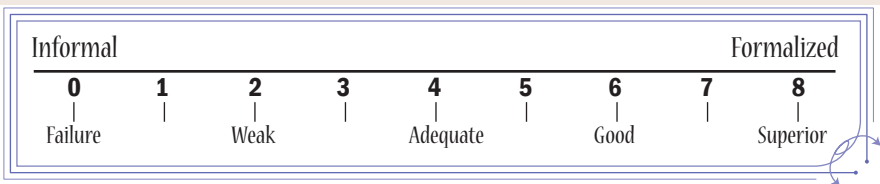
## METHODOLOGY MANAGEMENT

18. Is the Enterprise Architecture methodology expressed using formal models whose structural integrity can be verified?

Informally expressed methodologies cannot be verified for correctness either manually or automatically. Methodology management refers to functionality that allows verification of the formal models used to express a methodology. It also supplies a means to manage the changes that will occur to the methodology over time. The functionality required for effective methodology management allows traceability of deliverables from inception to use.

Low rating Enterprise Architecture methodologies are informally expressed using unverified models, unclear and implicit relationships between models, deliverables, methods, and verbose wording. High rating methodologies are designed using formal models and are managed by a consistent vocabulary.

---

**RATING SCALE 18**
## Management

| Informal | | | | | | | | Formalized |
|---|---|---|---|---|---|---|---|---|
| **0** | **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** |
| Failure | | Weak | | Adequate | | Good | | Superior |

---

## METHODOLOGY NAVIGATION

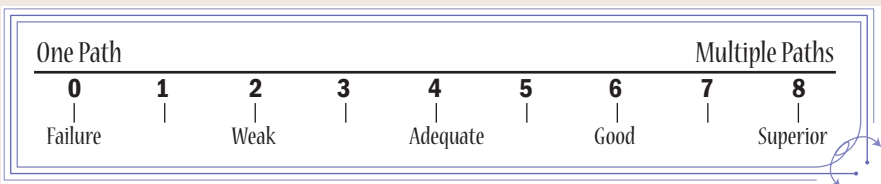19. Can the Enterprise Architecture methodology be expediently searched to retrieve methodology information?

The value of a methodology's content is diminished if it cannot be located and retrieved efficiently. An effective Enterprise Architecture methodology is accessible using a variety of approaches:

- Abstraction—allows review from several levels of abstraction so that the practitioner can select any component at one level of abstraction and see its details (go to a lower level of abstraction).

- Context Shifts—allows quick shifts in context so that the practitioner can anchor on an object, and quickly navigate to a set of related, but adjacent information.

- Perspective—allows the same information to be viewed from multiple perspectives so that, for example, the practitioner can see methods hierarchically or sequentially.

Low rating Enterprise Architecture methodologies are paper-based, offering functionally weak navigational capabilities or supplying flashy navigational features that fail to address the needs of the practitioner.

High rating methodologies provide navigational support linked to the way the methodology is used. Highest rating methodologies deliver this support via an easy to use interface.

RATING SCALE 19
**Navigation**

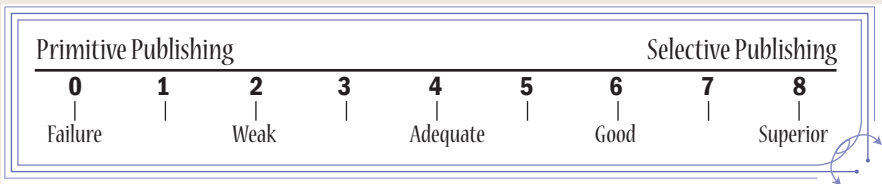| One Path | | | | | | | | Multiple Paths |
|---|---|---|---|---|---|---|---|---|
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| Failure | | Weak | | Adequate | | Good | | Superior |

## Handbook Generation

20. Can select pieces of the Enterprise Architecture methodology be published as project handbooks?

A project handbook is an electronic or paper-based subset of the methodology designed to support a specific project. The handbook complements the electronic form of the methodology by providing a convenient reference guide. The handbook is simply a generated report of methodology contents, with any changes to the methodology appearing in the paper version without human intervention.

Low rating Enterprise Architecture methodologies offer primitive printing capabilities or none at all. High rating methodologies allow any portion of the content to be delivered in publishing-quality handbook form.
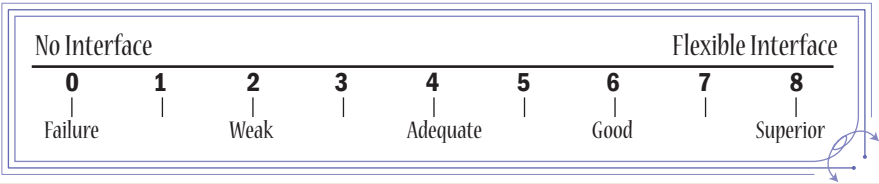
RATING SCALE 20
### Handbook

| Primitive Publishing | | | | | | | | Selective Publishing |
|---|---|---|---|---|---|---|---|---|
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| Failure | | Weak | | Adequate | | Good | | Superior |

21. Can the Enterprise Architecture methodology be imported to external software (tools)?

Interfaces with external software—project management software, desktop publishing packages, other tools, etc.— enhance the power of an electronic-based methodology. For example, one portion of the methodology may be imported into a desktop publisher to produce educational materials for in-house courses; another portion may be imported into a project manager to better drive Enterprise Architecture projects.

Low rating Enterprise Architecture methodologies require manual intervention or offer little or no support to electronically interface with other products. High rating methodologies provide an open interface for import and export of electronic information.

---

**RATING SCALE 21**
**Interfaces**

| No Interface | | | | | | | | Flexible Interface |
|---|---|---|---|---|---|---|---|---|
| **0** | **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** |
| Failure | | Weak | | Adequate | | Good | | Superior |

---

# SERVICES

*Services identify the support provided by the methodology vendor. Five services are required to effectively implement a methodology within an organization. This section considers those five services.*

## EDUCATION

22. Is the Enterprise Architecture methodology supported by a complete line of educational services?
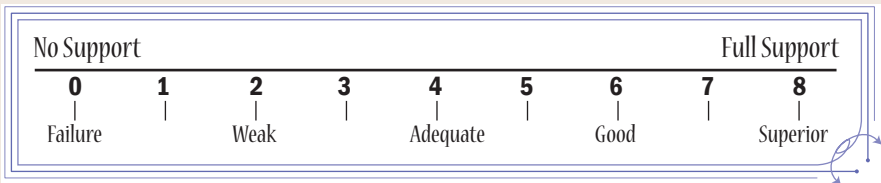
Effective education transfers information about the content and usage of a methodology into knowledge.

Education should be conducted by a practitioner who can explain significant characteristics, clarify complex points, answer questions, and verify that learning is taking place.

Low rating Enterprise Architecture methodologies offer superficial education or poorly vetted "franchised" education. High rating methodologies support education on a level equal to the methodology itself.

---

**RATING SCALE 22**
## Education

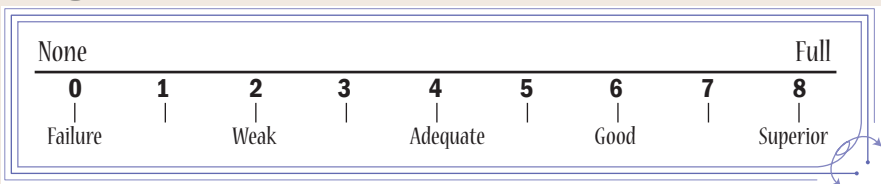| No Support | | | | | | | | Full Support |
|---|---|---|---|---|---|---|---|---|
| **0** | **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** |
| Failure | | Weak | | Adequate | | Good | | Superior |

---

## INTEGRATION

23. Are services available to integrate the Enterprise Architecture methodology with the standards, practices, and conventions of the practitioner organization?

No commercially developed Enterprise Architecture methodology will fit precisely with the practitioner organization. As a result, an early implementation step is to integrate the methodology with the organization's existing standards, practices, and conventions. There are several key points of integration:

- Roles—some roles will require change to adjust their name or definition; some roles will be added or deleted; some will be split into several roles; some may be combined into one.

- Tools—each organization has a different mix of tools that will necessarily vary from those identified in the methodology and will require incorporation.

- Paths—a path describes a unique sequence of methods and steps designed to achieve certain objectives. Integration will adjust the methodology's default paths or introduce new paths to reflect the organization's sanctioned project approaches.

Low rating Enterprise Architecture methodologies offer no integration services, as the actual methodology organization has no practice experience. High rating methodologies provide assistance in fitting the methodology to the organization.

RATING SCALE 23
## Integration

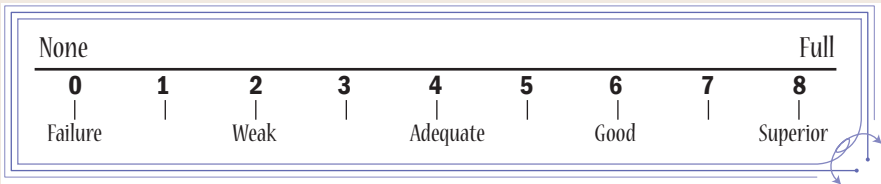| None | | | | | | | | Full |
|---|---|---|---|---|---|---|---|---|
| **0** | **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** |
| Failure | | Weak | | Adequate | | Good | | Superior |

## DEMONSTRATION

24. Is the Enterprise Architecture Methodology vendor capable of demonstrating any aspect of the methodology on a real project?

Recognizing that there is no substitute for experience, an organization that is educated in a particular methodology can realize a significant head start in its implementation by observing the method in practice by professionals. This is best accomplished by putting the methodology to work on one of the organization's actual projects.

Low rating Enterprise Architecture methodologies and vendors are not able to demonstrate the methodology on real (versus pilot) projects. High rating methodologies encourage demonstration on actual projects.

**RATING SCALE 24**
## Demonstration

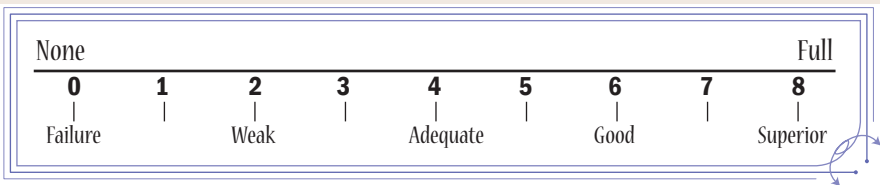| None | | | | | | | | Full |
|------|---|---|---|---|---|---|---|------|
| **0** | **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** |
| Failure | | Weak | | Adequate | | Good | | Superior |

## Customization

25. Are services available to customize the Enterprise Architecture methodology to incorporate the practitioner organization's experiences?

Customizing is similar to adding new functionality to an existing, working system—it involves a careful weaving of new experiences without compromising the integrity of the methodology. Initially, the Enterprise Architecture Methodology vendor has the strongest understanding of the design philosophy and content of the methodology. For this reason, the vendor should provide a service to help with the very first customization of the methodology. This service should lead to a process that allows the practitioner organization to handle all future customizations on its own.

Lowest rating Enterprise Architecture methodologies claim that customization is unnecessary and have no customization support. High rating methodologies view customization as a necessary part of implementation and offer full services to meet this need.

RATING SCALE 25
### Customization

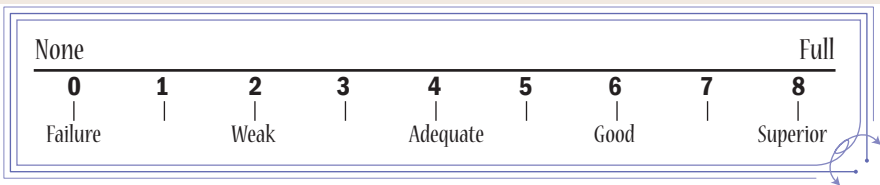| None | | | | | | | | Full |
|---|---|---|---|---|---|---|---|---|
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| Failure | | Weak | | Adequate | | Good | | Superior |

## IMPLEMENTATION SERVICES

26. Are services available to guide an effective rollout of the Enterprise Architecture methodology?

To effectively implement a methodology, the practitioner organization will necessarily influence a change in culture. The organization can choose to manage the change or to allow the change to manage them. The management of cultural change involves proactive planning and execution. It treats change as a process with known characteristics—measures of risk, indicators of success or failure, defined roles, etc. An effective implementation service addresses these issues in the roll out of the methodology.

Low rating Enterprise Architecture methodologies consider rollout to be a simple distribution of the Enterprise Architecture methodology. High rating methodologies provide an implementation service to help manage cultural and organizational elements within the practitioner organization.

RATING SCALE 26
## Implementation

| None | | | | | | | | Full |
|------|---|---|---|---|---|---|---|------|
| **0** | **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** |
| Failure | | Weak | | Adequate | | Good | | Superior |

# SCORING THE ENTERPRISE ARCHITECTURE METHODOLOGIES

*The ITEMIZED EVALUATION CHART provides a means to conduct a quantitative evaluation of several Enterprise Architecture methodologies.  Simply go back through the handbook and transfer the scores from each of the rating scales under the 26 evaluation criteria.*

*Total these scores for each of the five categories and transfer them to the OVERALL EVALUATION CHART which follows.*

| | METHODOLOGY NAME | | | | |
|---|---|---|---|---|---|
| | EACOE Methodology | | | | |
| **Objectives** | | | | | |
| 1. Guide | | | | | |
| 2. Centralize | | | | | |
| 3. Simplify | | | | | |
| 4. Standardize | | | | | |
| **TOTAL** | | | | | |
| **Properties** | | | | | |
| 5. Customizability | | | | | |
| 6. Correctness | | | | | |
| 7. Compatibility | | | | | |
| 8. Completeness | | | | | |
| 9. Conciseness | | | | | |
| 10. Subsetting | | | | | |
| 11. Deliverables | | | | | |

Selecting an Enterprise Architecture Methodology

| | METHODOLOGY NAME | | | |
|---|---|---|---|---|
| | EACOE Methodology | | | |
| 12. Methods | | | | |
| 13. Techniques | | | | |
| 14. Standards | | | | |
| 15. Roles | | | | |
| 16. Tools | | | | |
| 17. Paths | | | | |
| **TOTAL** | | | | |
| Functions | | | | |
| 18. Management | | | | |
| 19. Navigation | | | | |
| 20. Handbook | | | | |
| 21. Interfaces | | | | |
| **TOTAL** | | | | |
| Services | | | | |
| 22. Education | | | | |
| 23. Integration | | | | |
| 24. Demonstration | | | | |
| 25. Customization | | | | |
| 26. Implementation | | | | |
| **TOTAL** | | | | |

Selecting an Enterprise Architecture Methodology

| METHODOLOGY NAME | | | | |
|---|---|---|---|---|
| **Category** | **EACOE Methodology** | | | |
| Objectives | | | | |
| Properties | | | | |
| Components | | | | |
| Functions | | | | |
| Services | | | | |
| **TOTAL SCORE** | | | | |

## COMPARING ENTERPRISE ARCHITECTURE METHODOLOGIES

As you can see, the maximum attainable Enterprise Architecture methodology score is 208. While today's Enterprise Architecture methodologies may strive to reach this level of precision, the criteria set forth in this handbook are demanding. Recognizing that the "perfect" methodology will likely never exist, the following ranges indicate a general rating of methodologies based on total scores:

- **Low rating 0-103**
- **Average rating 104-155**
- **High rating 156-208**

The chart and these ratings provide a means to compare Enterprise Architecture methodologies quantitatively with an eye toward identifying strengths and weaknesses in specific categories. The objective of this comparative evaluation is to provide a useful base of information to assist you in making a difficult decision—the decision of selecting an Enterprise Architecture methodology for your organization.

Selecting an Enterprise Architecture Methodology

## QUALITIES OF AN EFFECTIVE ENTERPRISE ARCHITECTURE METHODOLOGY

Today's organizations require an effective Enterprise Architecture methodology that incorporates the best understanding of effective Enterprise Architecture development and evolution. What are the qualities that make for an effective Enterprise Architecture methodology? The key features of such an Enterprise Architecture methodology are summarized here.

The Enterprise Architecture methodology serves as a central encyclopedia that guides, simplifies, and standardizes Enterprise Architecture, Business, and Systems Development/Evolution Processes. Recognizing that each organization is different, the methodology is customizable. It considers customization a key design requirement and provides functionality to accommodate diverse and ever changing processes within an organization. It is expressed using sound formal models that can be verified for correctness.

The Enterprise Architecture methodology supports advanced development techniques and technologies. It covers all aspects of the lifecycle—the planning for Enterprise understanding projects, the analysis of business requirements, the design of systems, the evolution of systems, and the ongoing enhancements of all of the above. The methodology is both complete and concise, serving as a coherent guide for practitioner professionals. It allows paths and pieces of content to be selected and extracted for application on specific projects.

The Enterprise Architecture methodology establishes deliverables as its goals. It focuses crisply defined methods on the production of those deliverables. It is supported by explicit techniques that have proved effective in accomplishing the methods. Roles and support tools required to execute each method are clearly defined.

The Enterprise Architecture methodology allows the practitioner organization to integrate its standards and practices and to create predefined paths to meet its unique objectives.  Content information can be searched and retrieved efficiently using several approaches, and portions of the methodology can be conveniently printed as project handbooks.  The power of the methodology is enhanced through interfaces with external software.

The Enterprise Architecture methodology vendor offers critical support services that include education, integration of the organization's existing standards and practices, demonstration on a real project, customization to embody the organization's experiences, and implementation assistance in the methodology's rollout.

## THE ENTERPRISE ARCHITECTURE CENTER OF EXCELLENCE (EACOE) QUICK START METHODOLOGY
### A High Rating Methodology

EACOE's Quick Start Methodology is an example of a high rating methodology, scoring in the upper ranges of all five categories covered in this handbook.  Housed in a desktop-friendly environment, EACOE's Quick Start is a flexible, interactive methodology for developing and managing Enterprise Architecture development.

Designed by practitioners to be highly practical and usable, EACOE's Quick Start is supported by a full line of education and implementation services.

For more information about EACOE's Quick Start Methodology, Certification, Consulting, Implementation Services, or Mentoring and Support:

**EMAIL:**     info@EACOE.org

**PHONE:**     (810) 231-6356

Selecting an Enterprise Architecture Methodology