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# The 10 Best Practices for Enterprise Architecture

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VI Annual Enterprise Integration Summit

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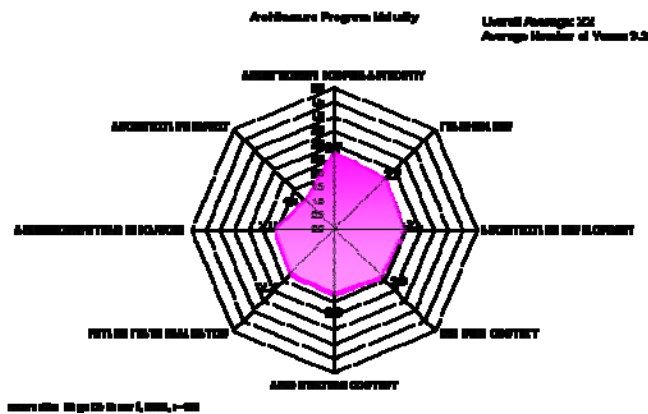
April 10-11, 2007

WTC Hotel

São Paulo, Brazil

## Sisyphus Would Be Proud

- More than 250 respondents — less than stellar results
- Architectural impact somewhere between "none" and "no causal relationship established"
- There appears to be no relationship between maturity and size of team
- Even in those organizations doing EA for a long time (>10 years) the average maturity is 2.9
- There is a significant break point in Year Three



Lots of effort, little result — But there are EA teams that get it right

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Gartner has developed an Enterprise Architecture Program Maturity Assessment that allows enterprises to measure the effectiveness of their enterprise architecture (EA) program as part of a program of continuous improvement. By measuring EA program maturity and understanding how the program is performing in different dimensions, EA teams can identify and address the critical constraints that are inhibiting the effectiveness of the enterprise architecture.

The Gartner EA program maturity assessment has been administered more than 250 times to at Gartner EA Summit events and subscribers to the Gartner for IT Leaders products. Maturity is measured across eight dimensions on a scale of 1 to 5 (similar to CMM/SEI). The respondents represent a wide range of industries, and company size and revenue are also quite varied. They range from organizations that are just beginning their architecture programs to those that have been at it for more than 10 years (see "Understand the Maturity of Your Enterprise Architecture Program," G00136105).

The results are not encouraging. Average maturity is 2.3, with particular weakness in architecture effectiveness, business context and stakeholder engagement. More than two-thirds of the respondents tell us that their EA program is started, but one or more basic requirements have not been met to move from "ad-hoc" to "performing." Only 5% of organizations have programs that are "established, functioning and repeatable" Large (more than 5,001 IT staff) and extra large organizations (more than 10,001 IT staff) with an average of 5.3 and 8.7 years in EA have only a 3.0 and 2.9 score, respectively. That's a long time to roll the ball uphill.

### Key Issues

1. What are the 10 best practices of enterprise architecture?
2. What benefits do organizations see when they apply these best practices consistently?
3. What are the techniques for applying these best practices?



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Yet we know from our discussions with customers that some of them have cracked the code and have EA programs that are performing well and delivering real value to the business. These teams are delivering against different value propositions, in organizations of different sizes, with different cultures, and in different industries. The way they practice EA may be different and the strategic imperatives of their businesses are different. But there is an underlying core set of best practices that allow them to keep their EA programs focused on business value, engaged with business leadership and delivering high-quality results. This presentation is focused on the best practices of those high-performing EA teams.

### Gartner 2006 Definition of Enterprise Architecture

- **Enterprise architecture is...**
  - ... the process (*it's a process AND a thing*)...
  - ... of translating business vision and strategy...
  - ... into effective enterprise change (*if no change is needed, no architecture is needed*)...
  - ... by creating, communicating and improving the key principles and models that describe the enterprise's future state and enable its evolution (*architecture produces the creative constraints that bound implementation decisions*).
- **The scope of the enterprise architecture includes...**
  - ... the people, processes, information and technology of the enterprise, (*architecture is NOT just about technology*)...
  - ... and their relationships to one another and to the external environment.
- **Enterprise architects compose...**
  - ... holistic solutions...
  - ... that address the business challenges of the enterprise...
  - ... and support the governance needed to implement them.

**Enterprise architecture means architecting the enterprise to enable change.**

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#### Key Issue: What are the 10 best practices of enterprise architecture?

In May 2006, Gartner ratified a standard definition of EA. This definition represents the consensus opinion of the entire Gartner enterprise architecture research community on the scope and purpose of EA. EA has always been focused on enhancing enterprise agility. We have long stated that EA must facilitate change. The key is to create, not the perfect or elegant architecture for the moment, but the most adaptable architecture for the future. It is useful to consider this definition in the context of the best practices for enterprise architecture. EA is a challenging discipline, made more so by its potential scope and reach. Careful attention to the basics can mean the difference between success and failure.

### The 10 Best Practices of Successful EA Programs

1. Charter Your EA Program
2. Develop (and Execute) a Communications Plan
3. Treat Each Iteration Like a Project
4. Start With the Business Strategy and Obtain Business Sponsorship
5. Do the Future State Before the Current State
6. Be Pragmatic
7. Don't Forget Governance
8. Set Up a Measurement Program
9. Track EA Program Maturity
10. Pay as Much Attention to Talent as to Skills

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#### Key Issue: What are the 10 best practices of enterprise architecture?

The best practices of high-performing EA programs are not rocket science. They don't require extensive training or specialized skills (beyond those required for EA). They are easy to put in place and not complicated to maintain. They are simply a set of behaviors that will help transform a less effective EA program into a more effective one.

### 1. Charter Your EA Program

- The EA program charter represents the agreement between the EA team and the stakeholders
- What is the value proposition?
- Who are the stakeholders?
- What are their obligations?
- What are the obligations of the EA team?
- What is the scope of the EA?
- What is the timeline for delivery?
- What is the governance model?



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#### Key Issue: What are the 10 best practices of enterprise architecture?

Program charters are an accepted best practice in most organizations. It is rare to see an enterprise embark on a transformation program (or any other kind of program) without a clearly defined charter that details the expected benefits of the program and the terms of its delivery. Yet most organizations do not charter their EA program. Development of an EA program charter makes explicit the benefits that the organization expects to achieve with its EA program and defines how those benefits will be achieved. The charter defines the stakeholders and details their obligations to the EA process. It defines the value proposition and the scope of the EA. It describes the authority of the EA team and explains how decisions will be made. It lays out the timeline for delivery of architecture artifacts and explains how those will be developed. Because the charter explicitly defines the operation of the EA program and the criteria for success, the team has a much greater chance of living up to expectations.

Over time, the EA program will evolve and the organization's approach to architecture will mature. In addition, the scope of the architecture or the strategic imperatives may change. The charter should be revisited periodically and adjusted as required (see "Chartering the Enterprise Architecture Program," G00136607).

*Action Item: If you don't have an EA program charter, develop one as soon as possible. If you already have one, review it periodically for completeness and relevance.*

### 2. Develop (and Execute) a Communications Plan

#### 1. Key Messages

#### 2. Audiences and Their Key Issues

#### 3. Messages by Audience

- Benefits/Value
- Anticipated Resistance
- EA Creation Process
- EA Governance
- EA Measures
- Sponsoring Authority

#### 4. Media Used

- Intranet
- Publishing
- Meetings
- One-on-Ones

#### 5. Action Plan

- Action Items and Responsibilities
- Timeline: Actions and Milestones
- Expanding Participation

#### 6. Feedback Process

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### Key Issue: What are the 10 best practices of enterprise architecture?

Communication is a critical issue for most EA teams, and one that is neglected surprisingly often. For the EA program to be effective, many things must be communicated, including the scope and objectives of the architecture, the decisions that are made (with justifications) and the benefits that are derived from the EA process. When EA teams communicate, they often do so without having developed a formal communications plan. This results in haphazard communications that are not effective in advancing the EA agenda. The key messages must be identified. Each stakeholder group must be analyzed to ensure that its specific value proposition is being addressed and that the communications are executed in a way that is effective for that group. The messages must be crafted for specific audiences. The communications media to be used should be identified. An action plan with timelines and responsibilities should be identified. A feedback process should be put in place to ensure that the communications plan is effective. Gartner estimates that up to 30% of an EA team's effort should be spent on planning and delivering communications (see "Gartner's Organization Communication Framework Supports IT Credibility," G00126193).

*Action Item: If you do not have a communications plan, develop one as soon as possible using the guidelines on the slide. If you have one, review it periodically for accuracy and completeness. If your communications plan is implied, make it explicit.*

### 3. Treat Each Iteration Like a Project

- EA is not a project – it's a process
- It has a beginning, but never ends
- Iterations ensure that the EA will respond to change
  - In the business
  - In technology
  - In the external environment
- But without project discipline, it can meander
  - Timelines
  - Milestones
  - Deliverables
  - Responsibilities



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#### Key Issue: What are the 10 best practices of enterprise architecture?

Because EA is not a "project" with a defined beginning and end, EA teams often neglect project discipline, resulting in an unfocused effort that does not deliver a coherent stream of deliverables. These architecture initiatives are perceived as unprofessional by both the business and the IT community, because they seem to expend effort without any defined goals. It is difficult, if not impossible, to develop an open-ended project plan for an entire EA initiative, but it is both possible and desirable to develop "project plans" for each iteration of the architecture process. In this way, tasks can be planned and resourced, timelines and milestones can be identified and interdependencies can be coordinated. Because enterprise architects often do not make good project managers, successful EA teams often employ professional project managers to ensure that project plans are developed and that project discipline is maintained.

*Action Item: Develop a project plan for the current iteration of your EA and manage according to that plan. Institute project management discipline in your EA program going forward.*



### 4. Start with the Business Strategy and Obtain Business Sponsorship

- Starting with the business strategy ensures that:
  - The architecture supports the business goals of the enterprise (and you can demonstrate it).
  - You are engaging the business leadership on a subject they care about (they don't care about technology or architectural purity).
  - You can identify the business value that the architecture must deliver.
- Obtaining business sponsorship ensures that:
  - The business will support EA decisions.
  - The business will understand the value that EA provides.



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#### Key Issue: What are the 10 best practices of enterprise architecture?

One of the most frequent complaints we hear when we talk to clients is that the business strategy is nonexistent. While it is often the case that the business strategy is not well articulated, it is rarely true that it does not exist. A common error is to confuse the process of developing business strategy, which tends to be complex and involves many factors, such as market research, customer trend analysis and others, with the strategy itself. Business strategy is an articulation of what the company's goals are and what things the company is going to do to achieve those goals. It should not be confused with the studies that are done and the assumptions that are made to achieve that articulation.

In its simplest (and most simplistic) form, the business strategy consists of the answers to five simple questions. What does the company want to do? Who is (are) the target market(s) for the goods and services that the company provides? What is the geographic scope of the strategy? What is the time frame in which I want to accomplish these goals? And most importantly, *how* do I want to accomplish these goals?

One good place to look for your business strategy is on the investor relations portion of your company's Web site. People are not anxious to invest in a company that does not have clearly stated goals and an action plan for getting there. Gartner's process for articulating the business strategy and its implications is called the "common requirements vision." This process provides a clear and structured way of analyzing the business strategy and understanding its impact on the architecture (see "Building a 'Fast-Path' Common Requirements Vision," G00142111).

*Action Item: Develop a common requirements vision to guide your enterprise architecture development.*

### 5. Do the Future State Before the Current State

- EA is about what we have to change, not what we currently have.
- Current-state analysis provides you with a very detailed picture of how messed up you really are.
- Developing the future state first constrains the level of detail required for the current state.
- "What do we need?" vs. "What can we do with what we have?"



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#### Key Issue: What are the 10 best practices of enterprise architecture?

We will often talk to clients who are beginning their architecture program and they'll say "Our first order of business is to get a detailed analysis of our current environment." This is a mistake for several reasons. First, the team will expend a great deal of effort on a deliverable of limited business value. An analysis of the current state tells you nothing about what your future environment should look like to best support the business strategy. The primary goal of the architecture is to facilitate change. The analysis of the current state is important only in the context of gap analysis. For that reason, we advise that documentation of the current state be confined to the minimum that is required to identify the gaps between the current state and the future state. By doing the future state first, you essentially enforce that minimum level of documentation, since it is impossible to plan the future state in tremendous detail.

Another reason for doing the future state first is that it allows you to think about the requirements of the business strategy and how they can best be supported by the architecture, without constraining your thinking based on the limitations of your established environment.

*Action item: If you have started your EA program and your first activity is to document the current state, STOP NOW. Refocus your team on analysis of the business strategy and development of the future state architecture.*

### 6. Be Pragmatic

- Don't model everything in sight.
- Don't attempt to boil the ocean.
- Focus on the strategic imperatives of the enterprise and what's important (right now) to your business.
- Deliver value early and often.
- Be alert for signs of "modelitis."



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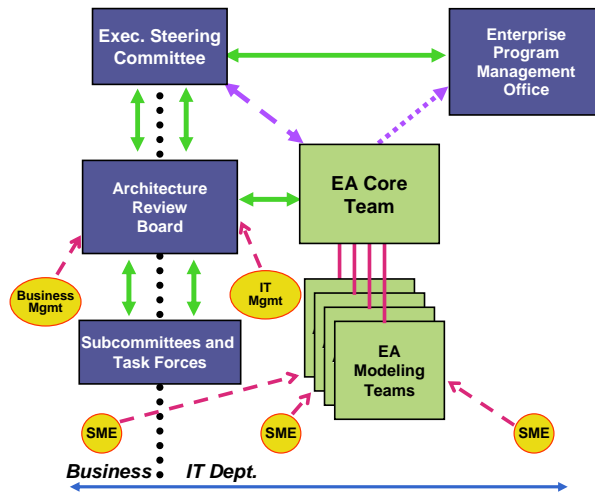
#### Key Issue: What are the 10 best practices of enterprise architecture?

One of the common mistakes that we see EA teams make (particularly new ones) is to attempt to produce a "comprehensive" enterprise architecture as their first deliverable. Inevitably, they get bogged down trying to model the entire enterprise and, as a result, produce little or nothing of immediate value, and languish as the enterprise loses interest and moves on. For EA teams afflicted with "modelitis," the act of creating the model becomes an end unto itself and the team loses sight of the fact that the real objective is to provide the enterprise with the information required for better decision making as quickly as possible. A more effective approach is to choose pragmatic targets based on the strategic imperatives of the enterprise (you will identify these as part of the business context and CRV work) and concentrate on those. In this way, you can concentrate on issues that are truly important to the business and deliver value quickly — before the organization loses interest and wanders on to the next great idea. We said earlier in this presentation that EA is not a project. It is a never-ending program that is delivered in iterative fashion. What is not modeled in this iteration will be modeled in the next one, or in the iteration after that. By maintaining focus on modeling the current strategic imperatives, you will ensure that the critical issues that are important to the enterprise are the ones being addressed.

*Action Item: Evaluate the activities of your EA team for symptoms of "modelitis." If your team is afflicted, refocus their efforts immediately so that the strategic imperatives of the enterprise are addressed.*

## 7. Don't Forget Governance

- EA governance
  - Architecture decisions
  - Compliance decisions
- Characteristics of successful governance:
  - Complements the business governance model
  - Is lightweight
  - Is integrated into the strategic and operational processes of the enterprise
  - Has a waiving process (and the waivers have a shelf life)



EA without governance is as bad as governance without the EA

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### Key Issue: What are the 10 best practices of enterprise architecture?

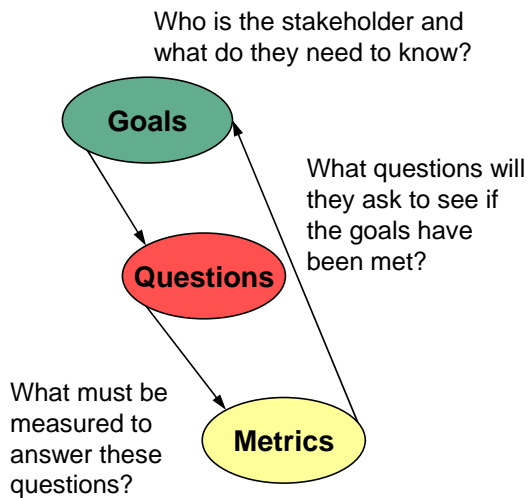
Governance is defined as the process of making decisions and the identification of who is entitled to make them. There are two kinds of EA governance – governance around the making of architectural decisions, and governance around the decisions on compliance of implementation initiatives. This second kind of governance is often called "architecture assurance." These two types of governance serve different purposes and very often require different organizational structures and formats. Increasingly we are finding that the most effective architecture programs are the ones who ensure a wide range of participants in both types of governance. EA teams that include implementation experts in the more detailed, lower level architectural decisions find that they encounter less resistance to EA standards on the part of implementation teams. Because the designers and implementers have a hand in making those architectural decisions, they fell ownership of the architecture rather than resentment at externally imposed constraints. Similarly, architecture teams who include business participation in the architecture assurance process typically see higher levels of business sponsorship, which is critical to the success of the EA initiative.

An important point to remember is that no EA is comprehensive enough to anticipate every possible business requirement that might come up in the future and there will always be a good business reason to make an exception. A formal process for making exceptions is critical, as is ensuring that exceptions do not self-perpetuate, but rather expire after some period of time.

*Action Item: Review your governance processes for external participation, effectiveness and the existence of a waiving process. Make adjustments as necessary.*

### 8. Set Up a Measurement Program

- Without effective measurement
  - The EA team scrambles to justify its existence
  - No way to know if the EA is delivering business value
  - Only anecdotal indications of success
- As organizations adopt measurement-driven discipline, EA teams must too



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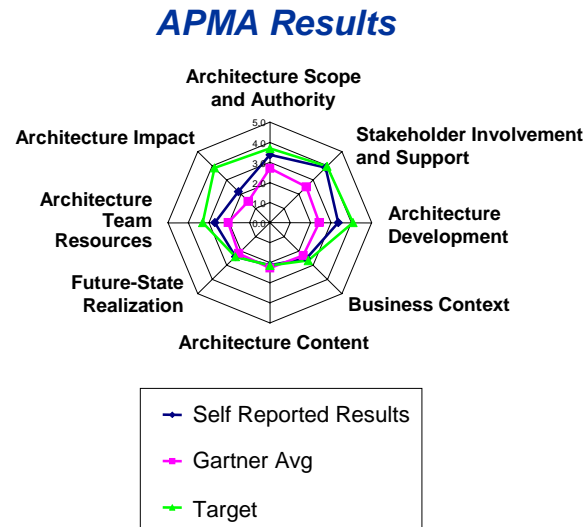
#### Key Issue: What are the 10 best practices of enterprise architecture?

We are often consulted by EA teams who are looking for a standard set of measures that they can use to demonstrate the value of their EA. The sad news is that there's no Chinese menu to pick from. To effectively demonstrate the value of EA, the concerns of individual stakeholders must be recognized, and the measures that demonstrate progress against those concerns must be worked out. Because the EA value proposition will be different in organizations with different business strategies, different industries, different cultures and different levels of maturity, there is no standard set of measures that apply. Another common problem is architecture teams who are being called on to justify their efforts after the fact. Because they don't have any measurement in place that can demonstrate the value of what they are doing, they are forced to rely on anecdotal evidence. These teams often see their budgets cut and their resources dispersed to other activities which appear to be of higher value. High-performing enterprise architecture teams define the value proposition and identify appropriate measures to demonstrate that value proposition as part of the preparation work for an EA iteration. Then they measure and report on a regular basis. The measures of EA value are included as part of their ongoing communications (see "Enterprise Architecture Measurement Program, Part 1: Scoping," G00142314; "Enterprise Architecture Measurement Program, Part 2: Defining What and How to Measure," G00142387; and "Enterprise Architecture Measurement Program, Part 3: Implementing," G00142355).

*Action item: When you get back to your office, assess what and how you are measuring to demonstrate the value and effectiveness of your EA. Make adjustments as necessary and include measurement and reporting as part of your normal communications program.*

## 9. Track EA Program Maturity

- Part of a continuous improvement program
- Focuses on critical constraints
  - What are the problems that are preventing you from being effective?
- EA programs must change over time
  - As the enterprise matures and changes



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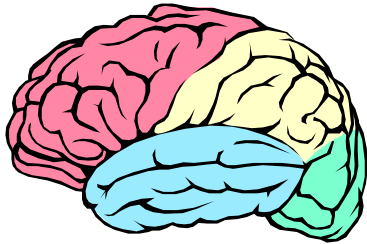
### Key Issue: What are the 10 best practices of enterprise architecture?

One of the interesting phenomena that we observe in our clients is the architecture programs that start out being very effective, but become less effective over time. The reason for this is simple: As the enterprise adopts the strategic discipline of enterprise architecture, it becomes more mature and sophisticated over time. If the architecture program does not change as well, a point will be reached where the enterprise has moved beyond the capability of the EA program to provide benefit. Best practice EA teams treat their programs as processes that must continually improve over time. That means evaluating the current level of maturity on a regular basis, setting realistic goals for the next evaluation cycle, analyzing the critical constraints that prevent the program from being as effective as it should be and developing concrete action plans to address those constraints.

*Action Item: Measure your EA program maturity regularly (once a year) as part of a program of continuous improvement. Set realistic targets for improvement and carefully analyze the constraints that impede your effectiveness.*

### 10. Pay as Much Attention to Talent as to Skills

- Skills
  - Create EA Documents
  - Manage EA Processes
  - Define EA Governance
  - And so on...
- Talents
  - Conceptualization
  - Innovation
  - Enterprise perspective
  - Foresight
  - Consensus building
  - Facilitation
  - Leadership
  - Logic
  - Communication



**Enterprise architects must possess the necessary talents before learning the tools of the trade**

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#### Key Issue: What are the 10 best practices of enterprise architecture?

Members of the core architecture team require a common set of talents that enable effective participation in the development of the architecture. The talents that are required by architects are rare in IT professionals, adding to the difficulty in recruiting the architecture team. Specifically, architects must have a talent for:

- **Conceptualization:** Visualizing the solution, process or infrastructure that is required
- **Innovation:** Exploring new opportunities that add to the business value proposition or reduce costs
- **Enterprise perspective:** Understanding the broader implications of strategy across all business units
- **Foresight:** Wrestling the short-, medium- and long-term planning horizons
- **Consensus building:** Enabling a group of people with diverse backgrounds to accept majority or common conclusion
- **Facilitation:** Guiding a debate without dominating the conclusion
- **Leadership:** Influencing a broad audience to adopt a particular path
- **Logic:** Selecting the best solution from a range of options to resolve an issue or seize an opportunity
- **Communication:** Effectively convey the results of the architecture, the process to develop it and the value it provides

*Action Item: Look honestly at the talents of your EA team and assess their suitability for the task. Determine how their natural talents can be augmented for a more effective EA program.*

### What Are the Benefits of a Best Practices EA Program

- To the business?
  - Alignment with the business strategy
  - Faster time to market
  - Greater agility
  - Greater consistency
  - Better decision making
  - Better ROI
  - Better information



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#### Key Issue: What are the benefits of a best practice EA program?

When an EA program is performing well, the benefits are apparent to a wide range of constituencies. The business gets better alignment of IT with the business strategy, bringing with it a host of benefits, including decreased time and cost to value, a higher level of agility, a better chance to achieve return on technology investments and better all-around information for decision making. In today's competitive climate, in which resources must be carefully spent in a way that provides the most business value, and the ability to respond to changes in the markets, the competitive landscape and the regulatory climate is key, the ability of the EA team to work proactively with the business to develop a vision of the future can mean the difference between success and failure. As best practice EA programs mature (and their business constituents mature along with them), EA and IT become true strategic partners in the development of a technologically sophisticated business strategy, allowing the business to achieve true competitive differentiation through well designed and streamlined processes, information and technology.



### What Are the Benefits of a Best Practice EA Program

- To the IT Organization?
  - Reduced technology diversity
    - Planned rather than Ad Hoc
  - Reduced cost
    - Support costs
    - Project costs
  - Increased reuse
  - Operational stability
  - Less "management by magazine"
    - Reduced dependence on flavor of the month



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#### Key Issue: What are the benefits of a best practice EA program?

The IT organization (ITO) also gets something out of a best practices EA program. When the ITO adopts a strategic planning and discipline approach to the acquisition and operation of technology assets, the benefits range from the mundane (we're spending less money keeping the lights on, so we have more money to spend on innovation that can bring greater competitive advantage) to the esoteric (we are not as vulnerable to the "silver bullet of the month" approach to technology planning, which has us running from one fad to the next). Projects are less costly and less risky. More of them are completed on time and on budget, and more of them actually deliver the value that was promised when they were proposed. The operational environment is more stable, so no one is rousing the operations staff out of bed at night. The business looks at the ITO as a partner in the strategic direction of the business rather than just an annoying cost center.

### What Are the Benefits of a Best Practices EA Program

- To the EA team?
  - Stability
  - Job satisfaction
  - Opportunities for personal and professional growth
  - Recognition of the value of the EA
    - By the business
    - By the IT organization
  - The enterprise perspective provides excellent opportunities all around the enterprise



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#### Key Issue: What are the benefits of a best practice EA program?

There are benefits to the EA team too. It's more fun to be working in an organization in which your contribution is recognized and the value of what you do is explicit than it is to work in an organization in which you are constantly struggling to convince people that your point of view is worthwhile and should be taken into account. In addition to the fundamental benefits of job stability and satisfaction, the fact that the enterprise architects take a strategic and enterprise level view makes it easy for them to make contributions in other parts of the organization — both inside and outside of IT.

### Techniques

- Slowly, slowly, catchee monkey
  - Don't try to change everything at once
  - Rome was not built in a day
- Carry a bigger carrot than stick
  - Make sure you understand the incentives and disincentives of your constituencies
- Make sure that you're focusing on the important stuff
  - If it's not going to make a real difference, it's not worth doing — no matter how elegant the solution is
- The stealth architecture approach
- The APMA approach

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### Key Issue: What are the techniques for applying these EA best practices?

Like every other instance in which you want people to change what they are doing or the way they are doing something, change management techniques are an important tool for getting the change accepted and internalized. Even if you look around and your EA team is doing *everything* wrong, it's important to remember that you can't change everything overnight. When too many things change at once, people will resist, simply because there is too much going on. Remember that it's more important to change a few things effectively than to change a lot of things ineffectively. It is also important to remember that change is most effectively adopted when there is some benefit that accrues to the "changee." If it's worth my while to change because I get some benefit from it, I will. If the benefit only accrues to someone else, then it's not worth my effort to change.

Another common mistake is to focus on changing the things that don't really matter. As you are identifying the things that your team should be doing differently, remember that you should focus on the changes that will have the biggest effect. An EA program maturity assessment is a useful technique for identifying the areas where change will have the biggest impact. When followed by an analysis of the critical constraints that are preventing the EA program from operating effectively and delivering value to the enterprise, it is easy to identify the areas where change is required and to ensure that the change efforts will be spent in the areas that provide the biggest benefit.

### Recommendations

- ✓ **When you get back to your desk:**
  - Assess the performance of your EA team in each of these best practice areas.
  - Identify the gaps between current practice and best practice.
  - Conduct an enterprise architecture program maturity assessment and critical constraints analysis.
  - Identify key areas for improvement (go for the biggest bang for the buck).
- ✓ **In two months:**
  - Assess your changes and make course corrections as necessary.
  - Remember that if it's worth changing, it's worth waiting for — don't expect miracles.
- ✓ **In one year:**
  - Reassess your EA program maturity as part of an ongoing discipline of improvement.
  - Reassess the performance of your EA team in each of these best practice areas.
  - Identify the next targets for change.

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