

# Self-Sustaining Evolution of an Enterprise Application Integration Project #189

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## INTRODUCTION

Large or small, your organization most likely has focused IT groups in various areas – supply chain, order fulfillment, finance & admin, etc. If you're an IT manager, you have probably read about EAI (Enterprise Application Integration) and maybe even implemented some messaging middleware backbone solutions. But how do you decide the path for their evolution? With limited trained personnel, how do you prioritize what to connect next? And how do you retain sponsorship and funding while you're in the growth mode?

Unlike traditional IT projects, EAI projects start with a trickle, then the dam bursts and suddenly you're in the middle of a flood of pent-up demand that you can't satisfy. Expectations and sponsor imperatives for EAI are set extremely high and everyone wants their top priority initiatives plugged into the backbone *now*. Meanwhile, you may have islands of redundant integration work proceeding independently with different sets of priorities, solving the same problems multiple times over in different ways.

When times are tough and the immediate payback of EAI isn't apparent, how do you convince management to keep investing in you? And how do you attract the necessary critical mass of connected applications when your ultimate EAI Value Proposition is far from fulfilling its promise?

Intuitively, you already know the answer to these questions; it's the same as it is for all IT projects. You have to continually communicate your Value Proposition and your progress towards achieving business objectives in such a way as to generate the momentum necessary for your project to be considered a top priority.

In the case of EAI, the problem isn't that people disagree with your long-term goals; it's that they have too many urgent short-term imperatives of their own and they see EAI as a slow and expensive solution. Fundamentally, you have to change the thinking of top management so they recognize that not only do EAI projects have significant long-term benefit, they also provide short-term advantages that are competitive with point-to-point/client-server solutions.

This paper provides EAI managers with principles and communication models to achieve the following:

1. Keep tying EAI's short-term value to its long-term value in the minds of sponsors.
2. Successfully compete with EAI's main short-term challenger, point-to-point interfaces.
3. Strategically evolve EAI so it delivers maximum short-term value en route to long-term objectives.

## A SIMPLE ARCHITECTURAL MODEL FOR UNDERSTANDING EAI

An Enterprise Application Integration (EAI) architecture provides a distributed computing framework that allows processes and systems to communicate in ways that are not possible with typical client-server solutions. EAI offers a combination of “messaging middleware” technologies that enable custom-built as well as packaged software applications to exchange business-level information in formats that are understood by each. The result is a network of software solutions that can communicate across functional domains.

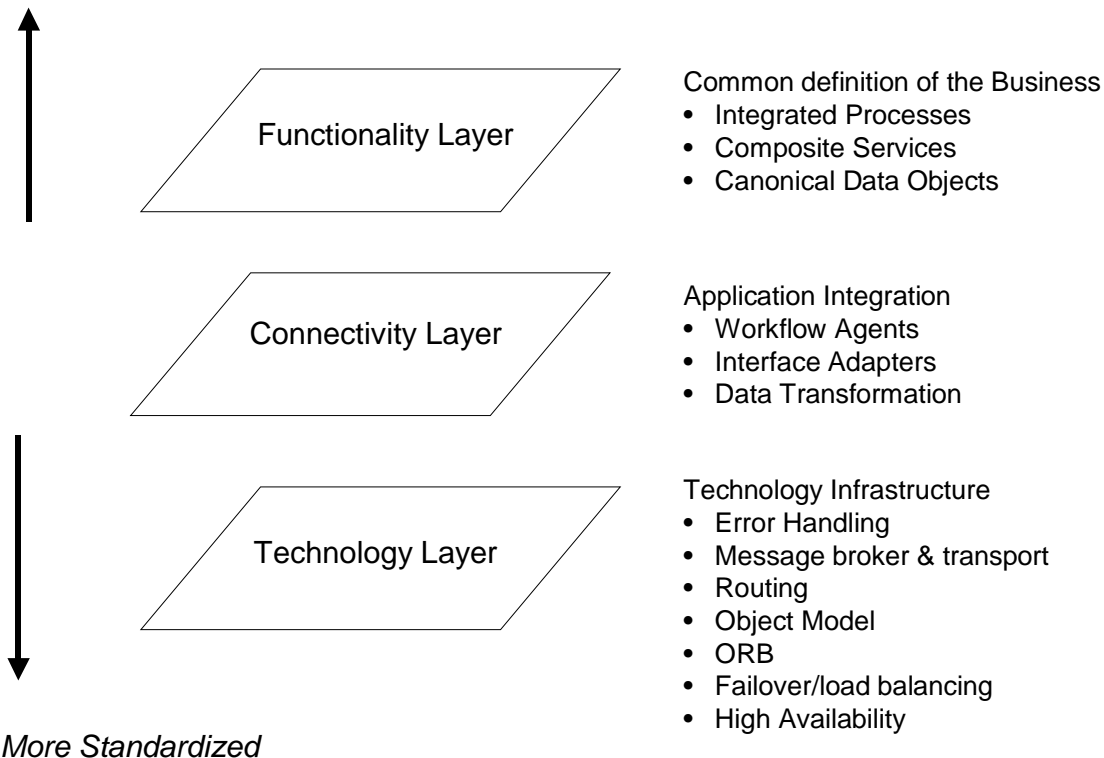
By integrating various incompatible applications and allowing real-time data exchange, EAI removes the system latency that has historically been the source of barriers to excellence. This makes EAI fundamental to the achievement of key business objectives e.g. Improving Total Customer Experience; Enabling revenue growth; Reducing IT costs; Accelerating time to market; and Enabling enterprise e-services.

Conceptually, a simple model for an EAI architecture can be pictured in three layers:

- The **Functionality** layer incorporates the processes, services and data definitions required to satisfy business objectives.
- The **Connectivity** layer is where applications are integrated for inter-application communication via the technology layer.
- The **Technology** layer provides a “messaging backbone” to enable communications between connected applications. It typically relies on commercial off-the-shelf packages for the majority of its components.

*More Business-related*

### EAI Architecture Layers



This model and these definitions are referred to throughout this paper.

## EAI'S LONG-TERM VALUE

Unlike traditional IT projects that provide significant immediate business value with their first implementation, EAI delivers installments of limited short-term & increasing collective (long-term) value. In the long run, EAI offers the following Financial, Speed, Access, Services and Real-Time Data Value Propositions:

- **Financial** – significant reduction of IT budget spent on creating and maintaining redundant point-to-point connections.
- **Speed** – significant reduction in the time new business initiatives must spend waiting for interfaces and services to be created or enhanced.
- **Access** – significant increase in access to key information about customers, products and services dispersed throughout the enterprise.
- **End-to-end Services** – significant increase in the number of services offered to customers that require integration of various “incompatible” applications throughout the enterprise.
- **Real-Time Data** – significant decrease in the number of customer interactions that are based on outdated or inconsistent data.

The bulk of EAI's value propositions, however, are not delivered until the installments achieve enough **critical mass** to transform the IT environment. As such, if the short-term benefits are not significant or noticeable enough, EAI projects are highly vulnerable to losing sponsorship before achieving critical mass.

For an EAI project, critical mass is the complete set of services, technologies and connected producers & consumers needed to achieve a specific business objective. In the Functionality layer, this means identifying the services, data objects, etc. needed to achieve the objective. In the Connectivity layer, it comprises all the applications needed for producing or consuming the data involved in the process. In the Technology layer, it includes all the architectural components required to support the other layers.

Long-term transformation of the IT environment occurs in the five dimensions outlined above. Because they are highly inter-related, progress on any one dimension contributes to the long-term Value Proposition of the others. For example, business objectives that eliminate redundant interfaces and databases will contribute to the Financial transformation of the IT environment. This, in turn, will reduce the time it takes to introduce new business initiatives (the Speed Value Proposition) and decrease outdated or inconsistent data (the Real-Time Data Value Proposition).

## EAI'S SHORT-TERM VALUE AND MAIN COMPETITION

Short-term value includes the benefits that can be realized as soon as an application connects to EAI, even if critical mass for the business objective has not yet been achieved. For short-term interface requirements, point-to-point solutions are the main competition to EAI. At a minimum, EAI can deliver the same functionality, connectivity and technology as point-to-point solutions. In addition, EAI has several short-term value propositions that make it more attractive than a point-to-point solution:

- Standards-based interfaces mean faster response to future business changes
- Fewer interfaces to maintain means lower cost
- Distributed application and data access allows opportunistic business integration across domains

To sustain sponsorship and funding, you must ensure that EAI helps achieve short-term business objectives on a regular basis that contribute to the five long-term Values. For example, for the environment-transforming goal of providing real-time data access, you could target a business objective that requires the reduction of data latency in one business area. To achieve this, you might initially connect one producer and two consumers of the total set of producers/consumers needed to achieve the business objective, and thus deliver one “installment” against the full Value.

## DEBUNKING THE POINT-TO-POINT MYTHS

Even as you continue to meet business objectives and enhance functionality, you'll be challenged repeatedly by the argument that point-to-point solutions are faster to develop, and that the business can't afford to wait for a backbone connection. The only way to compete is by demonstrating your ability to integrate applications at least as fast as a point-to-point solution. In other words, you have to debunk the point-to-point myths.

### **Myth #1: Point-to-Point Interfaces Are Always Faster And Cheaper Than EAI Connections**

In the early stages of EAI development, it might be faster to develop a point-to-point solution. However, it shouldn't take long before you are at least at parity with the time it takes to implement interfaces; once you've created standardized libraries and toolkits for developers, an EAI connection is very likely to be faster.

Implementing interfaces in both cases requires the same key activities, e.g. analysis/design, development and testing. But an EAI team's mission is to create interfaces. As such, it's incumbent on the EAI team to create a suite of services, tools and procedures that significantly decrease the amount of work required by each of those key activities. In addition, the EAI team must include analysts who are skilled at determining interface requirements. The net result is that once a suite of tools is available and the EAI team develops the necessary expertise, an EAI interface will be cheaper and faster to create.

### **Myth #2: It Only Takes A Single Point-to-Point Interface To Achieve An Objective**

In an established or mature IT environment, this is never true. In the modern era, client-server architectures have resulted in distributed systems combining multiple different legacy applications for a single business objective. The more mature and dense the legacy application population, the greater the number of point-to-point interfaces required to achieve a business objective. In contrast, connecting to EAI opens up access to any other data source or service connected to the backbone.

## **STRATEGIC PRINCIPLES FOR EVOLVING EAI TO DELIVER SHORT-TERM VALUE EN ROUTE TO LONG-TERM OBJECTIVES**

If your EAI project is going to receive ongoing sponsorship, your Business and IT managers must be in alignment on the long-term investment it will take to transform the environment. But your project must also be given the same high priority as more urgent mission-critical objectives. As such, there will be tension between the trade-offs of trying to invest in the future while delivering on today's urgent requirements.

There's an expectation of immediate payback in the minds of sponsors who are accustomed to spending dollars on traditional point-to-point solutions, but EAI projects provide different benefits. Implementation of a new enterprise-wide infrastructure requires significant changes to the usual approaches for proposing, developing and expanding software applications.

Traditional software methodologies apply to EAI implementation, but only to a degree. The usual IT project targets well-defined objectives with fairly specific requirements. Solutions are likely to fall into a single business silo. Opportunities for combining existing systems with new software are limited at best.

EAI projects are different. Inputs/outputs may be developed and implemented independently. Solutions may target the invention of new cross-enterprise business processes not possible with the old IT infrastructure. Business objectives are often high level and vague, or not easily measured. Baselines for comparison may not even exist. Technical metrics fail to demonstrate the most powerful paybacks of EAI like process automation, improved flexibility, etc. The value that EAI provides isn't immediately visible to business sponsors.

EAI implementations demand new cross-enterprise methodologies for portfolio management, sponsorship, resource allocation, and project tracking. They need to be approached initially like a start-up business with corresponding metrics, risk analysis and transition plans defined for each stage of the business lifecycle (New -> Emerging -> Established -> Mature). If an EAI project is to be self-sustaining, it's important to make sure that the appropriate expectations are set, the EAI organization is set up correctly and the required key activities demanded by this approach are staffed.

Without a set of operating principles for managing the EAI evolution, your project's sponsorship could be swept away in favor of some other, more immediate solution.

### **PRINCIPLE #1: YOU NEED SIMPLIFIED, BUSINESS-ORIENTED MODELS BY WHICH TO COMMUNICATE AND MANAGE THE VALUE PROPOSITION OF AN EAI PROJECT**

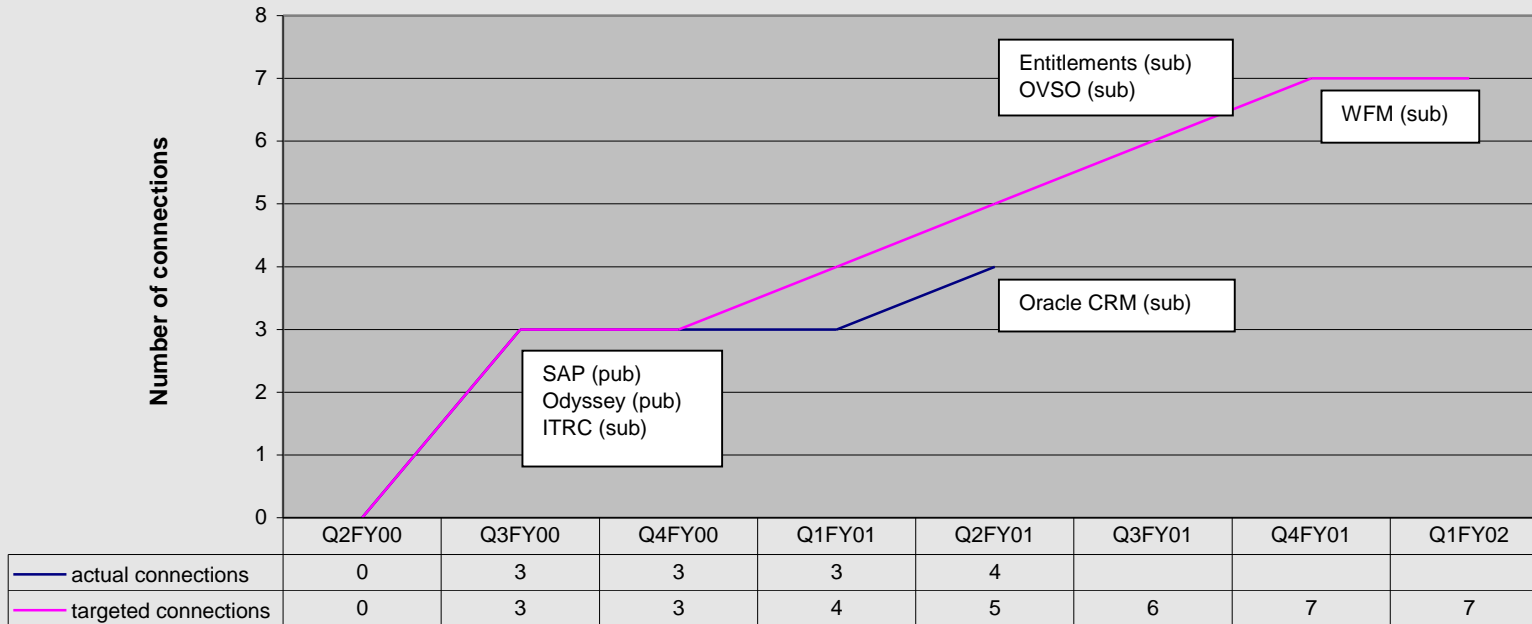
Given that it takes time to develop EAI's critical mass and you have to ensure that sponsors continue to support you in the interim, you need a simple, business-oriented model for communicating the evolution of the EAI value. The model must reinforce that critical mass is worth waiting for in the long-term, and that there's enough benefit in the short term to continue the project.

The **Value Roadmap** on the following page provides an easy-to-grasp model for representing and communicating the EAI evolution strategy and progress. It correlates a traditional business lifecycle model to the requirements on all three architecture layers for satisfaction of business objectives. The requirements are represented on a graph that lays out the plan for technology implementation, business functionality and application connectivity, clearly depicting the dependencies and business objectives. It is updated with actuals over time that demonstrate what has been accomplished so far and how much additional work is required.

## THE EAI VALUE ROADMAP

**Business Objective:** Improve customer satisfaction by eliminating contract data inconsistency between local databases  
**Solution:** Publish contract update messages when data is changed in (master) contract source systems

### Plans for connecting contract source systems (publishers) and local databases (subscribers)



### Corresponding plans for evolution of Functionality and Technology

	Q2FY00	Q3FY00	Q4FY00	Q1FY01	Q2FY01	Q3FY01	Q4FY01	Q1FY02
Functionality requirements	basic CDO data object		enhanced CDO data object		process work flow			
Technology requirements	async backbone	monitoring		async toolkit		initialization ODS		

= requirement completed

Using this model to communicate EAI progress and value is important for several reasons:

- It shows sponsors how increasing EAI's Functionality and Technology attracts connections needed to reach critical mass for the business objective
- It avoids the tendency to represent accomplishments in strictly technical terms
- It illustrates the dependencies between layers
- It demonstrates the relative progress towards the overall business objective
- It articulates the incremental value that can be leveraged by multiple consumers based on a singular producer connection

In addition, it clarifies expectations for short-term and long-term benefits by illustrating what the plans are for future delivery and what's already been implemented so far.

However, the real integration value becomes apparent if you create a summary dependency table that shows the overlap by business objective between Functionality, Connectivity and Technology requirements, and leveraged progress towards the EAI Long-Term Value Proposition. Critical Mass and Value for a given business objective are attained when the objective's targeted Functionality, Connectivity and Technology are completely implemented:

EAI Long-Term Value Proposition Roadmap				
Critical Mass Elements	Bus. Obj. A Reqts.	Bus. Obj. B Reqts.	Bus. Obj. C Reqts.	Reqts....
<b>Connectivity</b>				
app. 1	connected May -01		connected May '01	
app. 2		target Oct. '01	target Oct. '01	
app. 3	connected August '01			
<b>Functionality</b>				
func. 1	deployed May '01		deployed May '01	
func. 2		target Oct. '01	target Oct. '01	
<b>Technology</b>				
tech. 1	deployed May '01	deployed May '01	deployed May '01	
tech. 2		target Oct. '01		
tech. 3		target Jan. '02		

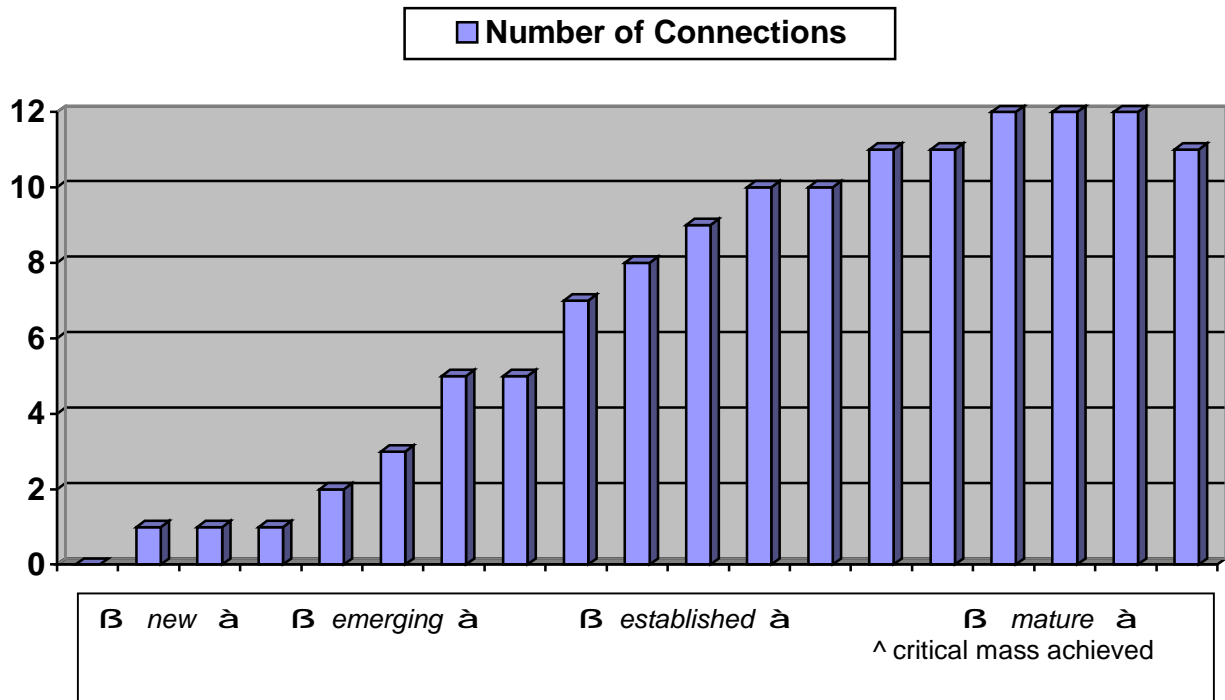
### EAI Value Lifecycle

Besides representing progress towards critical mass of Functionality, Connectivity and Technology, the **EAI Value Lifecycle** characterizes four stages of maturity - **New**, **Emerging**, **Established**, and **Mature** – that indicate the difference between short-term and long-term benefits. These four stages have different Value Propositions that apply to each of the three architecture layers, with corresponding requirements for their management. Failure to understand and articulate the Value Proposition for each stage is a sure way to slow the growth of the EAI expansion.

With acknowledgement to Geoffrey Moore's *Crossing the Chasm*, the following table depicts the Value Proposition to the prospective connecting application at each stage of EAI evolution:

STAGE	Appeals to	Value Proposition
<b>New</b>	Innovators	Get breakthrough technology tailored to meet their needs in exchange for being a high-risk development partner.
<b>Emerging</b>	Pragmatists	Get debugged breakthrough technology with reduced risk of failure; reliable, stable environment with more tools.
<b>Established</b>	Mainstream	The benefits of existing, mature EAI functionality, connectivity and technology greatly outweigh costs and risks of alternatives.
<b>Mature</b>	Add-Ons	EAI is "commoditized", easy-to-use, and low cost due to broad, highly developed, highly available technology and functionality.

A graphic representation of the Value Lifecycle Connectivity Curve over time would look something like this:



### Rising up the Connectivity Curve

Ultimately, reaching business objectives requires achieving a critical mass of connections. To successfully grow your EAI architecture, you have to have a thorough understanding of the mindsets of the different potential connectivity partners at each stage of the Connectivity Curve:

- **(New) Innovators** will be willing to put up with a very limited Value Proposition in terms of Functionality and Connectivity in exchange for extra consulting and features on the Technology side.
- **(Emerging) Pragmatists** will require more Functionality and easier-to-use Technology to be convinced to connect.
- **(Established) Mainstream** connections will be waiting on the sidelines until they see the proof of Functionality, but then they'll want to get connected very quickly and start reaping rapid benefits.
- **(Mature) Add-Ons** will be the stragglers and less strategic interfaces who stayed away from connecting while they optimized on short-term Technology benefits; they will only get connected when it would actually be counter-productive not to.

### Focus & Finish

You must also recognize that the most difficult transition will be between the New and Emerging stages, where you're trying to attract key producers and consumers to connect to the backbone even though your Technology and Functionality are not yet fully developed. The best way to speed this transition up is to target a highly leveragable, high visibility business objective and focus your resources on getting all of its Technology and Functionality requirements met first. This will also provide a showcase for the long-term benefits that you are beginning to create.



## **PRINCIPLE #2: ACCELERATE ON ALL THREE LAYERS IN ORDER TO ADVANCE STRATEGICALLY TOWARDS THE LONG-TERM VALUE PROPOSITION**

The integration architecture must be built from the bottom up; nevertheless, it's necessary to work across all three layers simultaneously. The initial release must set the foundation (bottom layer), connect key interfaces (middle layer) and deliver a service that contributes to business objectives (top layer). For the first release, the bulk of the work is in creating the infrastructure including servers, networking, foundational message brokering, etc. A few key early adapter applications can be connected to provide a service that fits into the overall long-range design for enterprise integration, but the initial value lies mainly in setting the foundation.

To ensure sustaining sponsorship and rapid achievement of business objectives, it's necessary to define and implement strategies on all three layers that accelerate the EAI evolution towards critical mass:

- **Functionality:** determine which applications have the greatest contributions to the highest priority business objectives; target their process and data requirements for early development
- **Connectivity:** buy or build easy-to-use, highly leveragable components and toolkits for connecting partners
- **Technology:** observe generally accepted standards for integration; strive for vendor-neutrality to avoid being buffeted by changes in approach, strategy or implementation.

The Value Lifecycle and Long-Term Value Roadmap will help you prioritize and target which new connections to pursue, and understand what the resistance to connecting might be. For example, if the Technology layer is immature, the prospective connecting partner might be concerned about availability or impact to their core application's online performance. If the Connectivity layer is under-developed, they might assume it will take too much of their time to build an interface to the backbone. And if the Business layer is too sparse, they may decide it's not worth the effort until more services are available. It's important for you to understand all these concerns, and to either communicate how your solution addresses them or target enhancements to remove them.

## **PRINCIPLE #3: CROSS-DOMAIN INTEGRATED PRIORITIZATION FROM SENIOR MANAGEMENT IS REQUIRED FOR OPTIMUM EXPANSION**

Portfolio Management for an EAI project is especially challenging. Usually, business and IT sponsors define priorities within their own silos and drive project schedules based on their own objectives. Enterprise Application Integration projects force the question of how to prioritize across domains and how to coordinate dependencies between projects.

Your company probably doesn't have an overall integration strategy, doesn't have an enterprise-wide prioritization process for defining integrated Plans of Record (PORs) and will be reluctant to create a centralized governing body for dictating priorities; although everyone will be in relative agreement about the overall business objectives, they won't want to sacrifice their projects to work on yours.

An analytical approach to prioritization is useful for normalizing the process across business domains and settling disputes. It also provides a clear definition of expected value, which can then be used for evaluating actual results.

One such prioritization approach involves creating a matrix of **Strategic Business Drivers** (e.g. Operational Excellence, Business Agility, Growth, Customer Satisfaction, etc.) vs. **Success Measures** (e.g. Reduced Time to Market, Leveragability, Legacy Application Obsolescence, etc.). Start with the first Strategic Driver and for each Success Measure, indicate on a scale of 1-10 how applicable it would be as a measure of the achievement of the Strategic Driver. Repeat for all Strategic Drivers. When you have filled in all cells for all Success Measures, add them up to get a weighted value that indicates how well each measure correlates to all Strategic Drivers combined. Once you have the weighted measures, use them to drive the prioritization for your potential projects in a similar fashion: list the potential projects and indicate on a scale of 1-10 to what degree each project contributes to achieving the measures. Multiply the assigned value by the predetermined weight of the measure and sum the values for each project. Use the sum to drive the order in which to pursue the potential projects.

The following tables illustrate how this process works:

	Operational Excellence	Business Agility	Growth	Customer Satisfaction	Weight x .1
Reduced Time to Market	9	8	9	7	3.3
Leveragability	3	5	0	6	1.4
Legacy App. Obsolescence	3	9	0	7	1.9
etc.					

In this example, 'Reduce Time to Market' has been evaluated to be the greatest measure of the Strategic Business Drivers, so it will be given the most weight when prioritizing potential projects.

	Reduced Time to Market (3.3)	Leveragability (1.4)	Legacy App. Obsolescence (1.9)	Sum
Potential Project #1	5	4	1	24
Potential Project #2	2	7	6	27.8
Potential Project #3	7	3	5	36.8
etc.				

In effect, this sum of values for the Measures becomes the Value Proposition for that particular project. After the projects are sorted according to their sums, apply other constraints such as resource requirements, cross-project dependencies, timelines, etc. to come up with a fully integrated POR. When the projects are completed, their actual results should be evaluated according to the Success Measures to see how well they delivered on the Value Proposition estimated by the prioritization process. This process can also be re-used for resolving conflicts between businesses when priorities shift or dependent projects get cancelled.

**PRINCIPLE #4: IF THERE IS NO INTEGRATED PRIORITIZATION FROM SENIOR MANAGEMENT, USE A DEFAULT PRIORITIZATION**

If your senior management has not established a high-level integrated set of priorities, you'll be compelled to use your own judgment for deciding how to proceed with Functionality, Connectivity and Technology implementation. You'll need to define a rationale that incorporates your best understanding of business objectives, coupled with your resource bandwidth and skillset and the stage of maturity of your EAI evolution. Given a good understanding of these factors, your decision should be based on what's most leveragable and most likely to succeed. You can characterize this in terms of the three layers:

- **Functionality:** what contributes more to achieving a greater number of business objectives?
- **Connectivity:** which are the "heavyweight" applications that have the broadest impact on the organization?
- **Technology:** which teams are technologically ready for the new challenges, as characterized by the stage of your technological evolution?

In addition, you must assess which applications have the strongest sponsorship for migrating to a new architecture and the greatest risk tolerance appropriate to the level of your evolution.

**The Critical Nature Of Your First EAI Project Selection**

For your first project, however, the prioritization principle is clear: you should migrate a non-mission critical process with low complexity. Ideally, you should try to select a legacy process currently implemented with some technology that you can fall back on, like a batch-mode update that occurs on an infrequent basis. In this way, you'll have a safety net that can remain in place while you implement your first limited solution. This is important because your first solution will arguably be the most difficult, requiring you to deploy new servers, a new integration broker infrastructure and new support models in addition to the new software. You'll have learning curves to surmount in all directions, and predictable unforeseen problems to be dealt with.

## **PRINCIPLE #5: SUSTAINING DIRECT SPONSORSHIP DEPENDS ON SETTING EXPECTATIONS CORRECTLY**

### **Creating a Partnership With Sponsors In Competing Against Point-To-Point Solutions**

Your greatest threat to sustaining sponsorship comes from the competition posed by the point-to-point alternative. As long as your potential connections continue to invest in point-to-point solutions, EAI's ability to deliver on its value is at risk. And if you diminish your credibility by overstating the interim benefit of your results, you'll drive people away and lose your funding. You must be realistic about the interim value of EAI connections, and evangelistic about the need to keep investing for the long-term. In particular, you must get your IT sponsors aligned behind demanding that all new strategic interfaces should go through EAI.

### **Managing Sponsor Expectations for EAI Investment**

The Value Lifecycle model is useful for setting sponsor expectations with regards to EAI investment.

For a **New** EAI startup, the short-term goal is to establish an initial infrastructure presence and develop the minimal set of high-level processes required for support. At this point, sponsors should be clearly informed that this is pure investment without return. The priority is quick-to-market with minimal functionality.

As the **Emerging** stage is reached, the goal is to capitalize on the early deployments and refine existing processes, while attempting to speed up connectivity with easy-to-use toolkits. The priority is to increase the number of connections to make progress towards achievement of long-range goals. The Value Lifecycle status also has predictive qualities. If you identify the entire "market" of applications that will need the services you provide, you can measure the progress towards getting these applications connected.

As you increase the number of connections, your Value increases and you can expect more of the Mainstream population to decide they're ready to jump on the backbone. By the time the **Established** stage is reached, sponsors should realize that the architecture is cost-neutral due to redirection of IT budget away from point-to-point interfaces and towards the backbone.

When critical mass is achieved and the backbone moves to the **Mature** stage, sponsors should see that the architecture is starting to decrease the IT budget due to a reduction in costs for interface development, support & maintenance. In addition, there should be clearly demonstrable examples of faster implementation for new business programs, and greater flexibility of the IT infrastructure to support business objectives.

### **Essential Guidelines For Sustaining Sponsorship**

- Never overstate interim benefits as being equivalent to attainment of ultimate business objectives
- Provide the big picture/vision state so sponsors can clearly understand how close or far you are to achieving final objectives (this is also helpful for getting priorities adjusted as needed)
- Deliver a series of quick to market MVPs (Minimum Viable Products) to create interim short-term value on the way to critical mass and full long-term benefits
- Use the Full Value Roadmap to communicate interim value in business terminology, related to ultimate objectives; avoid describing short-term achievements strictly in terms of technology
- Be honest when things aren't working; be quick to deliver bad news and to escalate issues of scope, schedule or resources

## **PRINCIPLE #6: SUSTAINING DEVELOPMENT PARTNER (INDIRECT) SPONSORSHIP REQUIRES EXCELLENCE IN PROGRAM MANAGEMENT AND COMMUNICATIONS**

Besides making sure that your business and IT sponsors are aligned with EAI, you must also manage the expectations of the sponsors of your internal development partners. Your success is dependent upon your ability to integrate not only applications but also disparate processes, methodologies, lifecycles, and styles of operating. It is absolutely essential to develop and retain personnel on your team who excel in all aspects of software development and implementation.

- Cross-lab and cross-domain technology integration projects require strong core competencies in Program Management, with rigorous processes for managing changes to Scope, Schedule and Resources.
- All Project Management work products (communications, work breakdown structure, issues list, change requests, etc.) should be maintained in an easy-to-access knowledge base.
- From the beginning, try to template-ize everything you create. You'll need to have repeatable PM processes and work products to use again and again as the speed of new connections accelerates.
- Start projects by doing a level-set on differences in methodologies for software development. Review and reiterate processes for all new development partners. Never assume that your processes are self-evident or automatically accepted.
- Define common models for integration of Testing, Support and Deployment processes (they are likely to be different; you must all agree on acceptable shared processes).
- Define and agree on communications models targeted to different audiences; include frequency of communications, media, contributors.
- Expect some dropouts due to shifting business models and priorities; keep the "pipeline" of new connection requests stocked but don't over-promise capabilities.

### **PUTTING IT ALL TOGETHER**

There is little question that implementing an Enterprise Application Integration framework is key to transforming IT environments. The greatest challenge to an EAI manager is to deliver sufficient short-term value to sustain sponsorship for the long run.

The initial EAI implementation will be a large effort with little visible benefit other than establishing the infrastructure. After the infrastructure is in place, the main challenge will come from competition with point-to-point interface providers who claim to be able to deliver a solution faster and cheaper. The key to winning this battle is to enroll senior managers into believing in the long-term value of EAI so much, that they are willing to wait while you grow the functionality, connectivity and technology necessary to deliver visible short-term benefits. At the same time, EAI must develop the suite of tools and expertise needed to build EAI interfaces faster and cheaper than the competition and thereby attract more connection partners.

Once EAI develops a track record of contributing to business objectives that advance EAI's long-term Value Propositions, the mainstream connections will want to get involved and the challenge will be to satisfy the accelerating demand for integration. To succeed at this stage, the EAI team must be ready with repeatable processes and reusable components that provide self-service capabilities, and significantly reduce the amount of work required for a development partner to benefit from EAI.

Ultimately, EAI's promise to transform the IT environment will sustain the visionary sponsors. But getting to that point requires excellence in communications, coordination, project management, delivery of short-term benefits and anticipation of the requirements of integration partners. The six principles and the models outlined in this paper are essential for achieving these purposes.

"If you don't invest in the future, you won't have a future."

"EAI is not a sprint, it's a marathon."