



Going Beyond IT ROI—Estimating the Business Value of Process Integration Solutions

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Executive Summary

Whether facing slipping competitive advantage such as increasing costs or smaller margins, a merger or acquisition, compliance requirements such as HIPAA or T+1, or supply chain problems, integration of applications and people can help overcome these issues and yield a quantifiable return on investment. Integration is the challenge of getting independently developed application systems to work together—to cooperate and share information. Integration can even streamline and automate business processes, improving efficiency and freeing employees to focus on value-adding activities. In the end, integration can reduce the costs and speed of doing business and allow the enterprise to focus on core competencies.

However, before launching an application integration project, Gartner recommends that stakeholders ask and answer business-related questions. Quantifying the business objectives and identifying the project elements in the planning phase vastly increase the likelihood of success. The answers will determine whether the project is cost-justified and, more important, influence how the project is implemented.

After the business questions are answered and the project is clearly scoped, determining the best approach to integration is simpler. Gartner identifies two possible approaches: traditional and systematic. In the traditional method, the solution is hard coded from scratch. In contrast, the systematic approach leverages integration software with prebuilt functionality. Aside from the savings in implementation time, the systematic approach more accurately achieves the business objectives while yielding higher investment return. This is partly because a broader group of departments, rather than just the IT department, helps plan and manage the integration project. Within that systematic framework, the use of integration brokers brings particular advantages, including reduced labor and maintenance costs.

In today's economic environment, justifying investment in integration software requires a compelling business case, backed by a well-grounded return-on-investment (ROI) model. This preparation will also ensure the successful implementation of the project later. The purpose of this paper is to provide a step-by-step approach to developing a business case for investing in integration software.

Two Sets of Questions

It is Gartner's premise that integration as a standalone project is, at best, ambiguous in delivering business value to a company. Almost all integration projects benefit from being evaluated in the context of the business process they are trying to improve. Hence, to evaluate the business case for application integration, two different sets of questions must be asked. The first set concerns the costs and benefits of the new business process supported by the application integration effort. The second set addresses the best approach to integration. Following is the first set:

- What will be the dollar value of the benefits that will be generated by this streamlined or enriched business process?
- How much will it cost the enterprise to implement this process and the integration that it requires?

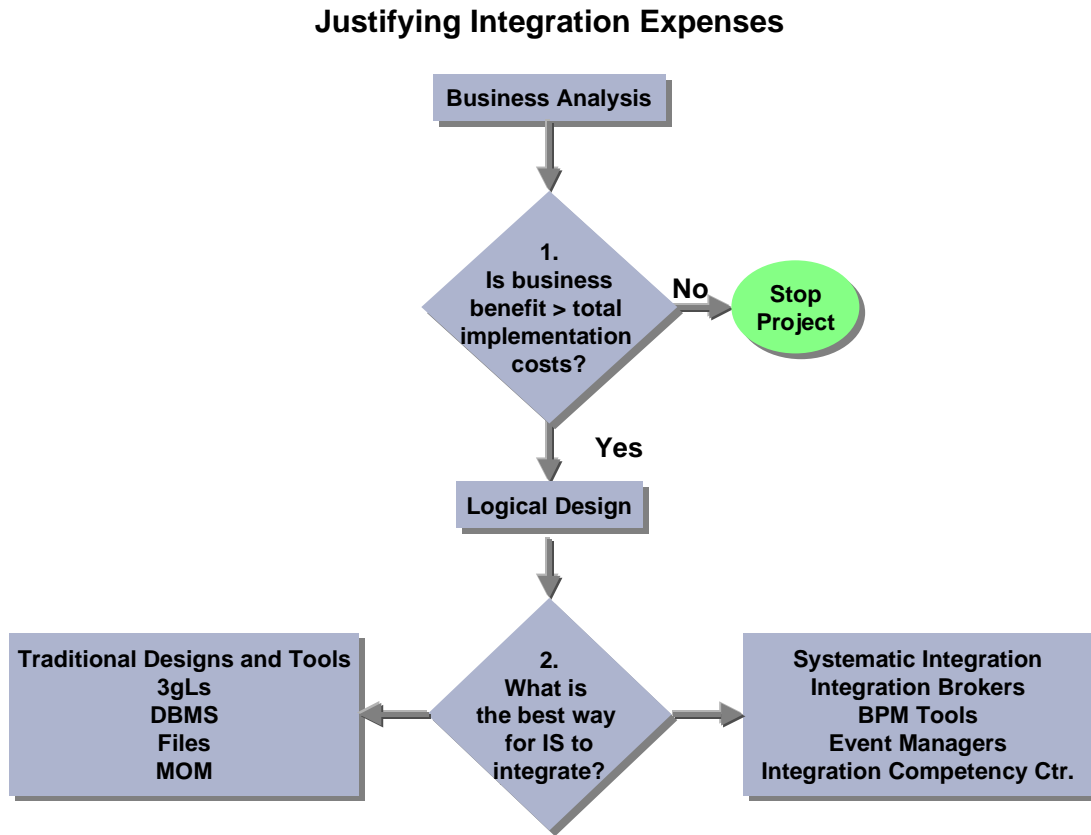
The purpose of these questions is to determine whether the benefits outweigh the costs.

This leads to the second set of questions, which compare the different approaches to integration:

- What will be the cost of the integration effort if traditional development techniques, such as third-generation languages (3GLs), database management system (DBMS) or message-oriented middleware (MOM), are employed?
- Will the cost be lower or the benefits greater if new integration middleware products, such as integration brokers, Web services middleware or business process management (BPM) tools, are used?

Figure 1 highlights the central roles these questions play in the integration broker decision-making process.

Figure 1. Justifying Integration Expenses



Source: Gartner, 2003

In the following two sections, we will briefly examine each of these question sets further, describing the issues involved and approaches to take in answering these questions. To begin, the next section describes the typical business benefits achieved from integration. Since each situation is unique, the project manager should use these ideas as a starting point for a deeper exploration of benefits relevant to his specific situation.

Determining Business Benefit

Every project should start with an examination of the business process to be improved and, at the core, should either save money or enable new revenue. In these tough economic times, most of the projects we see are justified primarily through cost savings and enhanced by value in improved customer service, reduced risk, enablement of a long-term business agility strategy (e.g., regarding mergers and acquisitions) and, in some cases, the opportunity for a more flexible IT infrastructure.

That said, it is Gartner’s opinion that all too often the justification effort focuses only on efficiency considerations, because that seems easiest. But efficiency is only one driver. If higher-level strategic or tactical drivers are present, they will usually be far more important than efficiency and should be the drivers of the business case. Technical people often mistakenly think that business executives only understand “dollars and

cents.” But application integration may be the key to making an acquisition work, leapfrogging the competition or getting full value from a multimillion-dollar customer relationship management (CRM) initiative.

What is important is to focus on the business process in question and, within that, clearly establish the expected benefits—whether quantifiable or not.

In our experience, some of the common business benefits of application integration include:

- Automation of manual tasks, such as re-keying data from one system to another, to increase employee efficiency and speed of processing and to reduce human error. Process automation also frees employees to focus on value-adding activities. In Gartner’s experience, the benefits of reduced errors usually outweigh the improvement in efficiency and productivity. Gartner recommends that an automation evaluation examine the likelihood of reduced errors and cost savings that may result.
- Automation of the exception handling processes to minimize the burden on employees by only involving them when absolutely necessary, such as when an extraordinarily large order with a short deadline is received. This means even “normal” exceptions should be automated so personnel are only required for extraordinary exceptions. Since the cost of handling an exception can be several times the cost of handling an errorless transaction, automation of exception handling can yield substantial savings.
- Increased competitive advantage through faster, more efficient and more adaptive business processes. The ability to do the same thing faster than the competition means greater capacity to do more (e.g., accept more orders). The ability to do this more efficiently allows the company to either reduce prices to increase order volume or retain the higher margins for reinvestment in the business. And, finally, the ability to rapidly change the automated processes provides the agility to immediately react to dynamic market conditions while competitors slowly change course.
- Increased revenue by being able to serve more customers faster and cheaper (due to automated processes) and better (due to greater visibility into the business processes and increased focus on the company’s core competencies). Some understanding of the competitive environment is important when evaluating the impact of improving the business process. Are customers making decisions based on the outcome (e.g., fast order fulfillment) or the visibility of the process (e.g., knowing where their order is at any time)? By focusing the integration effort on the areas of greater value, revenue can be substantially improved while costs are reduced.
- Improved supply chain efficiency and effectiveness by automating processes involving trading partners. For example, automation of your inventory management process can result in reduced inventory requirements in your own

warehouses, fewer errors from manual handling of data, and less personnel time required to manage and track inventory. In addition, the company gains greater visibility into the process, enabling longer-term inventory planning. As another example, automation of your order management process shortens order fulfillment cycle time, which improves customer satisfaction and permits the company to accept a higher volume of orders.

- Improved ability to handle company expansion and growth, such as from mergers and acquisitions. With your systems already integrated, the company can more easily tie other companies' systems into your own. As a result, the pain of mergers and acquisitions is dramatically reduced and the benefits driving the merger or acquisition more quickly realized.

Whether this list captures your benefits or you have developed your own, the next step is to clearly and precisely identify the actions that will lead to the desired benefits. For example, if the desired benefit is less manual data re-entry, the actions are integration of the systems involved and automation of the processes so that the data is propagated to the appropriate systems.

With the actions clearly identified, it is much easier to have a dialogue with the IT organization and with potential vendors to begin estimating the costs. At this point, precision of the costs is less important than identification of the integration tasks to be accomplished. Therefore, estimated numbers for the costs should be good enough to make an evaluation as to whether it is worth investing in the project.

If, after doing this work, the organization is still interested in the project, we proceed to evaluating the technology alternatives.

How to Integrate—Deciding Among Many Alternatives

Once an organization decides to undertake an application integration initiative, deciding how to do it becomes a central consideration. Budget constraints, IS core competencies, and organizational politics are just some of the factors that play roles in determining how application integration efforts will be executed.

Among the questions an organization must ask in determining an approach are the following:

- Who governs the project?
- How will we create the interfaces to the various systems and applications?
- How will we handle business processes?
- How will we implement the overall integration logic?

Gartner recognizes two possible approaches to answering these questions, traditional and systematic, as outlined below:

Table 1. Approaches to Integration

	Traditional	Systematic
Supervision	IT project team	Integration competency center
Tools	3GL coding, gateways, screen scrapers	Integration brokers, adapter-building tools, off-the-shelf adapters
Business Process	Embedded in applications	BPM software
Design	From scratch	Leverage packaged integrating processes (PIPs)

One of the major problems with integration projects is that the project is poorly scoped. The business managers describe what is needed and the IT department does its best to create that solution. Since the business managers were not closely involved in the design, the implementation does not meet their expectations. They then submit a series of change requests to the IT department. The central problem is lack of communication. The solution is improved collaboration between the IT personnel and business managers during the design phase.

Under the traditional approach, the application development team handles integration, and the business managers play a minor role. The problem described above will likely occur in this situation.

In contrast, the systematic approach requires a partnership between the application development team and the business managers, who own the business processes. This mixed group of IT personnel and business managers comprise the integration competency center. With the project manager, the integration competency center defines the project scope. The value of the mixed group comes from the separation of roles. The business managers are responsible for clearly describing the business processes and desired results of the integration; the IT personnel are responsible for integrating the applications and automating the processes. This collaboration ensures the project is accurately scoped within the limitations of the technology to successfully achieve the business goals.

The traditional approach uses a 3GL, coding and other conventional tools (e.g., ETL tools, file transfer and screen scrapers) to create interfaces, whereas the systematic approach uses integration middleware (e.g., integration brokers and adapter-building tools). The temptation is to use in-house skills to develop everything. It is a classic decision and often faces internal organizational inertia; it is generally known as the “not invented here” problem and is characterized by hypercritical evaluations of any vendor. While it is true that any application can be written in assembly language, we generally agree that there are higher-level tools that vastly accelerate the job. This holds true with integration middleware tools as well.

In the best-case scenario for traditional practitioners, business processes are embedded in the applications. In contrast, the systematic method employs BPM software. When integration logic is mixed with the applications, change is difficult. Changes to the applications can damage the processes and changes to the processes can have unexpected effects on the applications. Hence, BPM software tries to separate the process and application layers so the two exist more independently. This issue goes directly to the expectation of change and complexity in the required solution. It is Gartner's experience that eventually all business processes change, regardless of the current expectation of simplicity. If the process is embedded in multiple applications, the company will be less able and may even become more resistant to change. Through BPM software, the systematic approach overcomes this problem.

About PIPs

Early in middleware development, companies explored the notion of pre-packaging components of an integration, such as prebuilt transformations and simple data processes between applications, to accelerate the tasks of integration.

Subsequently, other companies evolved the concept to a much higher value proposition where higher order capabilities have been pre-packaged to solve specific business level problems (as opposed to data level). In these PIPs, also called Collaborative Applications, vendors offer long-running, complex business process definitions such as HIPAA Claims Processing Compliance processes for the Healthcare industry.

Most recently, one company added semantic transformation based on sophisticated vocabulary management ("taxonomy" or "ontology") to these Collaborative Applications, or PIPs.

Finally, for overall integration logic, the traditional approach designs it from the ground up; in contrast, the systematic methodology may leverage packaged integrating processes (PIPs). Based on best practices from real-world customer implementations, PIPs can be simple, such as synchronization of data between Siebel and SAP applications, or complex, such as a long-running order management process involving multiple applications. The advantage is that the PIP is prebuilt and can be more quickly modified to perfectly match a specific situation or to accommodate new circumstances. For example, adding a new customer to an order management process simply requires reuse of the existing process for other customers. The traditional approach requires substantially more time and effort as well as coding.

Systematic Integration

A systematic approach begins with the recognition that integration is not just an aside to an application but a fundamentally different kind of development task.

Though not all are necessary for every situation, the four potential aspects of systematic integration are:

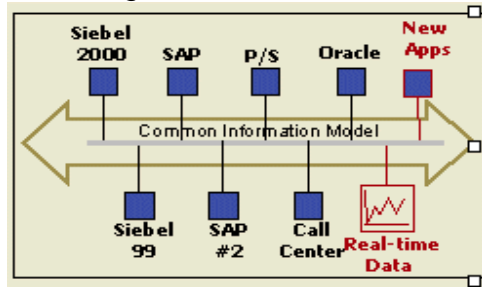
- Integration competency center, which spans across multiple applications and business units so there is one central group for integration tools and skills. The integration competency center should be comprised of the IT personnel involved in implementing, changing and maintaining the integration and the business managers who own the business processes. With the project manager, the integration competency center defines the scope of the project.
- Integration broker, adapter-building tools and off-the-shelf adapters.
- BPM tools, which explicitly document the business processes. This makes them better understood, more easily tuned, and more easily communicated among business and technical people.
- PIPs, which provide a rapid solution to common integration problems. In addition, PIPs can be modified to perfectly match the business needs.

In our view, the key advantages of systematic over traditional integration include:

- Faster deployment by using pre-built components and graphical user interface (GUI)-based tools.
- Less programming expertise since GUI-based tools reduce the amount of coding required.
- Reduced development costs since fewer developers are needed.
- Reduced maintenance costs through the use of GUI-based administration tools.
- Easier to change through GUI-based tools as new business requirements arise, new applications are added, and so on.
- More flexible and scalable architecture able to evolve with your business.

Additional benefits can be achieved if the integration broker uses a common information model. With the common information model, the customer can select from several available PIPs, each designed to address a specific integration problem. The benefits include those of normal integration brokers and the following:

- Minimal deployment effort and time since most components are prebuilt.
- Rapid time-to-market due to extremely fast implementation.
- Immediate resolution of specific, common integration problems.



Of course, the degree of realized benefits depends on the amount of customization to the PIPs. Based on real-world best practices, PIPs attempt to satisfy the business's needs with minimal modification. Since all changes require time and effort, business managers should seriously consider which modifications are necessary and at what cost in labor by developers.

Developing a Business Case and ROI Model for Integration Brokers

In the current slow economic climate, the advantages of integration brokers, even using a common information model, may not be sufficient to prove the business case to invest. Many companies are still trying to capture returns on investments that they made on enterprise applications in the late 1990s. Companies are also in the belt-tightening mode to survive the current slow economic environment. In this scenario, companies need to see a solid business case for the investment and quantitative ROI numbers to be convinced of the validity of such investments.

The remainder of this paper describes how to build the optimal business case for investing in integration broker solutions and describes the appropriate ROI model to support your case.

The Fundamentals

A robust business case is based on understanding of:

- The vision of the new investment, including expected business benefits
- The requirements of concerned parties, stakeholders and allies.

A successful business case for a large integration broker investment should begin with the “vision” for the investment. The vision consists of a short statement of the business situation driving the integration project and the rationale for the investment. The vision should be as specific as possible. Here’s an example:

Business Situation: Our online sales are stagnant due largely to the delays caused by batch processing of online quote requests and orders. We are losing sales to competitors able to process requests and orders much faster.

Rationale for Integration: To enable real-time processing of individual quote requests and orders, we must automate our online quotation and ordering processes and integrate the related applications.

In addition, the vision must be developed collaboratively between the IT department and the business managers who approve the budget and have a stake in the success of the integration project. It is imperative that the business managers play a leading role in this effort. Any IT project is more likely to succeed with a strong vision statement that is supported by the business sponsors.

Following are examples of common vision statements:

Table 2. Sample Vision Statements for Integration Projects

Business Driver	Business Situation	Rationale for Integration
Competitive Advantage	Our online sales are stagnant due largely to the delays caused by batch processing of online quote requests and orders. We are losing sales to competitors able to process requests and orders much faster.	To enable real-time processing of individual quote requests and orders, we must automate our online quotation and ordering processes and integrate the related applications.
Mergers and Acquisitions	Due to the recent merger, we now have duplicate order management, inventory, production, CRM, and billing systems and related processes. Attempts to coordinate activities across the organization result in increased processing times, errors and employee involvement. Furthermore, access to current, complete information across the new enterprise is all but impossible.	The duplicate applications must be integrated to ensure real-time sharing of information between systems and the processes that access them. Through integration, duplicate processes must be combined or modified to complement each other and take advantage of the larger pool of resources. Human involvement should be minimized by automating the processes but including exception management for special conditions.
Regulatory (e.g., HIPAA or T+1)	New regulations require us to process transactions in less time and with fewer errors. We will be fined heavily for non-compliance.	To achieve compliance, we must streamline and automate our processes. Integration of our systems will provide visibility into our processes and enable us to model, streamline and automate them.
Supply Chain	Our inventory levels are too high, and inventory management and tracking are demanding more personnel time.	We must integrate and automate the inventory, production and order management systems and processes within our enterprise and with our partners. This will provide real-time, complete visibility into all of these systems. As a result, we can better match the incoming orders with what is in inventory and what is being produced. The increased visibility will also improve inventory and order tracking. The bottom line benefits are reduced inventory levels and personnel time required to manage inventory.

Business Driver	Business Situation	Rationale for Integration
CRM	Despite our investment in CRM software, customer satisfaction and loyalty have not improved. To respond to customer inquiries better and faster, our customer service personnel and the self-service portals must have accurate, complete information on each customer. However, our CRM application cannot access the data in other critical applications such as the order management system.	To provide current, complete information to our customer service personnel and self-service portals, we must integrate our CRM application with the order management and related systems and automate the processes that bring information to the CRM application in real-time. As a result, we will be able to respond to customer inquiries better and faster, and customer satisfaction and loyalty will improve.

Once the vision and expected business benefits of the integration project are identified, the project manager has to understand other details, such as:

- The organizational level at which the project is being implemented
- Business stakeholders
- Desired outcome of the project, according to business stakeholders, and how it aligns with the company’s business objectives
- Allies
- Barriers.

This information provides the context for the project and the expectations for the results. The responses will also identify the hurdles that must be overcome. The data should be gathered by interviewing concerned executives and business managers. The following table summarizes the questions that should be answered.

Table 3. Questions to Ask Prior to Developing a Business Case

Topic	Comment
What is the organizational level?	For what level of the business should we be planning (e.g., enterprise or business unit)?
What is the desired outcome of the project? Does it align with the company's business objectives?	The desired outcome should relate to the vision of the project and represents the primary benefits sought. To answer these questions, interview the business stakeholders and other business leaders.
Who are the business stakeholders?	Identify the business processes that would benefit from integration and which support the vision of the project. Interview the personnel involved in those processes.
What are the supplemental benefits?	The primary benefits are identified in the vision statement. The supplemental benefits are additional benefits that can be achieved by the integration project. Interview executives and ask them. Study the processes and applications involved.

Topic	Comment
How tangible are the benefits? Can I quantify them?	Benefits can be tangible or intangible. Tangible benefits can be quantifiable or non-quantifiable. All are real.
Who are the potential allies?	Understand which business leaders are most likely to support this initiative—and why.
What are the barriers?	Barriers may be many, including organizational and governance problems or certain individuals.

The ROI Model

Once the vision statement has been developed and the business benefits, key stakeholders and other organizational issues identified, the project manager has to show the ROI.

The ROI analysis should be able to determine two key factors necessary for management to make its decision:

- Cost-benefit analysis of the business processes supported by the integration project
- Evaluation of alternate integration solutions.

Determining the ROI of an integration broker is a multistep process:

- Identify the core business processes
- Gather data
- Quantify the costs and benefits
- Consider various integration solutions
- Interpret the results.

Step 1. Identify Core Business Processes

Integration broker solutions are implemented to integrate disparate business processes within an enterprise. This streamlines business processes and could lead to lowered cost and increased revenue. The key to determining the ROI of any integration project is identifying the business processes that are to be integrated and streamlined. The business stakeholders in collaboration with the project manager should be responsible for identifying these processes.

The table below provides examples of key business processes in a CRM integration scenario, one of the more commonly implemented integration projects. Actually, many of the processes also apply to other situations, such as supply chain management and mergers and acquisitions.

Table 4. Sample Core Business Processes in a CRM Scenario

CRM Process	Challenges
Product Rollout	Improve the speed and quality of this process by removing obsolete products and pricing and adding new products and pricing rapidly to all catalogs. Integration can achieve this by propagating these changes to all catalogs in real-time.
Order Fulfillment	Increase customer satisfaction by providing accurate product lead times. To do this, current, accurate production and inventory data must be made available to customer service and sales personnel. Integration of production and inventory systems can accomplish this.
Order Tracking	Improve customer satisfaction by providing current, accurate order status information through self-service portals and customer service personnel. Making this information available requires integration of production, shipping and CRM systems.
Invoicing	Reduce cost, improve payment collection and increase customer satisfaction by providing a consolidated invoice to customers. This requires integration of the company's billing systems.
Customer Inquiry Response	Improve customer satisfaction by increasing the speed and quality of the response to customer queries. This requires the availability of consolidated, accurate and current customer data through self-service and customer service portals. Gathering and synchronizing this data and propagating changes in one application across the entire system in real-time requires integration.
Cross-Selling and Up-Selling	Increase the number of cross-sell and up-sell opportunities by providing customer service and sales personnel with customers' current, accurate purchase histories. Integration of all billing systems can achieve this.

Step 2. Gather Data

Another crucial step to the ROI model is the gathering of data to populate the model itself. Collecting accurate data is crucial for getting good ROI results. There are three main types of data that are required for populating the model.

- Data on “fundamentals”—this includes company data such as number of employees, pay rates of concerned parties, number of customers, etc.
- Cost data—this includes both direct and indirect costs of not using an integration broker.
 - Direct costs could include hardware, software and services costs required to maintain the status quo of disparate applications and databases. These costs could come from more frequent server upgrades, purchase of several copies of software across the enterprise, support and maintenance, implementation and deployment, and training and personnel.
 - Indirect costs should include the costs incurred from longer processing times. Disparate systems bring about inefficiencies, which can result in millions of dollars in lost productivity. It is important to consider this when calculating the total costs of not having enterprisewide integration of applications.

- Opportunity costs/benefits—Opportunity costs are actually the benefits of providing application integration. These benefits could be an increase in sales or productivity due to quicker turnaround of information. To calculate the benefits, the existing sales revenue and costs related to the processes must first be determined. Then, the changes in revenue and cost due to integration must be estimated. These changes are the opportunity costs/benefits of integration.

Costs and benefits can be one-time or recurring, so it is important to list them appropriately. Following are examples of cost categories.

Table 5. Cost Categories

Cost Category	Description
Software	All software costs related to the integration must be included: <ul style="list-style-type: none"> ■ License fees for the product ■ License fees for any required support software ■ Upgrades of existing applications if needed for the integration
Hardware	<ul style="list-style-type: none"> ■ Additional servers to support the integration software ■ Network hardware purchases or upgrades
Support and Maintenance	<ul style="list-style-type: none"> ■ Annual cost for support and maintenance of software and hardware
Implementation Costs/ Costs for Deployment	<ul style="list-style-type: none"> ■ Internal and external consulting fees ■ The time expended by any personnel involved in planning and managing the project should also be considered
Training	Staff will need to be trained to use and maintain the software. Also, as personnel change or new users are added, additional training will be necessary. Training costs should include: <ul style="list-style-type: none"> ■ The trainer’s cost ■ The cost for using the facility ■ The trainees’ time

In the context of the earlier CRM integration scenario, the following table lists a few examples of opportunity costs, or benefits of integration.

Table 6. Sample Opportunity Costs in a CRM Integration Solution

Benefit Category	Description
Customer Management	<ul style="list-style-type: none"> ■ Increase in sales due to more up-sell and cross-sell opportunities, which result from the availability of comprehensive, real-time customer information to customer services and sales personnel. ■ More repeat orders and higher margins per order due to improved customer satisfaction and loyalty, which result from faster, higher quality response to customer queries via self-service portals and customer service personnel. ■ Reduction in customer service personnel due to lower call volume and shorter calls, resulting from the availability of comprehensive, real-time customer information to self-service portals and customer service personnel.
Partner Management	<ul style="list-style-type: none"> ■ Increase in sales due to greater visibility into the supply chain process and partners' systems, which provides insight into inventory and current lead times.
Catalog Management	<ul style="list-style-type: none"> ■ Increase in sales due to faster rollout of new products and pricing to catalogs. This results from integrated systems and automated processes. ■ Increase in sales due to faster rollout of pricing changes and promotions to catalogs. ■ Reduction in product and pricing errors due to faster elimination of obsolete products and pricing from catalogs.
Invoice Management	<ul style="list-style-type: none"> ■ Decrease in paper usage, mail charges, etc., due to consolidated billing statements, which integration of billing, CRM and order management systems makes possible. ■ Reduced costs associated with payment collection due to consolidated billing statements.
Internal Operations	<ul style="list-style-type: none"> ■ Increase in productivity due to automation of manual tasks. This frees employees to engage in more value-adding activity. ■ Reduction in errors due to electronic sharing of data between disparate systems and automation of processes. Employees no longer have to manually transfer data from one application to another, resulting in the occasional typing error. ■ Reduction in costs due to automation of exception handling.

The required data can be collected from one-on-one discussions with key business managers familiar with the business processes. Since data on cost savings and opportunity costs will be based on estimates, it is important to design the model to get accurate responses. The project manager should start by making a comprehensive list of the data needed for the ROI model. Then that data should be matched to the business managers who could provide the information. The pre-organization of the data required and the people who can supply it will improve the efficiency of the data collection process.

Once the project manager has identified the key functions and thus the key individuals who can provide the information, one-on-one interviews can be scheduled. These

interviews can be used both for data collection and to gather feedback on users' requirements.

Step 3. Quantify the Costs and Benefits

Identification of key business processes provides the framework for developing a model to calculate the ROI of an integration project. The information collected in Step 2 provides the data necessary to populate this model.

Now, to make sense of this data, the model must be able to calculate the return on investment annually as well as over a specific number of years. For example, the ROI for the first year may be five percent due to the initial investment but the following year jump to 15 percent. Over five years, the ROI might be 35 percent. Showing the ROI both annually and over a specific number of years offers a better understanding of the performance of the investment.

In addition, the ROI model should calculate the payback period, which is the amount of time required for the benefits to cover the costs of the integration solution. For example, the increase in revenue and decrease in costs over five years might cover the investment in only three years. This means the increased revenue and cost savings for two years could be reinvested in the company.

Step 4. Consider Various Integration Solutions

Most ROI models compare the costs and benefits of integration software with the “do nothing” case. This is a good evaluation if the enterprise has not integrated any of its applications by other means.

A better ROI model compares the costs and benefits of integration software with both the “do nothing” case and the traditional approach, or hard coded integration.

Step 5. Interpret the Results

The final step is to interpret the results in the context of the enterprise. If the ROI of implementing an integration broker does not show positive returns in the long run, then the company should reconsider making the investment. However, if it shows positive ROI, then a strong business case can be made.

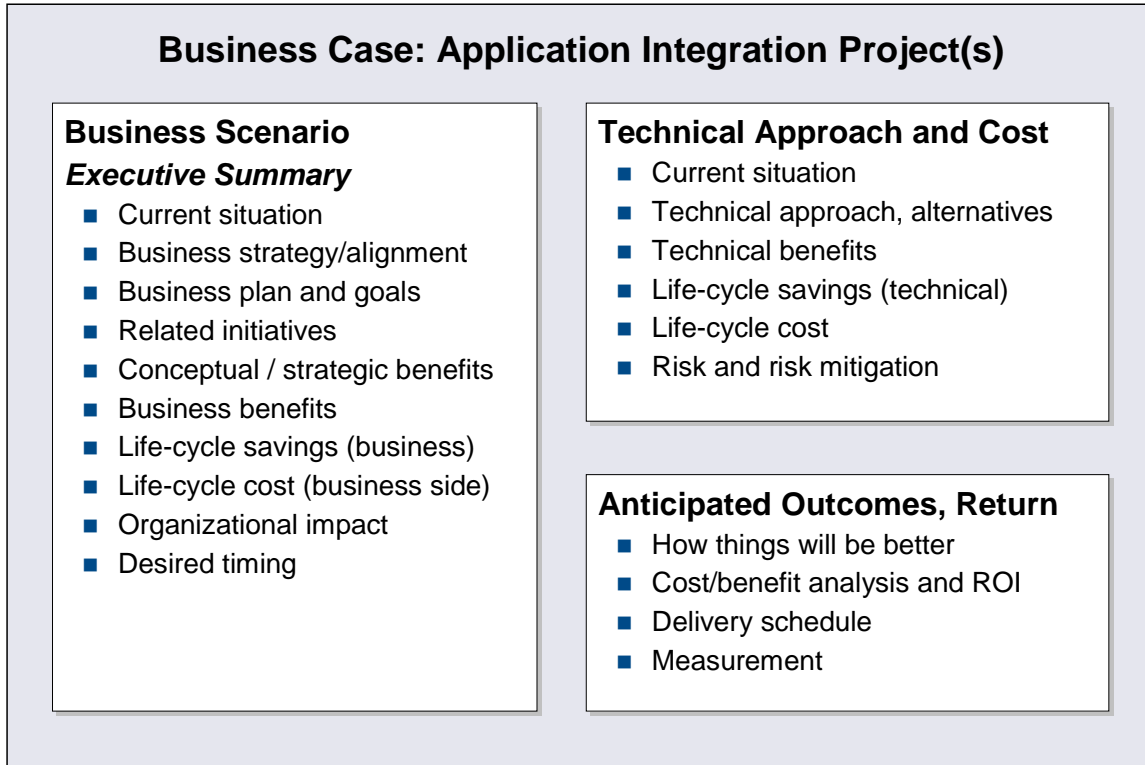
Bringing It All Together: The Business Case Presentation

Once a quantitative ROI has been established for the integration project, a business case presentation has to be developed. A business case should have the following three components:

- Business scenario
- Technical approach and cost
- Anticipated outcomes and return.

Figure 2 shows the key elements of each of the above components.

Figure 2. Elements of a Business Case



Source: Gartner, 2003

The “Business Scenario” part of the presentation identifies the business requirements and the parties affected. The “Technical Approach” details the integration approach and specific technology recommended. The “Anticipated Outcomes, Return” reveals the quantitative ROI and demonstrates the business value of the investment.

The business case framework provided above gives a comprehensive list of elements to address in a business case. Depending on the company and the project, not all of these elements will be necessary. To develop an effective business case, it is important to identify and use only those elements that are considered important to the decision-makers.

Conclusions

It is no longer sufficient to merely count dollars and cents associated with integration or to examine ROI from merely a departmental or tactical perspective. In the current economic climate, management requires an enterprisewide business case development and ROI examination to be convinced. By asking the right questions at the outset, involving both business managers and IT personnel to scope the project, and by developing and implementing an expanded business case analysis with a rigorous quantitative ROI model, organizations will provide a new understanding of the true business value of their technical investments.

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