As we enter the Knowledge Economy, the challenge of effectively managing technological change in organizations and indeed across entire industries is becoming acute. This is not primarily a technology issue, nor an issue of interest only to IT managers, it is an issue for all business managers. The traditional industrial-age approach to managing automation-focused projects has become a relic, leading to silver bullet thinking about the new generations of IT and how they can be applied to support advanced information management and enable business transformation. The end result is unacceptably high failure rates in applying new technologies. We need a new approach.

The Benefits Realization Approach provides a new basis for using information technology to deliver business results more consistently and predictably. It proposes two interrelated shifts: in mind-sets about IT and in management methods. Silver bullet thinking is replaced with a new benefits mind-set that focuses on integrating technology into the
business system. Its central tenet is that IT alone, no matter how technically powerful, cannot deliver business results.

Before we describe the approach, it is useful to note that while the focus of this book is on investments in IT-enabled change, the Benefits Realization Approach that we describe in this chapter, and all through the book, is applicable to any major investment in organizational change. Our examples throughout the book have a strong IT component, but the astute reader will observe, as many of our clients have done, that the approach and its underlying fundamentals have much more general applicability. And it is important to note that initiatives which at first appear to be dominated by technology, on analysis, prove to be exactly the opposite. The client story of Ericsson is a case in point. There, 80 percent of the work proved not to be IT related.

The benefits mind-set underlying the Benefits Realization Approach is based on the following premises:

- **Benefits do not just happen.** They don’t just automatically appear when a new technology is delivered. A benefits stream flows and evolves over time as people learn to use it.

- **Benefits rarely happen according to plan.** A forecast of benefits to support the business case for an investment is just an early estimate. It is unlikely to turn out as expected, much like corporate earnings forecasts. You have to keep checking, just as you would with a financial investment that fluctuates in value on the securities market.

- **Benefits realization is a continuous process** of envisioning results, implementing, checking intermediate results and dynamically adjusting the path leading from investments to business results. Benefits realization is a process that can and must be managed, just like any other business process.

The benefits mind-set forms the basis for a major shift in management methods and practices that is the main focus of this chapter. The industrial-age approach to project management described in Chapter 1 focuses almost exclusively on the delivery of technology, on time and on budget. In contrast, the Benefits Realization Approach focuses on all the projects and initiatives required to produce business results, whether they involve training or technology, change management or software engineering. It focuses on managing the continuous benefits realization process.
Managing IT-Enabled Technological Change: The Benefits Realization Process

The benefits realization process includes traditional project management processes, which are well understood and documented, but it reaches well beyond the “design-develop-test-deliver” cycle of conventional project management. Upstream from traditional project design, the benefits realization process reaches to the initial hatching of project concepts. At the other end of the cycle, it includes the ultimate harvesting of end results, which occurs far downstream from traditional project completion landmarks such as the delivery of new software, networks, and information systems. Viewed this way, the process includes all phases of investment decision making, project management, delivery, implementation, monitoring and continuous adjustment. In contrast to traditional project management cycles, it reaches from “concept to cash” rather than from “design to delivery.”

All organizations today have a benefits realization process whether they know it or not. It is probably not a formal process and therefore is neither known nor understood. It almost certainly does not work very well. It is a passive process, not a managed one. We have found that, like manufacturing or product development processes, the benefits realization process can be designed and engineered systematically to improve business performance.

The Benefits Realization Approach is designed to provide proactive management of the benefits realization process. By continuously improving the benefits realization processes of many organizations, we can envision the day when the success rates of investments in IT-enabled change will rise to 80 — then 90 percent and beyond — considerably higher than the casino odds prevailing today. Information technology will be recognized as delivering demonstrable business value consistently and predictably.

The Benefits Realization Approach is designed to help people build a shared vision of the benefits realization process. It gives senior management a clear understanding of what business results are to be achieved through a major investment and of IT’s contribution to those results. It gives middle management a clear understanding of the resources required to get these results and of their role in achieving this goal. All employees and work groups develop an understanding of how they will contribute to results and how they will use new technologies to do their work in new ways. With the Benefits Realization Approach,
organizations will only embark on IT-enabled change with both a clear road map depicting the paths that lead to beneficial results and the capabilities required to realize those benefits.

The Benefits Realization Approach is not just another academic theory. It is a practical approach, much of which was developed, tested in the field and successfully used in the U.S., Canada, Europe, Australia and New Zealand in organizations that include telecommunications companies, energy utilities, banks, insurance companies and manufacturers. It has been used to meet a variety of business transformation challenges, such as:

- Ensuring that benefits are understood and realized from large, complex and expensive software investments, including enterprise application packages such as SAP, Internet related applications and Knowledge Management initiatives
- Understanding, managing and realizing benefits from major business process re-engineering programs
- Managing complex portfolios of investment programs and projects
- Providing a focus on results to guide major organizational change programs.

**Cornerstones of the Benefits Realization Approach**

There are three fundamentals that define the core of the Benefits Realization Approach. To implement it successfully, organizations must also meet three necessary conditions. These are outlined below.

**Three Fundamentals**

1. Shift from stand-alone IT project management to business *program management*.
2. Shift from free-for-all competition among projects to disciplined *portfolio management*.
3. Shift from traditional project management cycles to *full cycle governance*. 
Three Necessary Conditions

1. **Activist accountability** in order to identify business sponsors with active, continuous ownership of investment programs.

2. **Relevant measurement** systems to measure the things that count in the benefits realization process.

3. **Proactive management of change** to give people ownership stakes in programs.

   The fundamentals and necessary conditions are illustrated in Figure 2-1.

**FIGURE 2-1**

Cornerstones of Benefits Realization Approach
Three Fundamentals

The three fundamentals underpinning the Benefits Realization Approach, aimed at changing the way people think and manage, are: program management, portfolio management and full cycle governance.

First Fundamental: Program Management. Organizations need to make the shift from stand-alone project management to managing blended business investment programs, including all elements of the business system. To understand the magnitude of this change, it is important to make the distinction between projects and programs.

Projects are a structured set of activities concerned with delivering a defined capability to the organization based on an agreed schedule and budget. Major projects common in the IT world include construction of an Internet Web site, installation of a new software package and design of a customer information system and automated response system for a call center. In terms of the benefits realization process, the focus of projects is on the inputs, costs and time required to produce intermediate outcomes. The typical project management cycle ends with delivery of the technology. The capability does not translate into benefit for the organization until it is combined with others delivered by other related projects. Some of these may be IT projects while yet others are business projects which will deliver capabilities in the other elements of the overall business system.

Programs are structured groupings of projects designed to produce clearly identified business results or other end benefits. The projects cited above would form important parts of blended investment programs. Here’s what three of them could look like:

1. The program around the interactive Web site would include all projects required to generate a minimum number of hits and achieve a predetermined sales revenue target within 12 months of the launch.

2. The program around the new software package would include related initiatives to help business units achieve well-defined process improvement objectives in manufacturing, finance and sales within 24 months.

3. The call center program would include staffing, training, marketing and launch projects designed to achieve clear operational, sales and profitability goals over the first 24 months of operation.
In terms of the benefits realization process, the focus is on all the steps required to deliver business results. To reinforce this view, the term “blended investment program” (explained fully in Chapter 3), is used. These programs include many types of projects: IT delivery, training, marketing, organizational change and business process redesign. All these projects are managed and monitored from concept to cash. Consequently, well-designed programs extend, in time, well beyond the delivery of technology to the desktop or data center. Benefits are realized because the process is continually managed from end to end. Program management will be explored fully in Chapter 3.

Second Fundamental: Portfolio Management Organizations need to make the shift from free-for-all competition for resources among stand-alone projects to disciplined portfolio management. This involves managing all blended investment programs as part of a portfolio with clear performance objectives.

Portfolios are structured groupings of investment programs selected by management to achieve defined business results, while meeting clear risk/reward standards. The classic example in business is a financial portfolio which groups stocks, bonds and any other financial assets together into a blended investment, offering a single rate of return. Ideally, the portfolio can be selected to maximize the expected return for any level of risk that the investor is prepared to accept. Investment risk is reduced through diversification. The investor gets a whole new menu of investment choices, rather than being limited to buy/sell decisions on a single stock or category of securities.

The idea is to manage an organization’s blended investment programs as part of a portfolio that produces a stream of benefits, similar to investment returns. Using this approach, the organization seeks to build the best portfolio mix of programs. This is happening to a limited degree today. Some companies, for example, manage portfolios of IT applications through the coordination of technology acquisition, development, maintenance and retirement processes. Major information systems may pass through defined life cycles as part of this process. The Benefits Realization Approach goes farther and suggests that the portfolio should include investments that touch all elements of the business system, not just IT. More specifically, and as indicated above, the portfolio will be composed of investment programs that blend IT investments with related business initiatives.
In terms of the benefits realization process, the portfolio focus is on the alignment of high-level outcomes of the major investment programs with business objectives, the costs incurred and the risk exposure associated with those outcomes. The portfolio focus is strategic. In a period of rapid technological and economic change, the portfolio represents the future of the business.

Moving beyond stand-alone projects to blended business investment programs allows organizations to define the full scope of such programs. Few organizations, however, have the luxury of working on only one program at a time or of “freezing” the internal and external environment during the life of the program. In reality, there are many potential programs, some of which will be underway at any given time. As programs are better understood, and as there are changes to the internal and external environment, the anticipated benefits from a program — and, as a result, its relative value — will change.

Organizations need to take the same approach as investors on the stock market. They need to select and manage a portfolio of business assets. This involves determining the desired mix of investments, and monitoring the investments based on changing returns and “market” conditions. Current investments may be increased, decreased or withdrawn, and new investments may be added. The composition of the portfolio will change over time. Portfolio management will be explored fully in Chapter 4.

**Third Fundamental: Full Cycle Governance.** Organizations need to move beyond myopic project management cycles to full cycle governance, an integrated management system that operationalizes the concepts of program and portfolio management.

Full cycle governance is the actual management process that goes beyond traditional project management in order to implement the Benefits Realization Approach. Like program management, it is distinguished by its long time frame that supports management of the benefits realization process from the conception of projects to the harvesting of benefits — from concept to cash. It is also distinguished by a process of progressive resource commitment in which resources are committed to programs in small increments.

To manage progressive resource commitment, full cycle governance employs a set of defined “stage gates,” decision points at which clear decisions are made to continue, modify or cancel programs. Stage gates are designed to encourage the search for new benefits opportunities
as the business environment around a program changes. It also allows for the incremental management of risk, since programs applying new technologies only bet the company one step at a time. Full cycle governance will be explored fully in Chapter 5.

**Three Necessary Conditions**

There are three conditions necessary for effective implementation of the Benefits Realization Approach, both of individual investment programs and of entire investment portfolios. These conditions require organizations to manage and act differently. The three necessary conditions are: activist accountability, relevant measurement and proactive management of change.

**First Necessary Condition: Activist Accountability.** Accountability must be assigned in a more active mode to clearly identify business sponsors of the investment programs that produce benefits, as well as the people responsible for specific projects and tasks. Full cycle governance makes business managers clearly accountable for delivering business benefits and IT managers accountable for delivering the right tools and technological capabilities. There must be a strong focus on destroying old ghetto walls between business and IT. We must move to activist accountability that includes the concept of ownership. By ownership, we mean active, continuous involvement in managing a program and, most importantly, clear ownership of each measurable outcome and the associated benefits. Accountability must be appropriately positioned in the organization, with business accountability for blended investment programs and their target benefits. Accountability will be explored fully in Chapter 6.

**Second Necessary Condition: Relevant Measurement.** Measurement systems must be adjusted to measure the things that count in the benefits realization process and to give the people who are accountable the information they need to make decisions and act upon them. Full cycle governance requires measurement of new domains of organizational performance, moving beyond the traditional measurement of inputs to measuring outcomes, with a primary focus on key business outcomes. Measurements must clearly link the contribution of investments to outcomes, and themselves be linked to clear lines of accountability. Measurement will be explored fully in Chapter 7.
Third Necessary Condition: Proactive Management of Change. The third necessary condition applies generally to the success of any attempt to implement the Benefits Realization Approach. It is a condition that is designed specifically to ensure that people think, manage and act differently, and therefore to help them make the transition.

This condition is the proactive management of change. Change management methods must be applied effectively both to introduce the new benefits mind-set and to support all phases of full cycle governance. As with accountability, a far more activist approach to managing change is required for organizations to take charge of the benefits realization process. The major change processes of benefits realization must be actively structured and visibly led by senior management. Their leadership role must be shared with program and project managers. The concept of ownership in major investment programs, introduced to sharpen the focus on accountability, includes the idea of ownership in key change initiatives. It conveys the sense that people can proactively direct the course of change. Managing change will be explored fully in Chapter 8.

Two Techniques to Support Benefits Realization

Organizations face two practical challenges when implementing the Benefits Realization Approach. These are designing programs and assessing the relative value of programs. There are two techniques to meet these challenges: modeling and value assessment.

Modeling:

- Supports program design through improved understanding of the linkages between investments and benefits in the benefits realization process, as well as many organizational reach issues, and
- Supports dynamic management of the benefits realization process over time.

Value assessment:

- Supports valuation and selection of programs, and
- Supports ongoing management of the portfolio, including dynamic adjustment to the programs composing it.
FIGURE 2-2 ODOT Results Chain
Modeling

One of our distinctive contributions to the cause of benefits realization has been to develop a technique to help you prepare a comprehensive and accurate model of your organization's benefits realization process — and especially of the benefits realization process specific to large investment programs. This technique, known as the Results Chain, enables you to prepare "road maps" that support understanding and proactive management of the four dimensions of complexity (linkage, reach, people and time) throughout the benefits realization process. Figure 2-2 shows a real life example of a Results Chain. It comes from the Oregon Department of Transportation (ODOT) story, which is described fully in Chapter 4.

The Results Chain technique is used to build simple yet rigorous models of the linkages among four core elements of the benefits realization process: outcomes, initiatives, contributions and assumptions.

**Outcomes:** the results sought, including either intermediate outcomes in the chain, those outcomes that are necessary but not sufficient to achieve the end benefit, or ultimate outcomes, the end benefits to be harvested.

**Initiatives:** actions that contribute to one or more outcomes.

**Contributions:** the roles played by elements of the Results Chain, either initiatives or intermediate outcomes, in contributing to other initiatives or outcomes.

**Assumptions:** hypotheses regarding conditions necessary to the realization of outcomes or initiatives but over which the organization has little or no control. Assumptions represent risks that you may not achieve desired outcomes. Any change to an assumption during the course of the benefits realization process should force you to revise your map.
The Results Chain for a program isn't just another externally created piece of documentation. It is developed through a process of extensive interviews and workshops with business stakeholders. The process of developing a Results Chain promotes discussion, consensus and commitment. It develops a shared understanding of the linkages between IT initiatives and initiatives related to other elements of the business system. Understanding of linkages exposes reach and people impacts, which then allows the time dimension to be realistically assessed. Its power is in making implicit thinking explicit, and bringing hidden assumptions to the surface, thus facilitating communication and enabling better decision making.

To illustrate these points, let us review just one small fragment of a program model built using the Results Chain. It comes from the plan of a printing firm that was experiencing a drop in sales. They were also receiving complaints from some customers about the length of time required to fill orders. The company felt that this problem was contributing to their decline in sales and that they needed to reduce their order processing cycle time. To accomplish this, they decided to develop and implement a new order entry system. The initial, simple Results Chain for this case is illustrated in Figure 2.3.

**FIGURE 2.3**
**Illustration of a Simple Results Chain**

- **INITIATIVE**: Implement a new order entry system
- **OUTCOME**: Reduced order processing cycle (Intermediate outcome)
- **CONTRIBUTION**: Reduce time to process order
- **OUTCOME**: Increased sales

Order to delivery time is an important buying criterion

ASSUMPTION
In Results Chain terminology, the company undertook an initiative to develop and implement a new order entry system. The objective of the new order entry system was to reduce the time it took to process an order. This reduction was expected to contribute to reducing the order processing cycle, an intermediate outcome. The reduced order processing cycle was in turn expected to contribute to increased sales, the final outcome. This expected contribution was also premised on the assumption that, based on customer complaints, order to delivery time was an important buying criterion.

In reality, the true Results Chain behind such a case would be much more complex. As currently modelled, this is a clear case of silver bullet thinking about how quickly the new order processing system can increase sales because it is unlikely that it alone will reduce the order processing cycle.

In the Benefits Realization Approach, this model would become the starting point for fleshing out other initiatives. It is likely that some re-engineering of the order entry process itself would be required. The assumption around the impact of delivery time on sales would need to be tested. Other initiatives that might be included are training, changing physical layouts, defining new roles and responsibilities and designing a new reward system. Along the way, further intermediate outcomes and assumptions would surface. These are all required for this to become a true blended investment program.

Different ways or “paths” to achieve the desired outcome may also be revealed. The Results Chain allows you to model and identify these paths. In combination with the value assessment technique described in the next section, a Results Chain lets you select the best path and to switch paths in response to changing conditions.

The Results Chain model is more than an abstract map of business reality. When completed, it becomes a living model of the benefits realization process. It is not just a one-off model that is used, like traditional business cases, and then forgotten. It is living in the sense that it can be continually revised to monitor and communicate progress and to assess the impact of changes over time. It is also living in the sense that it can be modified to reflect changes in both investment programs and the business environment. The model you build with a Results Chain will accompany your organization throughout the benefits realization process of an investment program.

In subsequent chapters, we will expand upon the development of the Results Chain, show how it can be used, as in the above example,
to define programs and demonstrate how it can further be used to support program management, including accountability, measurement and ongoing communication.

In the past, in the era of relatively simple automation applications of technology, such a model may not have been required. Today it is essential. It will become even more so in the Knowledge Economy when organizations are managing the complex web of initiatives involved in business transformation (including such endeavors as the implementation of large enterprise application packages, major IT-enabled re-engineering efforts, implementation of the virtual value chain through advanced electronic commerce applications and the creation of entirely new knowledge-based businesses).

**Value Assessment Technique**

The Results Chain provides the model for benefits realization. It shows the desired outcomes and the possible paths that can be taken to reach those outcomes. It does not, in and of itself, help you decide the relative value, including the opportunities and risks, of the various paths within a program, or of the potential programs within a portfolio. As such, it does not help you select programs. For that, the value assessment technique will assist you in gauging the odds of success for a specific investment program.

**The Four “Ares”**. There are many questions that need to be asked as you develop the Results Chain and try to assess the relative value of paths and of programs. What you need are a structured framework to organize the questions and instruments to provide more objectivity to the answers, permitting comparable measurement of the answers.

The structured framework is in the form of four basic questions — the four “ares”:

*Are 1: Are we doing the right things?* This question addresses the definition (or redefinition) of business, of business direction and the alignment of programs and the overall business investment portfolio with that direction.

*Are 2: Are we doing them the right way?* This question addresses organizational structure and process, and the integration of programs within that structure and process.

*Are 3: Are we getting them done well?* This question addresses organizational capability, the resources available and supporting infrastructure required to get work done efficiently.
Are 4: Are we getting the benefits? This question addresses the proactive management of the benefits realization process as a whole. The four "ares" are summarized in the Figure 2-4.

**Figure 2-4**
The Four "Ares"

![Diagram showing the four "Ares" with arrows connecting alignment to benefits and integration to capability/efficiency]

The four "ares" provide a rich framework for assessing value. To be truly useful in the benefits realization process, we have to drive these questions down to a greater level of detail and incorporate them into measurement instruments that are practical, easy to apply and that allow some degree of consistent — and therefore comparable — measurement.

From practical experience, a good approximation of the four "ares" can be developed with more detailed questions and measurements along three dimensions: alignment, financial worth and risk. For example, in the case of Nova Gas Transmission, one of North America's largest natural gas pipeline companies, the four "ares" have been used to determine how well programs contribute to current business objectives, to achieving the future strategic vision of the company and to supporting the goals of the parent organization. Financial worth is calculated using traditional accounting methods, and program risk is again measured with respect to the four "ares." In Chapters 3 and 4, we will expand further on these dimensions and their supporting instruments.

The most important thing that organizations must do if they are to master the benefits realization process is to ask the right questions and to ask them over and over again. All too frequently, organizations rush
forward blindly, basing their decisions on superficial answers to the wrong questions and never revisit the questions except to lay blame. Taking the time to formulate and ask the right questions and continuing to ask them is critical to an effective benefits realization process.

Tough questioning is also critical to get rid of silver bullet thinking and lose the industrial-age mind-set that is proving extremely costly to organizations. Asking the four “ares,” in particular, helps to define the business and technical issues clearly, and thus to better define the distinctive but interrelated roles of business executives and IT experts in the investment decision process. Are 1, Are we doing the right things? and Are 4, Are we getting the benefits? raise key business issues relating to both strategic direction and the organization’s ability to produce the targeted business benefits. Are 2, Are we doing them the right way? raises a mix of business and technology integration issues that must be answered to design successful blended investment programs. Are 3, Are we getting them done well? directs attention to the ability of business groups to deliver change projects as well as to traditional IT project delivery issues.

In the days of automation of work, attention focused mainly on “getting it done” (Are 3), with the IT group deciding whether proposed projects were executable and supported by accurate technical resource estimates. There might also have been discussion of “doing it the right way” (Are 2), ensuring compliance with the technology architecture and standards. To develop information management applications, the questions of integration (Are 2) and benefits (Are 4) became more important. To design business transformation programs, all four “ares” must be asked often. For benefits realization to be effective, business managers — including senior business executives — are needed to ensure that strategic alignment and benefits questions (Ares 1 and 4) are asked and answered. They also need to deal with the business aspects of integration and delivery (Ares 2 and 3). The IT group must continue to take the lead in answering the delivery question (Are 3), as related to IT projects, while participating more actively in discussion of all the four “ares.”

The Results Chain and value assessment techniques are innovative creations. However, it is important to recognize that they are only tools that are used to support the much bigger job of proactively managing the benefits realization process. This approach requires the use of a much more diversified tool kit and, most importantly, the commitment of all levels of management to understand and shape the way that benefits are realized over a period of many years.
Managers Must Have Patience: This is Not a Quick Fix

In today's increasingly complex world, very few things worth doing are easy. This is no exception. The Benefits Realization Approach is not a quick fix and certainly not a silver bullet. It involves a long-term, sustained change effort for organizations and managers in how they think and look at the world, how they organize and manage and how they act and execute. This approach is not a cookbook. It must be adapted to each organization, indeed to each of its major IT-enabled change programs. To succeed, however, all organizations must apply the three fundamentals and observe the three necessary conditions.

One final word of caution. The Benefits Realization Approach should not be considered as a purely mechanistic process. It is an approach to support business judgment, not to replace it. The future changes every day. It is the continuous nature of the approach that ensures that organizations can detect and react to change as it occurs.

Window on the Real World: Client Stories

The Benefits Realization Approach has been applied to meet a variety of business transformation challenges. Those described in the client stories that follow include: the redesign of core business processes; major IT conversion projects; and the management of IT investments with long-term business impacts that were hard to forecast and control.

Whatever the starting point, however, the path to success was not clear and there were pressing concerns about the risks of failure. The common core of issues included the following:

- **Project scope** was broad and unclear, since it included both technological change and business process redesign
- **Contribution of IT** was unclear in some areas and not universally understood in the organization
- **Traditional business cases**, cost/benefit analysis and project management methods appeared inadequate to deal with these issues.

In all cases, key decision makers and project managers recognized that new game plans, road maps and models were needed.
Benefits Realization Process

Although the exact approach differed from case to case, all the clients whose stories appear here built a Results Chain model of the initial project and possible related projects. The process of building the model included the following steps:

- Reviews of written strategies, business plans and budgets and the status of projects
- Interviews with key executives and managers involved in setting objectives and designing programs to determine high-level objectives and outcomes
- Interviews with a cross section of senior and middle managers to flesh out the initiatives, contributions, assumptions and intermediate outcomes.

The Results Chain models were built through an iterative process of discussion, preparing rough drafts, validation and the progressive detailing of programs and projects. There was a substantial element of consensus building around the model that emerged.

Results

As was the case with the initial problem, the specific results varied. But again there was a common pattern revolving around the recognition that the vast majority of project work in all these business transformation programs was not IT related. This discovery by project teams led to several positive results:

- Tighter meshing of Business Process Re-engineering (BPR) and IT projects in blended business investment programs
- Better transition plans built into programs
- Broader value cases and cost/benefit perspectives.

In addition to these technical results, these organizations developed a new mind-set about technological change and BPR. Closer cooperation between business managers and IT flowed from the validation and consensus building process required to build the Results Chain model. At the end of the day, there was universal recognition that the shared vision of change was more important than the paper model.
Ericsson

The projects appeared to be dominated by technology, but benefits analysis pointed to the opposite conclusion: almost 80 percent of the work was not IT related.

The telecommunications industry is faced with constant competitive pressures, sophisticated and demanding clients and smaller and smaller windows of opportunity to introduce new products. More than ever, time to market is a critical success factor for players in telecommunications.

Ericsson, headquartered in Sweden with operations in over 100 countries throughout the world, is a global provider of advanced telecommunications technology and the leading supplier of digital cellular systems. The challenge facing Ericsson was dramatic. The high-tech engineering teams at its Montreal development center for advanced cellular system equipment needed to achieve two goals: reduce the time to market for new products by 50 percent, and collapse the cycle time for fixing product bugs reported by clients by 95 percent. These goals were ambitious, to be sure, but they reflected clear messages coming from the sophisticated telecom carriers purchasing Ericsson cellular systems. Time was of the essence in a wide-open market where they had to get new cell phones and services in consumers’ hands quickly, or lose out to their competitors.

Ericsson concluded that a major re-engineering of core development and quality control processes was required to protect its global market position. Testing for software bugs and correcting them appeared to be the major time-consuming activities. The re-engineering planners zeroed in on two key areas for improvement: the product testing process at the back end of the manufacturing process for cellular switching equipment, and the process for diagnosing, solving and deploying software solutions for product bugs reported by clients, a prime customer service indicator.

The question asked by Ericsson managers was how to best design these two business process re-engineering (BPR) projects — known as advanced verification environment (AVE) and modification handling (MH). “These were not clear-cut BPR projects,” recalls director Luc Mayrand “The road to success was not clearly mapped in advance. We were concerned about risks of cost overruns, delays and failure to achieve targeted benefits.”

The Benefits Realization Approach was used to gain a better understanding of the risks and success factors. The investigation produced some surprises. At first glance, both the AVE and MH projects appeared to be dominated by IT and changes to advanced technology production environments. In fact, analysis pointed to
the opposite conclusion: almost 80 percent of the required initiatives were non-IT related.

As the perspective changed for the project teams, and a benefits mind-set began to shape senior management perceptions, the original BPR projects were expanded into complete blended investment programs. “We focused on business processes, organizational change, technology and people aspects. Scope and timing were key issues,” recalls program manager Patrick Forslund.

The approach allowed them to achieve commitment and consensus, share a common understanding of the changes to be put in place and select the highest value initiatives. But above all, it allowed them to determine the entire sequence in which all projects had to be realized over three years in order to maximize value and speed the realization of the benefits.

The exercise brought to the surface critical new projects that would be required to reduce the targeted cycle times and helped the company plan for an orderly transition to the new environment. Benefits realization showed the most effective grouping of initiatives into action programs and clearly mapped the linkages between key projects. Using this information, the programs were designed to avoid conflicts and delays.

The results were impressive — and measurable. With the two programs six months away from completion, time to market for new products was already down 50 percent, and the time required to deploy modifications to clients was reduced by 70 percent.

Sollac

The Benefits Realization Approach made IT visible to senior management and made it clear that “there’s no such thing as an IT project anymore.”

In the new economy, traditional heavy manufacturing industries are under just as much pressure to redesign their core business processes as are advanced technology firms. Benefits realization can be used to help structure blended investment programs that get results from these complex and critical initiatives.

Sollac, located in Paris, France, is the flat-products branch of Groupe Usinor Sacilor, Europe’s largest steel producer, and the world’s third largest. Sollac provides steel products to various industries. Sollac decided to adopt the Benefits Realization Approach when it began to reorganize its business around the automobile industry — its largest client segment. This was a major business transformation initiative with impacts on all major processes, from product design to billing. That meant a major effort by the IT
group, as 11 of the company's 12 information systems needed to be changed. Traditionally, Sollac had used the same systems and applications for all of its clients. Now, within a few years, it would have to tailor systems from one end of the supply chain to the other — including order processing, manufacturing, inventory management and billing — to meet the needs of an automobile industry that was undergoing rapid change.

"This was a large program for us," says Jean-Pierre Corniou, Sollac's director of systems and information technology. "We knew there would be risk and a sizable impact on both our systems and the way the organization works. A program like this touches the 'heart' of the organization. There is always a risk of rejection, just like when a surgeon transplants an organ into a patient. We had to minimize the risk of rejection of our IT systems. We needed a safety net."

The Benefits Realization Approach gave the business units and the IT group an integrated, big picture view of how all of the change programs would interact over time. It helped with project sequencing and prioritizing and facilitated communication with all of the stakeholders.

Corniou observes that while historically IT has been a sideline player in many organizations, the big picture view discloses a different reality: "This [Benefits Realization] Approach makes IT visible to senior management, especially as there's no such thing as an IT project any more. IT is all interrelated now with work processes, the culture, the people, other technologies in the organization etc. IT projects are blended investments, and they need to be viewed and treated as such."

**A Regional Bank in Asia-Pacific**

Benefits Realization linked the introduction of new technology with business process redesign, cultural change, bonuses based on results and the transformation of the teller's role into that of financial advisor.

Regional banks must compete in a world of global and national giants that have all the advantages of financial and technological scale. To build a competitive position in the Asia-Pacific market and measurably increase shareholder value, a regional bank launched an ambitious redesign of several dozen business processes, combined with an IT conversion program aimed at improving both customer service and cost performance.

Like most banking institutions, this regional bank was critically dependent on information technology to effectively serve its business and retail clients. Not surprisingly, it identified its information systems as the most promising area for improvement: the
area most likely to have an impact on the bank's overall efficiency, revenues and profitability. When the systems were targeted for replacement as part of the whole strategy, management recognized that every part of the bank would be affected, and that the systems conversion could not be managed like a typical IT project.

Benefits realization was used to link the introduction of new technology with a wide range of other change initiatives, including business process redesign, cultural change, bonuses based on results and the transformation of the teller's role into that of a financial advisor. What emerged, of course, were several blended investment programs.

The new approach transformed the bank's decision-making and management process by:

- Articulating high-level outcomes with senior executives
- Developing a common language and perspective that could be shared by banking and IT executives
- Defining less tangible, but strategically important outcomes, such as increased cross-selling of bank services
- Getting the executives involved to commit to delivering the expected benefits.

Benefits realization was integrated into the regional bank's project initiation and management methods. It has been used to assess all new project proposals, define programs, assign accountabilities, measure outcomes and track the delivery of benefits using a benefits register.

**National Bank of Canada**

The Results Chain model became a powerful communication and selling tool.

One of the classic causes of silver bullet thinking is that many investments in information technology are simply invisible to the business side of the organization, as are the immediate impacts on end users and customers. This is only to be expected, given that in most cases, there is a long and complex chain of linkages leading from the IT investment, through other elements of the business to end results.

The challenge is twofold. First, these linkages must be specified and articulated so managers know how and when they will get the benefits. Second, linkages to supporting business initiatives
must be clarified, communicated and sold. Results Chain modeling helps IT groups to meet these challenges. The models are particularly valuable when large investments must be made in so-called enabling IT infrastructure, which are platforms that only technology experts see and touch and that are generally invisible to the rest of the organization.

The National Bank of Canada is the sixth largest chartered bank in Canada, with 637 branches and offices and assets in excess of $66 billion. National Bank of Canada's decision to invest in a multiyear migration toward a PC-based, client-server development platform in one of its departments was a perfect case in point. The new platform would be far upstream in the production supply chain. Its new hardware and software tools would be used by IT professionals to create the business applications that bankers would use. While invisible, it promised to produce benefits for years, many of them hard to forecast with 100 percent accuracy.

To build understanding and stakeholder support, the IT group decided to amplify the standard cost/benefit analysis used to justify the investment. "Even if the budget is secured," says André Piette, senior project director of payment systems, "you still need a thorough picture of all the things that need to get done to make a success of such a large investment. What about training? What are we going to do with all the applications built with the old platform? What change programs need to be put in place? How do we get commitment from all stakeholders?"

National Bank developed a Results Chain model that provided an accurate picture of the linkages leading to many potential benefits, and identified new paths for maximizing returns on the investment. The model became a powerful communication and selling tool, demonstrating the value of the investment all the way downstream in various units of the bank. Once the program was under way, the bank was able to use the model to make dynamic adjustments to key program parameters, based on changes in the business and IT environments.

Piette says that using the Benefits Realization Approach allowed the bank to clearly map the proposed program, identifying benefits sought, business changes required to reap the benefits, ways of achieving them and obstacles to implementation. The result is the ability to more objectively evaluate and prioritize initiatives.

**Quebec Workers Compensation Board**

The method solidly supports the concept of "thought before action."

The Quebec Workers Compensation Board enforces the laws governing the protection, compensation and rehabilitation of workers
in Quebec, Canada. The Quebec workplace health and safety plan is a social contract between over two million employees and their employers. When the Quebec Workers Compensation Board began to look at replacing legacy financial systems, it found itself embarking upon a sensitive blended investment program. The two key systems used for budgeting by the accounting and finance departments needed to be updated. The IS directorate wanted to resolve the situation quickly to keep users satisfied and systems performing smoothly. But it needed a reliable game plan and found its standard cost/benefit, PERT and critical path methods to be too static. A more comprehensive method was needed to clearly define the expected results and provide a logical framework that could be used to monitor development and implementation.

The directorate — a recent winner of an award for excellence in public administration — used benefits realization to develop a transition plan that took into account:

- The consequences of removing the existing systems
- Scheduling and prioritization issues
- Interdependencies between the various pieces of the puzzle
- The need to bring the IT group and users closer together by creating a common vision and identifying the anchor points of the program
- The need to manage process and people factors as well as computing issues.

The new systems are now in place after a smooth transition. Jean Houde, IS department director, says that one of the key benefits of the Results Chain was that it provided a tool for communicating with users — an effective way of showing what had to be done, and of monitoring progress over time. “Based on our experience,” he says, “this method works well in an environment in which people have to anticipate problems and plan multidimensional implementations — beyond simple computing issues. Indeed, this method solidly supports the concept of thought before action.”

Summary

A strong focus on results is the starting point of the Benefits Realization Approach. This results focus is the energy source that drives everything else. Benefits Realization does not eliminate risk. In business terms, however, it ensures better risk/reward relationships and an intelligent
overview of your business investment portfolio, which includes a mix of IT and business projects. It does this by drawing on the financial risk management methods mentioned in the Introduction. Consider these points of comparison:

- **Program management** gives investment decision makers better knowledge of how different technologies produce business results as part of the overall business system, similar to financial investors' search for good information on individual firms, industries and stock market performance histories. The end result of program management is a better appreciation of risk/reward relationships.

- **Portfolio management** gives organizations methods of diversifying risk by selecting a variety of technologies and investment programs. They can also tailor their portfolio to suit their own risk tolerance, just as financial investors do when selecting a portfolio. The end result of portfolio management is that decision makers don't need to "bet the store" on a single stock, industry or IT-enabled change investment.

- **Full cycle governance** provides better methods of managing projects, programs and portfolios from day to day. It is an operational system of continuously monitoring performance and adjusting portfolio composition, similar in concept to the systems used by financial investment managers to manage mutual funds. The end result is better month-to-month performance as the future unfolds.

In commonsense terms, the approach to benefits realization helps you understand more clearly the benefits that you are trying to achieve. It gives you a better understanding of what you have to do to achieve the benefits. It provides a disciplined process to help you manage your way along the path to achieving the benefits.

*Does it position you better to get results? It certainly does.*

*Does it guarantee that you will get results? No. That is your job.*

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It may be hard at first for you to learn the benefits mind-set, but it will certainly be easier to learn than to adopt. Program and portfolio management represent a significant change in management thinking. New processes and organizational structures will be needed to operationalize the new mind-set through full cycle governance. Major changes will be required in the areas of accountability, measurement and the process of change itself. In Part II, we discuss these changes in greater detail.