Business Process Reengineering (BPR) Fundamentals (with Strategic Planning)

Building a Strategic Partnership --
Business Strategy and Process Reengineering

MHC-1012

Innovative & Comprehensive
Mountain Home Training & Consulting, Inc.

An Accredited Course of the
MHi Business Process Reengineering
Certification Program
Business Process Reengineering Fundamentals
(with Strategic Planning)
MHC-1012
5 Days

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Welcome to the BPR Fundamentals (with Strategic Planning) Course. Over the next five days we will introduce you to one of the most exciting initiatives in both the government and commercial sectors -- Business Process Reengineering (BPR). We have also included an overview of strategic planning. This aspect of the course is built on the premise that every organization needs a sense of direction. Without that direction in the form of a strategic plan the organization has no foundation upon which to build process improvements.

We must always be mindful of the importance of "The Mission" within each business or government Agency. Each of us, whether we are military or civilian who serve in the federal government, or the thousands of businesses that are the engine that drives our economy, must continually strive to make our organizations more streamlined and less costly, while maintaining, and even increasing, our mission capabilities.

I hope you take what you will learn from this course and really apply it. You can make a difference in the way we, accomplish our mission! Good luck, and again, welcome to the course.

A. DERRIL WATTS
Mountain Home Training & Consulting, Inc.
PURPOSE: This course is designed to provide the fundamentals of Business Process Reengineering (BPR) and how BPR can be applied to the processes and culture that are inherent in federal organizations. The attendee will also be provided with a number of the tools which can aid in strategic and project planning and will be introduced to the concepts and principles which guide the processes and the implementation of strategic planning.

SCOPE: The information shared in this course represents concepts, policies, and procedures employed in the conduct and management of a BPR Project. The attendee will receive the latest information concerning government and commercial BPR policy, strategies, and direction for implementation of this important part of Transformation. The course will address recent successes in applying BPR techniques to organizations across both government and commercial sectors. The course will also examine how BPR interfaces with Six Sigma/Lean Thinking, Total Quality Management (TQM), information engineering, and Strategic Sourcing. It will also provide the attendee with tools and techniques that are utilized in the definition, analysis, development, and implementation of organizational strategic plans.

WHO SHOULD ATTEND: This course is designed for individuals who are currently, or soon to be, involved in a Business Process Reengineering or Competitive Sourcing project; or those who need to know how to implement or manage such projects. Even though this course was originally open to only federal government employees, it is now open to state and local government, and private sector employees, as well.

PREREQUISITES: None.

AVAILABLE TRAINING MODES: Public Offering and On-Site.

For further information regarding this course, contact Mr. Derril Watts at (256) 931-2372, or email: Derril_Watts@mhc-net.com, or visit our web site at http://www.mhc-net.com.
I. General Objectives. Upon completion of the BPR Fundamentals (with Strategic Planning) course, the student should be able to:

- Accurately describe the concept behind and Business Process Reengineering (BPR).
- List the major components of BPR.
- Accurately describe the major phases of a BPR project.
- Describe the concept behind strategic and business planning, and how planning relates to BPR.
- List the key aspects of both strategic and project planning.

II. Specific Objectives.

Module I. Introduction to Business Process Reengineering (BPR).

- Define the concept behind BPR.
- List and define the objectives of BPR.
- Explain the concept of "process management".
- List the major components of BPR.

Module II. Strategic Planning Principles.

- List and define the three stages of the Planning/Performance Cycle.
- List and define the two types of planning that is performed in support of a BPR project.
- Describe the concept of strategic planning.
- Explain why strategic planning is critical to the success of a BPR effort.
- List and describe the key aspects of strategic planning.
• Describe the parts of a strategic plan.
• Explain the concept of “Gap” Analysis and how Breakthrough Objectives are defined.
• Explain “scorecarding” and describe why it’s important to reengineering.

Module III. Process Analysis (Problems/Opportunities).
• Define Activity Modeling.
• Define Data Modeling.
• Describe Activity-Based Costing and how it is used in BPR
• Explain the concept behind BPR analysis.

Module IV. Process Design/Justification.
• Describe the three levels of process design.
• Describe two general approaches to best business practices.
• List three ways to "Proof the Concept" before full implementation.
• Define the concept behind a Business Case Analysis (BCA).

Module V. BPR and Organizational Change
• Define culture change.
• Describe what role culture change plays in implementing a BPR initiative.

Module VI. Project Planning.
• Define Project Management.
• Describe the steps in defining a BPR project.
## Business Process Reengineering (BPR) Certification Program

### Business Process Reengineering (BPR) Fundamentals

**MHC-101**

3 Days

### COURSE OUTLINE

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**TOTAL COURSE MATERIAL** 38 Hours

**ADMINISTRATIVE/GRADUATION/COURSE REVIEW** 2 Hours

**TOTAL COURSE HOURS** 40 Hour
Chapter 1

Introduction to Business Process Reengineering (BPR)
Chapter 1
Introduction to Business Process Reengineering (BPR)

Businesses face an array of challenges including increased globalization, rapid technological advances, shifting demographics, changing security threats, and while at the same time improving quality of life.

THE NEED FOR CHANGE

Business Process Reengineering (BPR) is a key component of the Transformation policies of many government and commercial sector organizations. That policy is guiding the restructuring and reorganization of many companies and government agencies. Today’s Business environment is full of challenges that require a new kind of organization, one that is leaner, faster, and less costly than its predecessor. This environment creates change faster than ever before, where organizations must learn they are not only responsible for producing a product or service, but in doing so, they must be able to stay relevant. Competition can come from many different fronts including other producers, government organizations, or the young 20-something who has a great idea and is building it out of his/her garage!

Leading the Transformation of Business requires an enterprise to fundamentally rethink and radically redesign its core business processes and culture, leveraging its critical knowledge to achieve and sustain competitive advantage through dramatic improvements in critical measures of performance. To sustain a competitive edge in the future, an organization must continually learn and look for the best within itself. This new organization must be made up of high-performing knowledge workers who are self-adaptive, creative, responsive, and who collaborate and share what they know with others, and are continuously learning. The organization must systematically reach out to create knowledge that is useful to others, share it and capture it to facilitate the execution of its key business strategies. The end result is a successful enterprise that is effective, efficient, innovative, and competitive in any environment.
Strategic Sourcing – A Broader Perspective

For many years industry has focused much of its efforts on the use of outsourcing to create enough efficiencies to be able it to compete. It was believed that efficiency would lead to the lower costs and therefore increase the return on investment of services provided by the company. There has been a realization that this yielded sub-optimal results since few of their efforts were easily broken into discrete business units.

Both the commercial and government sectors have chosen to broaden its view of Strategic Sourcing by including both outsourcing as well as an enterprise approach to evaluating the organization that is left in-house. The goal is to determine whether processes can be eliminated, improved, or streamlined. In those instances when improvements can be made within the existing framework, then those changes will be made. The value of this approach is that an assessment of every organization is made -- regardless of whether the organization is open to outsourcing or should be kept in-house.

This approach cuts across all functions and organizations, permitting the company to take a complete look at how it does business and to proactively achieve savings in all its functions and activities rather than to focus only on those it may outsource. Strategic Sourcing will rely on a broad range of process improvement techniques to achieve savings rather than relying solely on outsourcing. This allows organizations to consider a wide range of options and combinations of these options, including: eliminating obsolete practices; consolidating functions or activities; reengineering and restructuring organizations, functions or activities; adopting best business practices; privatizing functions or activities; etc.—along with continued use of outsourcing.

Even though both outsourcing and reengineering are part of Strategic Sourcing, in this course we will focus our attention on addressing the challenge of making our core functions and activities more cost-effective, through the use of reengineering. Reengineering is not an alternative to outsourcing for areas where outsourcing can be applied. Rather, it is a concept employed when competitive outsourcing and other efforts, such as direct conversion to contract performance, are not practical or have restrictions.

To warrant the types of change worthy of this level of special attention, these efforts must go far beyond the implementation of generally good day-to-day management practices. When we apply reengineering, we attempt to rebuild the existing organization into one that is customer-focused in its external relations and process-focused and team-oriented in its internal relations.
An organization structured in this way can look at the processes that are performed across functions and make them more efficient and effective.

**BUSINESS PROCESS REENGINEERING (BPR) -- A TOOL FOR CHANGE**

You've probably heard a lot about business process reengineering over the last few years, through business journals and trade publications, numerous business books, or in training workshops. It seems BPR is the latest and hottest management trend to hit the business and governmental communities. But is it more than just a passing fad? Is reengineering just the latest buzzword, with it a new assortment of consultants ready to slay the "bureaucracy" in the name of efficiency? Or, is reengineering a culmination of many years of management evolution, bringing a new emphasis on creativity, going where no one has gone before? In this section of the course we will look at the many aspects of business process reengineering and hopefully, when we are through, you will have the answer to these questions.

**Business Process Reengineering (BPR)
Definition...**

Depending on to whom you talk, there can be many different definitions of reengineering. In this section, we will attempt to cut through all of the hype and get to the essence of reengineering. In gaining a full understanding of a particular concept, it is sometimes useful to define what it is not, so here, let's first take a look at what reengineering is not. What are some of the myths that have become associated with reengineering?

There are many misconceptions as to the essence of reengineering. Many times organizations go through a major reorganization and call it reengineering. Others reduce their staffs by half and call it reengineering. Still others will simply take an efficiency program they have in place and rename it reengineering.

First, reengineering is not "reorganizing". Reengineering looks at what work is required to be done not how the organization is structured. Organization structures are defined only after the processes necessary to produce products and services for the organization's customers are designed. The organization structure is then designed so it best supports that process.

Reengineering is not "downsizing". Downsizing focuses on the reduction of people to achieve short term cost reductions. Reengineering, on the other hand, focuses on rethinking work from the ground up, eliminating work that is not necessary and finding better, more effective ways of...
doing work that is. In a reengineered organization, the number of people needed is driven by the requirements of the process as defined by the needs of the customer and not the need to simply sustain an organization's existence.

Also, reengineering is not simply about making an organization more efficient. You can have the most efficient organization in the world, but unless it effectively serves its customers, in essence, accomplishes its mission, it is still of no value. Reengineering is about creating value for the customer, which may be defined by the customer as lower cost, higher quality, or increased responsiveness.

So, what is BPR?

One major thrust behind the business process reengineering philosophy is "we must fix the process before we try to automate it". This means, simply, that an organization should redesign its business processes before applying information technology. Many companies have spent millions of dollars on information technology, automating existing processes, warehousing mountains of data without first determining whether or not those processes or data were even necessary. This philosophy advocates that only after business processes have been reengineered can and should information technology be applied. If done correctly, this produces an increase in performance, not only through the reengineering of the process, but also, through the use of proper application of information technology.

Corporate Reengineering

The most common definition used in the private sector comes from the book entitled, *Reengineering the Corporation, a Manifesto for Business Revolution*, by former MIT professors Michael Hammer and James Champy. In the book, Hammer and Champy defined business process reengineering as:

"The fundamental **rethinking and radical redesign of business processes to bring about dramatic improvements in critical, contemporary measures of performance, such as cost, quality, service, and speed.**" (Reengineering the Corporation, Hammer and Champy, 1993)

The major emphasis of this approach is the fact that an organization can realize dramatic improvements in performance through radical redesign of its core business processes. This is in
contrast to the approach of incrementally improving processes in order to achieve a measured level of performance.

The key ingredient of the Hammer/Champy definition is the notion of **breakthroughs**. This aspect of reengineering assumes the existing process is not sound and therefore needs to be replaced.

For example, if a Travel Department wanted to significantly improve the way it processes business travel for its customers, it may attempt to find information technologies that would allow its existing paper forms, such as a travel order or travel voucher, to be "automated". Converting travel forms into an electronic format certainly could decrease processing time and cost of processing, but it wouldn't achieve nearly the level of performance that asking the question, "why are we even using travel forms?" would have.

These breakthroughs are defined as "levels of performance that stretch an organization beyond its current performance in order for it to reach its vision." The difference in current performance and its "breakthrough" performance is defined as the "performance gap". These gaps in performance, if not closed, will impede an organization's ability to perform at a level necessary to compete".

The size of the gap and the timeline at which it must be closed are the two major determinants of whether an improvement effort warrants a **reengineering** focus or an **incremental improvement** focus. The difference is significant. Even though both are very important aspects of continuous process improvement, each has its own role to play.

An organization should pursue a path of reengineering if its performance gaps are large and the gaps must be closed in a very short timeframe. This will require significant re-thinking of existing business practices.

For example, a Supply Operations Depot who distributes supplies to automobile manufacturers currently delivers those supplies within thirty (30) days upon receipt of the customer's request. During a recent Strategic Planning effort, the Supply Operations Depot senior leadership found that the majority of its customer base truly needed the supplies within a week or less, as opposed to the current thirty (30) days. They also determined through strategic benchmarking that several other organizations in the industry could deliver similar supplies within four (4) to five (5) days.
For the Supply Operations Depot to remain relevant (thus competitive), it decided it had to reduce the time it took to deliver supplies to its customers from its current thirty (30) days to three (3) days. And because their competitors can deliver their supplies much faster today, they felt it was essential they were delivering their supplies within three (3) days by the end of the fiscal year. This radical change in performance required the organization to completely redesign the way it filled parts orders, which would cut across many departments and cultures. But for the organization to remain relevant, it had to change, and change in a very short period of time.

As you can see from the illustration above, process **reengineering** normally results from a significant change in output product and service requirements (from customers or competitors), a significant change in controls or constraints imposed on the business process or a significant change in the technological platform supporting the business process. A process reengineering effort might also be undertaken following a radical change in the availability of an organization’s financial resources (i.e. budget cuts or downsizing requirements).

By contrast, **incremental improvement** actions are defined as those improvements that can be undertaken and supported by an organization with minimal impact on external suppliers, customers and other organizations within the functional area. The focus of this aspect of continuous process improvement is an emphasis on reducing the overhead associated with self-imposed controls and restrictions.

It also focuses on eliminating non-value added activities, reducing non-value added costs, optimizing available resources with respect to process and activity output requirements, and other improvements that can be made within the authority level of the target organizational element. There is typically no predetermined timeline to reach the new levels of performance, so the sense of urgency that is readily apparent in a reengineering effort is not visible.

**THE BUSINESS PROCESS REENGINEERING (BPR) VISION**

Business Process Reengineering (BPR) is based on a vision of the future that is increasingly shared by enterprises around the world. It is evolving into the sum total of everything we've learned about management in the industrial age recast into a knowledge age framework.
**Shared Knowledge**

As the Information Age comes to an end and the Knowledge Age takes hold, the principles of knowledge management are clear. Critical knowledge must be captured and then shared throughout the enterprise.

Several years ago, Alvin Toffler, in his book *Power Shift*, discussed the close relationship of knowledge, power, wealth, and the transformation of society.

According to Mr. Toffler,

"… a revolution is sweeping today's...world. No genius in the past... could have imagined today's deepest power shift; the astounding degree to which both force and wealth themselves have come to depend on knowledge."

Toffler defines a power shift as a transfer of power, a deep-level change in the very nature of power. He further states that,

"Knowledge itself, therefore, turns out to be not only the source of the highest-quality power, but also the most important ingredient of force and wealth."

Put simply, knowledge has gone from being an adjunct of money power and muscle power, to being their very essence. It is, in fact, the ultimate force multiplier. This is the key to the power shift that lies ahead, and it explains why the battle for control of knowledge and the means of communication is heating up all over the world.

Knowledge provides competitive advantage (e.g., what the customer needs, what the competition is doing, how & why to redesign business processes.). Corporate knowledge is to be made available where and when it is needed, and in the format and context in which it is needed, along with appropriate security, anywhere in the enterprise. Sharing of that knowledge must become a way of life! Only when all of the individuals of the enterprise realize the importance of sharing what they know with those who need to know, will the organization truly create value.
Mission Support

The focus of all organizations should be on their mission of producing the right product or service for their customers. The reason any organization exists is to provide a specified product or service to an external customer. There is no other reason an organization should continue to exist. Business processes will be redesigned in such a way that those activities, which support the mission, will be strengthened; those activities that do not add value will be eliminated.

Senior Leadership

All Senior Leaders must participate in and take responsibility for the management of his/her organization’s processes. This means that the organization’s senior and mid-level managers are responsible for the performance of his or her organization, therefore they are also responsible for the reengineering efforts of that organization as well. For years this responsibility was forced on the organization’s Information Technology groups. Without leadership from the Senior-most leader of the organization and other leaders throughout, process improvement efforts will not succeed.

Reduced Costs

Activities that increase the cost of doing business but provide no benefits to the customer are to be reduced or eliminated. Managers must search out and eliminate such non-value added activities and costs so that scarce funding resources can be applied to those activities that provide a higher return on investment, and enable the organization's mission to be accomplished.

Reusable Technology

The emphasis has shifted from custom developed, unique information management systems to the use of off-the-shelf technology and software to support standard business processes. Systems that must be custom developed will employ engineering-like development methods and strong life-cycle project management controls.

Single Interface

An organization should have to master only one system interface for accessing its information resources. Increasingly, this interface will be focused on process requirements which cross functional/departmental boundaries.
**Just-in-Time**

Information, training and support will be delivered electronically to the work site at the precise time it is needed, whether that work site is an office, a vehicle, or one's home. This vision shares many features with the transformation that is occurring in the private sector all across the industrial world. The hierarchical, compartmentalized corporation organized by function, product, or territory is giving way to the horizontally structured enterprise organized around business processes.

**OBJECTIVES FOR BUSINESS PROCESS REENGINEERING (BPR)**

Let's look at five key objectives of Business Process Reengineering. Achieving these objectives will help us realize the vision of the future, which will ensure that we meet OUR organization’s mission requirements. Whether it's under the auspices of government Transformation or global competition, a call is going out to all organizations to centralize policy, standardize and simplify procedures, and decentralize implementation and execution.

**Cost of Doing Business**

In today's downsizing environment, cost reductions are of ever-increasing importance. So, one of the objectives of BPR is to reduce the cost of doing business by getting organizations involved in eliminating their:

- Obsolete and inefficient processes
- Obsolete regulations and controls
- Unnecessary management overhead
- Lengthy review and approval cycles
Unit-cost Management

Across industry, organizations are being tasked to do a better job of determining the cost of producing its products and services. Once these costs are known, managers can use BPR principles to lower the cost of production while at the same time improving quality and customer service.

Fee-for-Service

If our products and services have value, then our customers should be willing and able to pay for them. Our goal is to apply best practices to the management of our organizations. By determining customer requirements and then meeting those customer requirements competitively, we will begin to provide more value at a lower cost.

Continuous Process Improvement

Process improvement is not a one-time exercise. Managers all over the world are learning that responding to customer needs, searching for quality materials and making processes more efficient and effective by the wise use of available resources is a continuous process. Just because you have radically redesigned a major business process, doesn't mean that you can sit back and not continue to improve the process. BPR coupled with a program of continuous incremental improvements will put the organization in a very competitive position when it comes time for budget justification.

Leadership

Functional managers become the process owners and are accountable for results and therefore they must be empowered to act with much discretion with respect to business process reengineering. Leadership is critical to the success of any BPR effort!

MAJOR COMPONENTS OF BUSINESS PROCESS REENGINEERING (BPR)

Do not let yourselves get confused by the terminology. As you might expect, gurus or experts in the field of business process reengineering have their own pet terms. We want to focus on the principles involved, not necessarily the terminology as we go through this section.

Strategic/Business Planning
**Strategic planning** provides a set of business goals and defined requirements which are expressed in terms of customer needs all within the context of mission, vision, values and beliefs. A strategic plan defines what an organization is all about, whom it will serve, what needs it will fulfill, and under what terms it will operate (values and beliefs). The strategic plan must be consistent with the constraints placed upon the organization by higher authority (i.e., corporate board, stockholders). This means that no element of the strategic plan can conflict with the mission, vision, values and beliefs directed by higher authority.

**Business planning** provides a set of objectives with appropriate performance measurements, and a detailed, complete list of required output product and service features that will meet customer needs as defined in the strategic plan. It is important to understand that the business plan itself should not be concerned with identifying customers or customer requirements. That is the role of the strategic plan. The business plan should focus on what the organization will do to satisfy the goals, needs and requirements expressed in the strategic plan. Also inherent in this aspect of planning is the identification and definition of information requirements necessary for proper development of automated information systems to support the organization's processes. This facet of BPR planning is known as Business Systems Planning (BSP).

**Activity Modeling**

Activity modeling is a technique that assists an organization in understanding how a business process really works. We use activity modeling to describe how things are (called AS-IS modeling), and also how we want them to be, based on our redesign criteria (called TO-BE modeling).

In activity modeling, we decompose a business process step-by-step into activities that make up the process. This results in a multi-level diagram that corresponds to the way we do work.

Each activity is shown in a diagram, complete with the inputs to that activity, the outputs of that activity, the controls or constraints on the way we perform the activity, and the mechanisms or factors of production consumed by the activity in transforming inputs to outputs.
Data Modeling

Knowledge is the glue that holds an enterprise together. Data modeling is a technique for accurately describing exactly what information you need to create the knowledge necessary to perform each and every activity that makes up the core processes of the enterprise.

As with activity modeling, we produce an "As-Is" model, describing the current data environment, and then a "To-Be" model showing what our data structures will need to be to support our redesigned processes.

A data model shows all of the entities (things or objects which an organization values enough to keep data about) necessary in performing an activity, the attributes (data items) of each entity, and the relationships between and among entities. One of the results of data modeling is a clear delineation of business rules. Business Rules are statements that constrain the way our function and its processes work.

The level at which you will be called upon to do data modeling is easily learned, even if you are not technically inclined. If you can write a functional procedure or design a simple form, you can successfully model data with the assistance of a facilitator.

Activity Based Costing

Activity-based costing (ABC) is a technique that allows us to determine the costs of producing our primary products and services. It focuses on the cost of the process rather than on the cost associated with an organizational element or function. ABC is an extension of activity modeling and while it requires a fair amount of work to produce the numbers, it too is an easily learned technique.

Economic Analysis

Applying the principles of BPR to our organization's business processes will result in a slate of improvement opportunities. There will always be alternative means of implementing process improvements. Economic analysis gives us the capability to determine the costs and benefits associated with alternative investment opportunities, taking into account the life cycle characteristics of each investment. Economic analysis also presents the decision data in equally valued dollars (taking the time value of money into consideration), as well as the risks associated with making decisions about future conditions and performance.
**Best Business Practices**

Most managers are consistently asking two questions about their areas of responsibilities:

Is this the best way to do it;?

and, How does what I do compare to what others do who have the same responsibilities?

The first question can be answered by using the techniques of "Best Practice," the second question by the techniques of "Benchmarking." Both are critical to creating a high-performance process.

**Business Case Analysis (BCA)**

BCA is a tool for analyzing and evaluating management practices and alternative process improvements and investments needed to implement the To-Be process and its supporting infrastructure. It provides a framework for exploring alternative opportunities for improving business processes based on sound business case practices.

A BCA and the traditional economic analysis (EA) are similar. Both evaluate the economic feasibility of a project using classic economic analysis techniques. The primary difference between them is scope. An EA usually covers a single initiative or information system while a BCA has a broader scope, usually covering duties assigned to a group of organizations or individuals that work together to produce a common product or service.

**BUSINESS PROCESS REENGINEERING -- THE CONCEPT OF PROCESS MANAGEMENT**

Every core business process exists to provide a needed product or service for a defined customer. A core business process according to defined requirements, rules, or constraints produces these products and services. In producing the product or service, the process requires materials and information, which are provided by suppliers, and consumes the resources allocated to the process.
When you hear the terms "downsizing" or "restructuring" on the evening news, or read about them in the morning paper, you are learning about companies that are moving toward process management and away from hierarchical management.

The hierarchical (vertical) organization served the needs of industrial age organizations well. The arranging of work into like functions was suited to the needs of an uneducated workforce. It simplified employee supervision and training, maximized managerial span of control, and had little dependence on the free flow of information.

However, a new model is needed for knowledge age organizations. Work can be organized and managed as an end-to-end process, rather than as the sum of disjointed functions. Thus, work teams can now be arranged around a single process creating focus and direction. Once the concept of process management is firmly rooted in the enterprise, it becomes possible to see real and lasting improvements in process performance.

**Organizing the New Enterprise**

Peter Drucker, in a 1988 *Harvard Business Review* article entitled, "The Coming of the New Organization", suggested we look at a symphony orchestra. In an orchestra, several hundred musicians play for one director. There is no chain of command and no middle management. The director interacts directly with individual players. Tom Peters, author of the landmark book, *In Search of Excellence*, uses a movie studio production process to illustrate an environment conducive to a flattened organization structure. In a movie studio, the director interacts directly with individual actors and others on the set without going through an elaborate vertical structure.

What enables both a symphony orchestra and a movie studio to work effectively? What provides the glue to keep all of the "players" from going their own independent direction? What keeps them working to effectively and efficiently produce a common product? There are several factors that both of these horizontal organizations share that are critical to their success. Each of these factors is an important consideration for organizations planning to rightsize, or restructure, their organization to a horizontal structure.

The first factor is that each of the individual players/actors must have a common sheet of music by which to play or a common script from which to act. Put simply, they all must share a common vision and each individual must know what needs to be done to accomplish their common purpose. Put into
business terms, these organizations must have a detailed business plan of where the organization is going and a specific guide on how they are going to get there. This plan must be understandable and each individual must know precisely how he or she fits into this plan.

Secondly, in both organizations, all individuals have clearly defined roles. The players and actors know when to come in, how to do their part and when to exit. They not only know what part they play, but they also know how their part interacts with other players and actors. The director also has a clearly defined role that is critical to the success of the enterprise.

In fact, this role may be perhaps more critical than director positions in a hierarchical structure. The Individual players are directly dependent on how the director interprets the business plan. TRUST is very important at this point. Each member of the organizational team must trust one another to carry out their individual responsibilities.

Finally, the information system must support the business plan, which lays out the processes that must be performed in order to accomplish the mission, and the individual roles. The information system, be it automated or manual, must provide the common sheet of music so that each individual clearly knows how he or she fits into the organization and how they relate to others in the organization. In addition, the information system must provide each player, actor, and director the critical information needed to perform their individual roles. Team members need sufficient information on what is expected of them. If the system does not provide the essential information, confusion will result, and the mission of the entire organization will suffer.

Also underlying all successful flattened organizations is the core business process. A clearly defined and understood core process will enable organizations to focus on the things that are important, that add value. Management of the process becomes critical.

So, what is process management?

Why is this concept essential for real and lasting improvements in process performance? To begin to answer these questions we need to first give a working definition of what we mean by “core business process”:

An end-to-end set of decisions and activities that, when accomplished, produce a pre-defined product or service for an external customer.

Another way to look at a core business process is that it is a group of interrelated tasks and activities that accomplish the defined mission of an enterprise. By this definition, even the largest organizations have no more than five or six core business processes. It is the improvement of these processes on a continuous basis that will allow organizations to be able to continue to perform their mission during a time of dwindling resources.
We define the philosophy of **Process Management** as:

*A philosophy of management that advocates an integrated approach to the management of an end-to-end process, including its lower level activities, which produces a product or service for a given customer.***

This concept goes beyond organization structures. It encompasses everything necessary to identify, produce, and deliver a quality product or service to a fully satisfied customer. When an organization chooses to manage by process, the organization’s structure and rules are no longer the focus of its efforts. The total satisfaction of the customer becomes the reason for the organization to exist. **Performance** is now measured by how well the product or service is received by the customer, not how well one department or division performed.

Another aspect of this management philosophy deals with the idea of managing the mission versus managing the organization. Simply stated, if the process directly supports the mission of the organization, then by managing the process, you are, in turn, managing the mission. Too many organizations spend too much time managing the rules of the organization. They give little attention to the process by which the mission is being accomplished or the products and services being produced.

By incorporating the philosophy of process management, the mission (the success of which is measured by satisfying the customer) becomes the emphasis as opposed to whether or not the organization is being managed.

**The Evolution of Process Management**

A way to illustrate this concept of process management is by looking at the evolution of process management. Please refer to the following:

**Basic Process Model:**

Let’s first discuss what a basic process is. In its simplest terms, a process is a set of decisions and activities that are performed to transform a defined input into a defined output. In other words, it defines the flow of work through an organization beginning with an external input and ending with an external output.

![Figure 1 - 12](#)
The Basic Systems Model:

The Basic Systems Model, Figure 1-12, describes the interrelationships between sub-processes (or activities), that together, produce a product or service for a pre-defined customer. It is at this level that many organizations spend most of their time trying to improve. But instead of assessing the performance of the "system" as a whole, they key in on a single activity. When this is done without regard to the whole system, many times the improvement in the performance of a single activity may decrease the performance of the overall system.

The Process Management Model:

The culmination of the evolution of the process is the Process Management Model (PMM). Notice in Figure 1-13 the five parts of the model: 1) the mission (which is the reason the organization exists), 2) the customer (who the organization serves), 3) the product (what the organization produces for the customer), 4) the process (the activities and decisions that are performed in the development of the product), and finally, 5) an information infrastructure (the management of information flow). The concept is really very simple. If an organization doesn't have customers, they don't have a product. If they don't have a product, they won't need a process to produce the product. If they don't have the need for the process, eliminate it. Of course this is all taken in the context of the mission of the organization, which defines the reason we exist.

CONCLUSION

The success of a BPR effort is based, in part, on the preparation and readiness of an organization to accept fundamental change. Experience has shown that there are several factors that need to be in place before launching such an effort.

Leadership. No organization can transform itself as radically as is called for in a BPR effort without the active and motivating influence of top management.
It can't be done. Without a clear vision of where the organization needs to go and a leader’s dedication to getting there, the effort will do nothing more than consume thousands of taxpayer dollars. No appreciable increase in performance will be realized and the organization’s effectiveness will suffer greatly.

**Strategy.** Since all business process reengineering efforts begin with a strategy, every organization must have a clear statement of mission and a well-developed strategic plan that lays out goals, objectives, metrics, and evaluation techniques. From these elements, business processes can be identified, defined, and prioritized.

**Project Teams.** Advanced planning needs to be in place to organize BPR project teams. Since teams are made up of individuals from different organizational elements, this is not a trivial exercise.

**Training.** Business process reengineering changes the very nature of an organization and that means overcoming organizational inertia and culture shock. Some people will have to learn new skills and new patterns of working, and the nature of the work itself will change.
Appendix A

Chapter 1 - Overhead Slides
Introduction to BPR
We are governed by RULES
Myths About Reengineering

What Reengineering Is NOT!
Business Process Reengineering (BPR) -- Definition

"The fundamental rethinking and radical redesign of business processes to achieve dramatic improvements in critical, contemporary measures of performance, such as cost, quality, service, and speed."

Reengineering the Corporation,
Hammer/Champy, 1993
Vision for BPR (Desired End State)

- Shared Knowledge
- Mission Support
- Senior Leadership
- Reduced Costs
- Reusable Technology
- Single Interface
- Just-In-Time
THE KNOWLEDGE AGE

Capital was the strategic resource in the past.

Now, however,

Knowledge has become the strategic resource.
Key Objectives for BPR

- Cost of Doing Business
- Unit-Cost Management
- Fee-for-Service
- Continuous Process Improvement
- Leadership
The Major Components of BPR

- Strategic Business Planning
- Activity Modeling
- Data Modeling
- Activity-Based Costing
- Economic Analysis
- Best Business Practices
- Business Case Analysis
Process Management
Process Management

The HEART and SOUL of BPR!
Activity is not necessarily Accomplishment.
As proposed by the marketing department.

As specified in the product request.
Customer Needs...

As used by the customer.

What the customer really wanted.

Process Management - A New Look at Management
Process Management - A New Look at Management

- Define Mission-Driven Processes
- Manage the Process, not the Organization
- Define and Manage by Performance Measures
- Establish an Environment of Continuous Process Improvement
The Evolution of Process Management

Stage One: The Basic Process Model

Stage Two: The Basic System Model
The Evolution of Process Management

Final Stage: The Process Management Model

Mission

Process  Product/Service  Customer

Information Infrastructure

To be successful, a horizontal organization must have in place:

- Sound Business Plan
- Clearly defined roles
- Effective/Efficient Info System
- Trust
There are three categories of people in the world:

Cat I. Those who make things happen
Cat II. Those who watch things happen
Cat III. Those who wonder what happened

Good leaders are those that can draw from Cat II & III and bring them into Cat I to get the Vision achieved.
Chapter 2

Strategic Planning Principles
Chapter 2
Strategic Planning Principles

"If you don't know where you're going, then any road will get you there......"

Cheshire Cat, Alice in Wonderland

PLANNING CONCEPTS AND PRINCIPLES

To plan is to prepare for the future. A ship at sea must plan its turns well in advance if it is to end up at the ship’s Captain’s desired location. The size of the ship and its speed determine both the importance of planning, and the length of the planning horizon. This rule holds for organizations as well.

All organizations must plan. An organization's planning horizon is determined by its size and the rate of change of factors that can impact on it’s future. These factors can include technology, the economy, competition, and social and political forces.

No manager disputes the importance of planning but few managers do it well as evidenced by the well-publicized failures in both highly regarded companies in the private sector as well as government agencies at all levels. In fact, few managers can demonstrate that they dedicate a significant amount of their management time to planning. When asked, some managers are not even able to produce a current set of planning documents relevant for their area of responsibility.

Planning need not be so troublesome. It is a skill that all managers can master regardless of their level of responsibility or position in the organization. Several myths about planning discourage managers from becoming skilled planners.

- Planning is only performed at the highest levels of the organization.
- Planning is the job of planners or the planning department.
- Planning means trying to predict the future.
We never have enough data to plan well.

- It costs too much and takes too much time to develop good plans.
- It is impossible to keep plans up to date.
- Plans seldom influence the day-to-day activities of managers.
- It is more important to develop the budget than develop a plan.

We will address each of these planning myths, but before we do, let’s see what planning really means, and define some basic planning terms.

**Planning/Performance Cycle**

Figure 2-2 illustrates the planning/performance cycle. During the planning period, an organization decides what it wants to accomplish and then establishes performance indicators for measuring the degree of accomplishment. During the performance period, measurements are continually made which track performance. During the evaluation period, performance results are evaluated and recommendations are prepared for use during the next planning period. It’s just that simple.

Most organizations need two types of plans: the strategic (outward/long range) plan and the business (inward/annual) plan. The annual plan can be further divided into two sections: the operations plan and the improvement plan. While we will define the intent and purpose of both the strategic and business plan later in this course, for now assume that the strategic plan provides a direction for the organization while the business plan provides a means of moving to some defined destination. The operations plan helps a business unit to do things right, while the improvement plan ensures that it does the right things.

The term **organization** is used in this course to mean the enterprise as a whole. The term **business unit** will refer to an organized group of employees accountable for their performance and their results. A business unit may develop a strategic plan, a business plan, or both. If a business unit is not required to develop a strategic plan of its own, it then operates under the strategic plan of a higher level business unit. Thus, everyone in the organization is part of, and accountable for, fulfilling the requirements of both a strategic and a business plan.
MYTHS OF PLANNING

The following statements are called planning myths because they act as inhibitors to the planning/performance cycle. Naive managers as excuses not to plan, or not to plan well often use these myths.

Myth #1:  *Planning is only performed at the highest levels of the organization*

Planning provides no value to an organization until and unless the plans have been translated into actions which, when accomplished, contribute to mission objectives. The only purpose of planning at the corporate level is to provide input for planning at lower levels of the organizations where all results are obtained. Plans are developed at each level in the organization until all objectives in the master plan have been restated into action or implementation plans with assignments, schedules, budgets, performance criteria and measurements. Yes, planning must be performed at the highest levels in the organization, but for those plans to be meaningful, they must drive planning at all levels of the organization.

Myth #2:  *Planning is the job of planners or the planning department*

Planning is a line management responsibility. All managers have a planning responsibility. Planning describes the series of objectives that must be met or actions that must be taken to successfully cross the time gap from a baseline (current) condition to a desired future state. Planning requires an intimate understanding of present resources (human, material, and financial), core competencies, and actual obstacles with respect to the business unit, all of which describe the current condition. Planning requires a clear vision of the desired future state with respect to its impact on the organization's ability to overcome potential obstacles, fulfil its mission, and serve its customers.
Only line managers have the perspective and sensitivity to plan for their own organizational unit. Planned economies have failed worldwide and highly centralized private sector companies have failed or fallen far behind their competition.

The role of a planning department is to support line managers by providing data on or about external factors of importance to the planning unit, assessing possible future conditions or scenarios, and supplying planning tools and techniques. In other words, the customers of the planning department are the line managers.

Myth #3: Planning means trying to predict the future

Planning has nothing to do with predicting anything. Predicting the future is the province of soothsayers and mystics.

Strategic planning has to do with analyzing trend data and looking for paradigm shifts, both within and outside of the organization, that could impact the ability of the organization to fulfill its current and projected mission.

Strategic planning is also concerned with designing future scenarios that could occur, and then devising alternative strategies that might be used to react to those scenarios. As strategic planning is propagated down through the layers of the organization, each succeeding plan is bounded by the conditions established in the next higher plan. In this way, there is only one strategic plan in the organization but it is customized for each business unit and can serve as a meaningful input for the annual business planning cycle in that unit. While long range in nature, strategic plans are reviewed and updated annually.

Annual business planning is even less concerned with future possibilities. Indeed, the annual business plan is predicated on an assumptive view of the future one year out. This is because business plans result in actual action plans that are only relevant within a set of known conditions. For this reason, business plans must be reviewed quarterly, and appropriately adjusted if the assumptive view upon which they are based has changed. If they are to be realistic, business plans must depend on the strategic plan for providing the assumptive view upon which the business plans are based.
Operating plans (a type of annual business plan) are plans mainly in the sense that they predetermine a course of action that will take place in the event that a process is not working as planned or has produced an error outside of planned tolerances. This concept will become clear when we look at the content and structure of operating plans.

Myth #4: *We never have enough data to plan well*

With respect to the future, you have as much data as anyone else has. None! There is nothing known about the future, therefore there are no facts or data about the future. You, or your planning function, have as much access to data about the past and present upon which to base projections, assumptions and scenarios as anyone else. You may not have as much skill, or time, or resources to devote to planning as others; but if this is true, it is because you or your business unit have not assigned the same priority to planning as other business units may have.

When individual managers make it a point to take planning seriously, they sensitize themselves to collecting planning data throughout the course of each day. Newspapers, magazines, trade journals, and interactions with others suddenly begin to yield pieces of data that become part of that manager's personal planning database. For the most part, managers who plan well are managers who are planning throughout each day based on the streams of data and information coming their way.

Myth #5: *It costs too much, and takes too much time to develop good plans*

The most expensive and time consuming plans are those that are never developed. In the absence of good plans, every event is a surprise that requires an immediate mini-plan, which takes time and costs resources. *Firefighting* becomes the order of the day. The business unit headed by a non-planner does not improve because the energy within the unit is consumed trying to maintain the status quo. The unit does not contribute to the mission of the organization because no thought has gone into how to contribute. The value chain is weakened because a vital link in that chain is weak.

At the end of the day, customers are disappointed, suppliers are confused, and employees are frustrated. At the end of the business year, the unit is considered successful if it is no worse off than it was when the year began. But the greatest tragedy is that little or no personal growth or
skill development has taken place because there were no challenging objectives accomplished. Employees who work in such a unit for five years do not have five year's experience, they have one year of experience five times. All because planning costs too much and takes too much time.

Myth #6: *It is impossible to keep plans up to date*

Strategic plans are reviewed constantly and many are updated annually. For even the largest enterprises, this is usually no more than a one or two week effort. Many large organizations even have a planning office that collects and maintains planning data. Such data should be available to all managers in the organization. Subordinate units within the larger enterprise may devote no more that a few days each year to understanding and refining the strategic plan for their unit.

Business plans are prepared annually and reviewed and revised quarterly, or even monthly. The total effort should consume around 15% of each manager's time (less than one day per week). Because planning is one of the most vital actions performed by a manager, this is not an unreasonable expenditure of time. Managers who claim not to have this much time to devote to planning are generally failing in their other areas of responsibility as well, and should be retrained.

Myth #7: *Plans seldom influence the day-to-day activities of managers*

When this is true in an organization, it is generally the result of having a poor planning technique or system. Plans that end up in a binder on the shelf are not worth the time and cost to produce them. The value of the planning process in an organization can be judged by its usefulness in sustaining the day-to-day running of the business. Good planning documents become dog-eared and coffee-stained during the course of the year. Later in this course, you will be introduced to a planning technique that will pass the dog-ear, coffee-stain test.
Myth #8: *It is more important to develop the budget than develop a plan*

This is the same as saying that it is more important to breathe than to eat. Managers are capable of doing both. To neglect one of these tasks in favor of the other is like choosing which way one prefers to die. Not managing the plan is a slower means of death, perhaps, but it is still death. The purpose of a budget is to fund the business (operating) plan. The purpose of a plan is to ensure that budget dollars are spent wisely in the pursuit of meaningful business objective accomplishments. One cannot have a plan without a budget and one shouldn't have a budget without a plan.

**PLANNING AND PROCESS REENGINEERING**

Process reengineering begins with planning. Planning provides the context for developing a process vision, which is the fundamental driver of all reengineering efforts. The more radical the reengineering objective, the more important it is to associate process reengineering efforts with strategic and business goals and objectives. Planning also determines the measures and critical success factors that will be used to evaluate the success of reengineering projects. Planning defines the destination, while the process reengineering project provides the vehicle. There is much truth in the aphorism that “if you don't know where you are going, any road will get you there”!

There are two levels of planning: strategic and business (or annual) planning. Strategic planning looks outward to establish the context in which the organization or business unit will operate with respect to its defined mission, and to set the vision for a desired future state. Business planning looks inward to marshal available resources in pursuit of the vision. Both levels of planning rely on definitive objectives and quantitative measures of performance to guide and monitor progress.

At the completion of the planning phase, a process reengineering project is in place that is consistent with the strategic objectives of the enterprise, supported by sufficient resources, guided by a well-conceived process vision, and bounded by clearly defined objectives. The objectives are related to quantified goals that define the success factors for the project, and keyed to performance measures that monitor the attainment of project objectives.
The principal benefit of the planning phase is that reengineering teams begin their work with a clear understanding of their mission and an idea of what successful performance will look like. Their efforts are properly focused on how they will achieve the process vision and performance objectives set in place by senior management (or by the whole organization), not wasted on trying to determine what their objectives should be.

Why does the organization exist? If you can't answer this question, your organization may not be adding value to the organization's mission and your BPR project is doomed from the beginning.

**PLANNING CONCLUSIONS**

There is no refuge for managers who don't take planning seriously enough to devote as much as 20% of their management time to the preparation and maintenance of strategic, business, operating, and reengineering plans. When they do take this time, the other 80% of their management time will certainly be more fruitful for these managers, their employees, and the organizations that entrust them with the stewardship of precious corporate resources for the purpose of achieving mission objectives.

Even in the absence of meaningful plans from higher authority from which to construct business unit plans, resourceful managers will persevere in developing meaningful plans by treating their higher authority as an external entity over which they have no control, but which does influence their operations.

Now that you know that there is no escape from, nor excuse for, not planning well, let's look at the requirements and techniques for getting the job done. First we will address the requirements, contents and structure of each of the planning documents introduced above; then we will look at the techniques for producing them.

**STRATEGIC PLANNING**

The purpose of the strategic plan is to develop a planned response (over a specified planning horizon) to factors that are not within the organization's span of control but which will impact mission achievement. The strategic plan relates the organization's mission to these external factors, taking into account the organization’s baseline capabilities, resource availability and markets (or customer base). The strategic plan identifies both the factors that can contribute to mission accomplishment and the factors that can inhibit mission accomplishment.

The word *strategic* carries a lot of baggage in many organizations, for obvious reasons. A strategic plan is not simply a business plan that has a three to twenty year horizon. Apart from the time horizon of the strategic plan is the fact that it contains different kinds of information than the annual business plan and serves a different purpose.
In a sense the strategic plan is not a plan at all; rather it is an assessment of the current or baseline situation of the enterprise with respect to its mission, extended out over a specified period of time. The baseline situation describes the organization as it is presently constituted: core-competencies, resources, products, etc.; and all of the external or environmental factors that impact it: economic, social, geo-political, technological, etc.

Each of the out-years is really a scenario of how things might look in that out-year based on trendlines, and (if you are really serious) potential paradigm shifts, or dislocations that could affect the mission objectives or operations. In this sense, a strategic plan is really an assessment and a "what-if" document. What if voice-recognition becomes a useful technology in 2005? What if inflation jumps to 8% next year? What if the reform program in Russia collapses? What if my department gets a new mission in three years? How will these things impact my current situation?

Obviously, the scope, extent, and complexity of the strategic plan are dependent on the amount of time and resources you care to devote to the effort. The importance of the mission from which it is derived and the availability of resources will determine this. Therefore, most of the effort and expense takes place at the highest levels in the enterprise. But, (and this is very important) every business unit in the organization must develop its own strategic plan, or operate under a higher-level strategic plan adjusted to that business unit's mission. Each lower level strategic plan will be a subset of the higher authority plan, and consequently easier and less costly to develop.

**STRATEGIC PLANNING AND PROCESS REENGINEERING**

Process reengineering is meaningful only if it improves an organization in ways that are consistent with its strategy. Alignment between strategies and processes is essential to radical change in business processes. Strategy and process objectives must reinforce one another. A good strategic plan is the first phase of business process reengineering. Elements of the strategic plan are eventually used to construct the annual business plan, which will include a section on process reengineering objectives.

When this is done, every process reengineering initiative can be traced back to an objective in the strategic plan which, in turn, can be traced back to a mission requirement.
In a high-performance organization, strategic planning is tightly integrated with business planning. Short and long term goals can be developed through comparative Benchmarking of world-class standards. Customers and suppliers (in a customer-centered organization) are considered integral to the planning process and must be included.

The strategic plan is the first step in developing an organization that is mission-driven rather than rule-driven. The strategic plan begins with mission. All elements of the strategic plan, as well as elements in the annual business plan, have a direct connection to mission. The strategic plan documents how the organization will shape itself to serve customer requirements within the constraints of mission. Rule-based organizations do not need a strategic plan because nothing in the plan can overcome what is already documented in the rules and regulations.

Only mission-driven, customer-centered organizations can reengineer processes in any sustainable way. In rule-driven organizations, the regulations, directives, and bureaucracy nullify meaningful attempts to improve processes, because following the rules supersedes fulfilling mission objectives and serving customer needs. To illustrate this difference, consider the scene from the movie *From Here to Eternity* where a sergeant is shown refusing to issue weapons to soldiers as the Pearl Harbor raid is taking place because he doesn't have an official authorization to do so. Mission-driven or Rule-driven?

**BENEFITS OF STRATEGIC PLANNING**

*Why Plan?*

- To establish stability in an uncertain world.
- To capitalize on the rapid changes in technologies.
- To evaluate limitations.
- To look for opportunities.
- To maintain competitive advantage.

*What Strategic Planning Delivers --*

- An assessment of business trends - How the mission is changing.
- An assessment of corporate trends – Customer and competitor direction.
- An assessment of technological trends.
- A plan that is aligned with the vision and objectives of the organization.
- A plan to satisfy the critical knowledge requirements of the organization.

**Benefits For the Organization.**

- Focus on critical areas for mission success.
- Minimize risks.
- Improve resource utilization.
- Improve flexibility.
- Reduce redundancy.
- Establish business priorities.
- Establishes overall direction.
- Reduce backlog.

**COST OF NO STRATEGIC PLAN**

- Loss of competitive edge.
- Crisis management - reactive rather than proactive.
- Diverse directions and redundancy.
- At the mercy of outside influences.
- Automated information systems that are out of date and do not meet the needs of customers.

**IMPORTANCE OF STRATEGIC PLANNING**

Strategic planning begins the process of truly understanding your organization. Without this understanding, no measurable improvements can be made. This has become a very important step in the BPR methodology because it forms the foundation upon which all other decisions and actions are taken during process reengineering.
Secure Management Commitment

Senior management commitment is essential for success in strategic planning. The top executive in the organization must personally support and participate in the effort. In a private sector environment this will be the President and/or Chief Executive Officer (CEO). In federal agencies and organizations, it is the director or commanding officer. If the top executive does not endorse and get involved in the process, it is likely the effort will not succeed. The top executive must be committed to the extent that he/she fully supports the dedication of resources and time to complete this effort.

He/she must also ensure the rest of the senior management team also participates. The importance of total senior management commitment cannot be overstated. If the entire team does not give their complete support, including their own personal involvement in the strategic planning process, the organization will tend to interpret the planning process as a waste of time, therefore, the effort does not succeed.

Gaining and Maintaining Commitment

It is very difficult to create and maintain a sense of commitment in one’s self, and even more so, in others. Commitment in others is a perception. Because commitment by senior managers is often a perceived condition where employees are concerned, senior managers must translate what they say and how they display the commitment which they have stated into overt actions which employees can see, evaluate, and most importantly, accept.

Research has shown that the most persuasive action a senior manager can take to convince employees of commitment to a stated project or principle is to spend their own time doing the action and implementing the principle. Employees invariably equate the amount of time spent by senior management on a task as evidence of commitment. In fact, this is probably the very best available indicator of senior manager commitment and prioritization.

Other actions, which senior management can take to emphasize their commitment to a program or principle, include:

- The adequate, even over-generous, budgeting of funds for a specific action or principle;
• The allocation of scarce or unique assets to the program or principle, especially if these assets are high-ranking or what the organization perceives as important persons;

• Placing a higher Priority on a given program or principle, especially if there are a large number of competing projects or principles, and, especially when resources are scarce;

• Assigning additional funding to a given project or implementation of a principle, when it gets in trouble. If other programs and projects are also in trouble, such allocation will be seen as proof of emphasis.

Employees expect senior managers to “Walk Their Talk”. If the senior managers merely “Talk and then Walk”, the senior manager’s lack of commitment will immediately be perceived by middle managers and worker populations, who will institutionalize this attitude.

**Maintaining Commitment in the Face of Adversity**

There is a myriad of pitfalls that can be encountered when a senior manager attempts to demonstrate or to gain commitment to a given effort among employees, however. In some instances, even the successful demonstration of strong leadership will not curtail the affects of some barriers. Enthusiasm and commitment of all concerned can be affected adversely.

Dr. W. Edwards Deming has stated that as much as 85 percent of the problems in an organization result from the behavior and decision of managers. This is especially true in the arena of actual and perceived commitment. In this arena, perception plays a key role in determining the attitude of all organizational members.

**Opposition is Everywhere!**

Maurice Maeterlick stated this principle best, when he observed, “At the Crossroads that Lead to the Future … Every Progressive Spirit is Opposed by Ten Thousand Guardians of the Past.” Opposition in the forms mentioned previously can quickly become a barrier -- sometime an insurmountable barrier -- to Strategic Planning and Business Planning and implementation. It is, therefore, very important to take action to thwart the initial signs of a lack of enthusiasm and opposition to new plans.

**THE STRATEGIC PLANNING PROCESS**

While not every organizational unit (business unit) is required to develop a strategic plan, one governs every unit. Subordinate strategic plans should always be a subset of higher authority strategic plans. In general, the lowest organizational level requiring a strategic plan is the level
of the organization which has some autonomy to govern its own direction. Below this point, annual business planning is sufficient.

So, what is strategic planning? The purpose of any organization is to allocate resources to the task of satisfying customer requirements, in the context of mission, taking into account the conditions found or assumed in the environment in which the organization operates. The strategic plan provides a vehicle for defining how the organization intends to realize its purpose for existence over a specified planning horizon.

The strategic plan defines what an organization is all about now and in the future (mission and vision), whom it will serve (customers and other stakeholders), what needs it will produce (products and services), how well it will perform (goals and objectives), and under what terms it will operate (values and beliefs). Strategic planning establishes the external boundaries of the enterprise with respect to the environment in which it operates.

The strategic plan is developed through consideration of the interrelationships of mission, customer base requirements, and environment with respect to potential organizational performance. When there is a gap between present and potential performance, a reengineering effort may be required to close the gap. The gaps identified in performance are expressed in terms of breakthrough objectives. As we discussed earlier, these breakthroughs are defined as "levels of performance that stretch an organization beyond its current performance in order for it to reach its vision." The difference in current performance and its "breakthrough" performance is defined as the "performance gap". These gaps in performance, if not closed, will impede an organization's ability to perform at a level necessary to compete.

The size of the gap and the timeline at which it must be closed are the two major determinants of whether an improvement effort warrants a reengineering focus or an incremental improvement focus. The strategic plan indicates the dimensions of the reengineering effort, not the means.

Most strategic planning requirements call for a planning horizon of three to five years, although ten years is not uncommon. Considering that radical reengineering projects may take one to two years to complete, and the life cycle of the improved process is five to seven years, it is clear that the strategic plan should be long-range in nature. Of course, strategic plans must be revisited and updated every year to capture changes in mission, customer requirements, and the external environment.
The following are the key areas of focus during strategic planning:

- **Mission Analysis:**
  - Identify major customer groupings.
  - Define customer requirements.
  - Identify key Products and/or Services to meet requirements.
  - Identify and Define Core Business Processes.
  - Identify core competencies.
  - Map Core Processes against As-Is organization structure.

- **Environmental Analysis:**
  - Conduct strategic Benchmarking.
  - Conduct SWOT (Strengths, Weaknesses, Opportunities, & Threats) analysis.
  - Develop organization-level assumptions.

- **Performance Analysis:**
  - Define Organization’s Vision, Values & Beliefs.
  - Develop organization-level goals & objectives.
  - Develop Enterprise-Level Performance Scorecard.
  - Conduct Performance Gap Analysis and prepare breakthrough objectives.

- **Document the strategic plan.**

Leading organizations around the world have found that it is wise to include customers in the planning process to increase the confidence level of the strategic plan. The best organizations have extended the strategic planning process to include all major supplier organizations as well. When suppliers and customers are included in the planning process, the concept of value-chain management becomes viable. The value-chain is a series of value-added activities and processes that begin within suppliers' organizations and extends through to customers' organizations.

An organization exists within, and must successfully operate within, an external environment over which it has little or no control. Strategic planning attempts to understand the current environment by collecting and analyzing data; and then to describe a potential future environment by reasoning techniques, plotting trend lines, searching for potential paradigm shifts, generating econometric computer models, and utilizing simulation techniques. Usually, the future environment is described as a series of potential scenarios that will be obtained if certain specified conditions occur.
Given a well-developed scenario, it is possible for strategic planners to develop a recommended organizational response for that scenario and thus, provide planning guidance that can be used to develop annual business plans. The annual business plans will then have the effect of moving the organization in the desired direction.

Given enough time and resources, the organization can develop multiple scenarios and planned response packages for each potential scenario. Then, as events unfold, the organization is prepared for the appropriate response based on the scenario that seems to be best describing reality.

When mission, customer base, and the environment are properly considered, the strategic planning process produces a plan that contains, in general, a vision to guide organizational decision making, a thorough situation analysis that can be used to develop annual business plans, and a series of breakthrough objectives that, when realized, will enable the organization to make great strides forward.

It is important to realize that more than half the value of a strategic plan is in the preparation of it. The act of producing a strategic plan encourages managers to look forward in their thinking so that they can be more proactive, rather than reactive, in their management practices. It trains their minds to look for clues, events, and trends in the environment that may affect or shape the way in which they manage the business. It prepares them to seize opportunities that may dramatically influence the way in which they can meet customer requirements. This is why it is important to perform strategic planning at several levels in the organization, and why it is critical that operating or line managers do their own planning rather than hire it done.

Now, let’s take a look at some key components of strategic planning that directly affect the outcome of a reengineering effort. We will start with the mission of the organization.

**MISSION ANALYSIS**

Strategic planning begins with the definition or analysis of mission, and cannot proceed until there is mission consensus among all planning participants. Mission analysis identifies the spectrum of customers the organization will serve, the broad categories of products and services it will produce, and what it will do to produce those products and services.

Every organization must be guided by a mission statement that defines why the organization exists and what it must do to justify its existence. Everyone must understand the mission because it is the basis for decision making within the organization.
The initial description of an organization’s mission is normally contained within its Charter. By referring back to the charter during mission analysis, the organization will discover the original intent of the organization, why it was created. Also, by comparing the initial provisions of the charter to the current mission, gaps in what the organization currently does and what it was chartered to do may be discovered. These gaps are often times referred to as “Mission Creep”.

The Mission Statement.

Let's start with developing a mission statement. As we have mentioned earlier, the mission statement defines what the purpose of the organization is. It identifies in general terms the operations of the organization, often identifies major products and services, and for whom the product and services are provided.

Mission statements must contain three key ingredients: 1) A defined customer, 2) a defined product and/or service, and 3) a general idea of what it will take to produce that product and/or service. Here’s a simple way of making sure you include each of these key aspects of a mission statement:

Just fill in the blanks!

We provide (Product/Service) to/for (Customer), by/through (Process), (Process), and (Process).

- Identify External Customers and Define their Requirements.

As part of Mission Analysis, the organization will begin to identify and categorize the external customer groupings that the organization serves or intends to serve and what they actually need to accomplish their mission. While the interests of all stakeholders in the organization must be accounted for, the starting point is to determine who the customers are.

Without a clear understanding of customers and their general needs, no other stakeholder interests can be served. An
understanding of your external customers is fundamental to decision making within the organization. Every decision either serves customer interests in some way, directly or indirectly, or it is irrelevant. Customer identification is also the starting point for process reengineering efforts. Without a customer focus, process reengineering efforts are destined to be futile.

The more that is known about our customers, individually or as groups, the more effective the organization's strategic planning and, eventually, its process reengineering efforts. In private-sector enterprises, technology is making it possible to evaluate and understand individual customer needs, and customize services to fit those individual needs.

Once these general requirements are identified, the organization must now define the key products or services it produces for these customers that fulfill their requirements. The key products or services are the outputs the organization produces and are the only thing that their customers really care about. The organization’s customers don’t care about how or what is done to produce the product or service, they are only concerned with whether or not the product or service they receive meets their specific need.

Establish critical customer requirements and needs.

A couple of tools to help you accomplish this task are the **Customer vs. Product/Service Matrix** and the **Customer vs. Needs Matrix**. These matrices will aid the organization in analyzing its current level of service. A matrix can be developed identifying which **products and services** are provided to each customer. In identifying customers it is helpful to separate them into two groupings: **Primary Customers** and **Other Customers**. This will be useful in determining the prioritizing needs. The list of customers is identified in the left-hand column and the list of existing products and services identified in the top row. **Customer surveys and interviews** are useful in providing an indication of what products and services they are interested in and the level of satisfaction in the quality of existing products and services.

**Customer Matrix.**

<table>
<thead>
<tr>
<th></th>
<th>Product #1</th>
<th>Product #2</th>
<th>Product #3</th>
<th>Product #4</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Primary Customers</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Customer A</td>
<td>X</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Customer B</td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td><strong>Other Customers</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Customer C</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Another matrix can be prepared to identify new products and service needs, products and services no longer required, and products and services that require improved quality. Customers are again identified in the left column and customer needs are identified in the top row. Indication can be made in each block as to the relationship between customer and need:

**Customer Need Matrix.**

<table>
<thead>
<tr>
<th></th>
<th>Need A</th>
<th>Need B</th>
<th>Need C</th>
<th>Need D</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Primary Customers</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Customer A</td>
<td>V</td>
<td></td>
<td>S</td>
<td></td>
</tr>
<tr>
<td>Customer B</td>
<td>S</td>
<td>S</td>
<td></td>
<td>S</td>
</tr>
<tr>
<td><strong>Other Customers</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Customer C</td>
<td>S</td>
<td></td>
<td>W</td>
<td></td>
</tr>
<tr>
<td>Customer D</td>
<td>S</td>
<td></td>
<td>S</td>
<td>W</td>
</tr>
</tbody>
</table>

"V" - indicates very strong relationship
"S" - indicates strong relationship
"W" - indicates weak relationship

Prioritize customer requirements and needs. Based on surveys and interviews with customers, existing and potential products and services should be prioritized. This will assist in identifying what are the important areas of concentration for vision achievement. It also will be useful in determining which processes should be analyzed for potential improvement. Current and potential competitors should be identified and ranked according to potential threat. Competitors are those organizations that provide comparable products and service or have the potential to provide the products and services needed by your organization's customers. This information will be used later in the Environmental Analysis phase of strategic planning.

Test customer requirements and needs against mission statement. Identify inconsistencies. For example: What customer needs cannot be supported within the existing mission? What missions are no longer supported by customer needs? Remember "Mission Creep"?

- **Identify and Define Core Business Processes.**

Now that the organization has a clear idea of whom its customers are and the products and services it produces for them, it must define the core business processes that are currently being performed to produce them.
The organization's core processes are identified and defined from an enterprise-wide perspective independent of individual functions or departments which make up the organization's structure.

However, when defining core processes, which cut across multiple functions or departments, it is very important to include all functional/department managers in the discussion.

A few rules for identifying processes include the following:

- Core Business Processes are independent of organizational structure.
- Core Business Processes are significant to the nature and purpose of the enterprise.
- The output of a Core Business Process is a product and/or service produced for a customer external to the organization.
- The naming convention for core business processes is verb-name such as "Design Project" or "Maintain Aircraft".
- Well-defined processes will have a logical structure.

**The Process Development Matrix - A Tool for Identifying Core Business Processes.**

There are many different methods and tools used to identify the core, mission-driven processes in the enterprise. One such tool is the Process Development Matrix. The Process Development Matrix (PDM) is a tool that was introduced into the BPR methodology as a means of structuring our thought process.
The PDM was designed in support of the concept of Process Management. As we learned in the BPR Fundamentals course, the Process Management Model (PMM) describes the existence of a customer with a certain need to be filled. The assumption is that the product your organization provides will fill that need. Both of these elements of the PMM are identified and defined early in Strategic Planning, but the specific core processes have not been identified yet. The PDM is designed to help you identify the activities that are necessary to be accomplished to produce a major product or service for an external customer. This "end-to-end set of decisions and activities that produce a major product or service for an external customer" is one of the organization's core, mission-driven processes.

Here's how the Process Development Matrix works.

Notice that the PDM is divided into several columns. The first column, labeled "Life Cycle", shows four life cycle stages. Any product or service your organization produces will go through a series of life cycle stages from the initial requirement from the customer through the final disposition of the product or service.

The next series of columns allow the analyst to take each major product or service produced by the organization, through the four life cycle stages. By doing this for each major product or service, you have now identified the first level of activities that, together, make up the process that is needed to be performed to produce that major product or service.

At this time, breakthrough objectives in the strategic plan should be thoroughly studied to determine if their accomplishment may require any modifications to these enterprise-wide processes you have just identified. It is quite possible that a radical improvement called for by the strategic plan may call for new levels of cross-function process integration, or even the elimination of some processes or lower level activities.

- **Identify Core Competencies.**

  Once you know what products and/or services an organization must produce, the organization must identify the knowledge and skills necessary to perform the processes that produce the product and/or service for its customers.

  A core competency is defined as a “set of knowledge, skills, and/or abilities an organization must possess, and at which it must excel, for it to be

  

<table>
<thead>
<tr>
<th>Mission Analysis</th>
</tr>
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<tbody>
<tr>
<td>Identify Core Competencies</td>
</tr>
<tr>
<td>- What knowledge, skills, and capabilities can we bring to our mission today, and what knowledge, skills, and capabilities can we develop to be competitive today?</td>
</tr>
<tr>
<td>- What will our competitors do?</td>
</tr>
<tr>
<td>- What knowledge, skills, and capabilities can we develop to be competitive in the future?</td>
</tr>
</tbody>
</table>

  

  Figure 2 - 16
successful”. Many organizations tend to ignore the importance of this aspect of strategic planning.

Every successful organization has a competency base that can be leveraged to provide superlative customer service. The strategic plan helps ensure that the organization devotes resource to preserving and strengthening its core competencies.

A clear understanding of its core competencies can also provide important information on what work the organization does in-house, and what work it will outsource. Never outsource one of the organization's core competency areas!

It is at this point that the organization can also begin to address the issues that exist in understanding its corporate knowledge base. As the organization defines its core competencies, it is also defining the knowledge and skills that must be maintained for it to be effective in carrying out its mission. A Critical Knowledge Assessment (CKA) can be performed to determine where critical knowledge exists throughout the organization and how to leverage it to enable the process to produce its product/service exactly as the customer needs it.

- **Map Core Processes against As-Is organization structure.**

Once the core processes have been identified and defined, the organization must now determine the relationship of those processes to the enterprise, within the context of the organization's structure. This mapping of the processes against the existing structure of the organization gives senior leaders an enterprise-wide view of where work is being done and the interfaces that exist within the organization. Without a doubt, this is the most explosive and controversial matrix in the Framework methodology. It is here where existing "stovepipes" in the organization are exposed. These "stovepipes" typically become boundaries where work is performed with regard to the rules set forth in the "stovepipe", not with regard to the needs of the customer.

**Here's how the Process vs. Organization Matrix works.**

The matrix is divided into several columns, and of course, several rows. The first column shows the Core, Mission-Driven Processes that were identified and defined on the Process
Development Matrix (PDM). Each major, core process will be shown on a separate row of the matrix.

Each subsequent column will be labeled with the name of each "first-level" organizational element that represents the top of the enterprise's organization structure. Since, at this time the matrix is trying to capture the "As-Is" environment within the organization, only those organizational elements that are currently identified on the organizational chart are to be included as headings.

The object of this exercise is to identify the relationships of each of the enterprise's organizational elements to each of its core processes. These relationships are assigned in accordance with the organizational element's level of involvement in the activities that make up the core process. Each level is assigned a notation.

The levels of involvement that are associated with the organizational element are:

"D" for Decision-Maker. The "D" will go to the organizational element that has the most involvement in the process and that has the responsibility of making the majority of the "day-to-day" operational decisions that affect the output of the process. Each core process should have only one "D". If more than one decision-maker has been identified, the enterprise must resolve this conflict.

"M" for Major Involvement. The "M" will go to an organizational element that has major involvement in the process, but doesn't have the decision-making responsibility for the process.

"S" for Some Involvement. The "S" will go to an organizational element that has a limited involvement in the process. They may be in a support role, or provide limited expertise to the process.

There are three things that an analysis of the Process vs. Organization Matrix identifies:

1) The organizational elements that must participate in any reengineering effort. Any organizational element that is deemed the decision-maker (or process owner) for the process, indicated by a "D" or has major involvement in the process, indicated by an "M", must have full-time representation on the Business Process Reengineering (BPR) Team. Other elements that provide limited resources and have limited impact on the
process, indicated by an "S" on the matrix, can be brought in by the team and interviewed as subject matter experts, but normally are not on the core BPR Team.

2) **The existing culture of the organization.** If, for example, the decision-maker for the process is always the top executive in the organization, this may indicate the enterprise's leadership is not quite as willing to delegate authority to lower levels in the organization. If the decision-maker, however, is identified as the next level down in the organization, then authority for managing the activities within the process will be the responsibility of the ones that are executing those activities.

3) **Whose Viewpoint the Activity Model will be developed from.** A very important outcome of Strategic Planning is the determination of the view of the process that will be reengineered. If there are many organizational elements that have either a "D" or an "M" for a single process on the matrix, the viewpoint may need to be elevated to the next level up in the enterprise's organization chart. If there is a single organizational element that seems to have the majority of the involvement in the process, and they have been identified as the decision-maker, they will represent the viewpoint for the process for which it is the owner.

The Process vs. Organization Matrix is a tool that allows the enterprise to see where it needs to concentrate its reengineering effort. It is a way to get an overview of how the organization structure affects the ability of the process to be performed effectively. It shows, very vividly, the distinction between business processes (which cut horizontally across the organization structure) and functions (which are vertical, causing stovepipes in the structure).

Many efficiencies can be gained, and a great deal of effectiveness can be realized by simply understanding, then eliminating the walls that have been built up between the organizational elements on the organization chart. The Process vs. Organization Matrix is a way to focus in on those problem areas that impede the enterprise's progress toward its vision.

**ENVIRONMENTAL ANALYSIS**

Once the organization has a clear idea of its current mission, including its customers and products and/or services, it needs to begin the process of focusing its attention on the external world around it. An environmental analysis consists of:

- **Strategic Benchmarking**
- **Strengths, Weaknesses, Opportunities and Threats (SWOT)**
- **Organization-level Assumptions**

Let’s take a look at each of these.
• **Conduct Strategic Benchmarking.**

Strategic Benchmarking is now a fundamental component of strategic planning and is absolutely necessary for the task of constructing a process vision. Strategic Benchmarking is the basis for setting performance targets for processes based on discovering what other organizations with like processes, products or services, and similar customer constituencies have done.

Strategic Benchmarking is usually done on a peer-to-peer basis meaning that the senior managers in the Benchmarking organization meet with senior managers in the target organizations; and junior managers with junior managers. The best results are obtained when the senior manager in the business unit writing the strategic plan is a full participant in the Benchmarking effort.

• **Conduct Strengths, Weaknesses, Opportunities and Threats (SWOT) analysis.**

Once an organization has articulated its mission, understands who its customers are and their general needs, it is ready to analyze its position with respect to the environment in which it operates. This is called a **SWOT** analysis, which is the acronym for the areas that are studied: **S**trengths, **W**eaknesses, **O**pportunities, and **T**hreats. Combined with the results of strategic Benchmarking, this analysis is all that is required to establish process performance gaps, which, along with performance measures, are the essential input to process reengineering projects. SWOT analysis is usually performed in a workshop environment by managers assisted by staff analysts who have collected meaningful data on environmental factors, statistics, and measures. Strengths and weaknesses supply the basis for understanding how the organization can best respond to probable or potential opportunity and threat factors that exist in the external environment.

This is a critical section of the strategic plan and shouldn't be overlooked. When this section is well done, the organization has a clear sense of its baseline condition (strengths and weaknesses), and what it must do to progress toward its ideal state (capitalize on opportunities, overcome threats). SWOT results provide the basis for setting meaningful business objectives for growth and improvement.
• **Develop Organization-level Assumptions.**

No one has an operational crystal ball that allows us to clearly see the future. So how can we plan? But for us to plan for the future, we have to establish a baseline that describes those possible events that may take place. One way is to create our own idea of what the future may hold. We do this by identifying certain aspects of the environment that relate to our organization's mission, then we make an assumption that something is going to happen, thereby allowing us to plan our strategies around as real a future as we can make. Assumptions form the foundation, or stability, if you will, for our future action plans.

This becomes an exercise in educated guessing. However, from the information we gathered from the SWOT analysis, we can get a pretty good idea of what may be ahead. It is from this baseline that we will begin to define the actions that are necessary to move the organization toward its vision. Using this information we attempt to make our assumptions as specific as possible. For example, the actions we would take in response to an assumption that states, "Downsizing will continue at the rate of 5% per year over the next 3 years", would be completely different than if it stated, "Downsizing will continue at the rate of 15% per year over the next 3 years". The more specific we define the assumption, the more effective will be our initiatives generated by the strategic plan.

Another aspect of defining assumptions is the concept of contingency assumptions. If an organization finds itself, at the time of the development of their strategic plan, in an environment of total instability, the organization may want to consider defining assumptions that would reflect more than one outcome of a particular event. If the second outcome actually comes to pass, the organization has then developed objectives and action plans to deal with the second contingency.

**PERFORMANCE ANALYSIS**

If there is one major business concept that has come to the forefront of organizations in both private industry and government it is Performance Management.
But, what exactly is **performance management**? For any organization to be successful, it must be able to clearly define what success means. Over the last twenty years organizations have spent millions of dollars on new information technologies hoping to find that one system that will tell them how successful they really are. Most are still looking!

It is very important to understand that success can only be measured once it is clearly defined. If you ask ten different organizations how they measure success, you will get ten different answers. In fact, you will get even more answers to that question the deeper you go into any of the ten.

One of the most critical aspects of strategic planning is the definition of organizational success. It is one of the most critical analyses performed, but it is the one that is most often left out of strategic planning sessions. So, how do you measure success of an organization? You first define what you mean by success.

- **Define the Vision, Values & Beliefs of the organization.**

  **Vision** describes a desired end state, an "Image of Future Success". It defines the future direction of the organization, where it wants to see itself at the end of some predetermined period of time. This "planning horizon" is usually 2 to 5 years out. It is a snapshot of the organization's success, from a futuristic perspective, i.e., its destination. Each vision statement is unique to the organization that created it and can be realized only by that organization. It is this uniqueness that makes the vision so powerful and motivating.

  Providing the initial vision is a senior leadership responsibility. However, once defined, it must be sold to the rest of the organization to build consensus on the organization's direction. As individuals begin to understand what the organization has in its future, the vision begins to take root and, in many cases, grow. This growth creates enthusiasm, commitment, and focus.

  A major part of defining the organization's vision is defining its values and beliefs. Values and beliefs describe what an organization is willing, and not willing, to do in support of its customer, or to reach its vision. They identify the manner in which the organization will carry out the mission. Often these statements begin with the phrase: "We believe in...." or "We value ...".
Values drive organizational behavior. As with individuals, an organization’s behavior must be consistent with its definition of who it is. When we define the values and beliefs of the organization, we are in reality defining the organization’s identity. It is this identity that will determine how the organization’s culture will react to different positive and negative situations it will face. This has a profound impact on the decision-making ability of the organization.

- **Define Organization-Level Goals and Objectives.**

Once the organization's vision, its destination, is clearly understood, the journey toward that destination begins. But how do you know if you are on the right path?

Once the mission has been defined and a vision of the future has been established, the organization must begin to describe how it is going to accomplish its mission and make progress toward the vision. An organization's goals are actually refinements to its vision that address critical issues within the organization. Goals help describe the organization's journey.

Max Richards, in his book, *Setting Strategic Goals and Objectives*, describes goals as "open-ended statements of purpose to be used when managers do not want to become entangled in specifics". Seriously, another way to look at goals is that they are high-level "what is going to be accomplished" and objectives are the more specific and detailed "how are we going to measure whether or not it has been accomplished". So, given the emphasis on measuring an organization’s progress toward its future, we have defined an organization-level goal as:

**Performance Analysis**

Define Organization-Level Goals & Objectives

<table>
<thead>
<tr>
<th>Customer Competition</th>
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</thead>
<tbody>
<tr>
<td>C/C/C = 5 Days/4 Days</td>
</tr>
</tbody>
</table>

**Vision:** Be the Parts Distribution Center of choice within the Commercial Construction Industry.

**Goal:** Lead the Industry with the lowest delivery time on spare parts.

**Objective #1:** Deliver spare parts to customers within 3 days of request during CY06.

**Figure 2 - 22**

A high level statement of intent, that when accomplished, moves an organization closer to its vision.

Goals are intangible. They describe a future state, but do not define specific measures. That is the role of the Organization-Level Objective.

**Objectives**, like goals, must support the achievement of the mission and the furtherance of the vision. Objectives are characterized by four things: (1) relate to a stated goal, (2) provide a means of measuring the progress toward the goal, (3) a specific target to
achieve, and (4) a timeframe for which the target will be achieved. An objective is very specific and when all four elements are defined, it a very important measure of performance.

An example of a vision statement, a supporting goal and objective for a Supply Operations Depot who provides a wide variety of supplies to the Commercial Construction industry might be:

<table>
<thead>
<tr>
<th>Vision: Be the Parts Distribution Center of choice within the Commercial Construction Industry.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goal: Lead the industry with the lowest delivery time on supplied parts.</td>
</tr>
<tr>
<td>Objective: Deliver supplied parts within 3 days of request by the end of FY 2006.</td>
</tr>
</tbody>
</table>

If you will notice, the vision is very broad, but it does define the boundary within which the organization is willing to commit its efforts. And once the end-state is defined, a set of objectives (i.e., performance measures) are identified that will help keep the organization focused. These objectives, or target measures, become the actual performance indicators used in the Senior Leader's Quarterly Performance Review. The intent of the Review is to monitor how close the organization is getting to its defined end-state, as defined by its vision.

- Develop Enterprise-Level Performance Scorecard.

Much has been written about the Balanced Scorecard and much of it has been misunderstood. Every organization needs a set of performance measures by which it can measure its progress toward its image of future success as described in the vision. There is little disagreement on whether or not a scorecard of some form is needed, the challenge comes from how to implement such a performance measurement system and what should actually be measured and tracked.

The most important aspect of any performance measurement system is that it keeps an organization focused on what it values most – service to its customer. The easiest way to ensure you are satisfying your customer’s needs is to monitor specific aspects of the organization’s operations that contribute directly to meeting those needs.
The idea behind the Balanced Scorecard is the notion of a balanced view of the organization’s performance as opposed to focusing the leader’s attention on just one area of the organization. The original concept of a balanced approach to performance analysis and management described four key aspects of the organization where performance must be measured:

**Customer** – What do our customers think of us?

**Internal Business Process** – Are our core business processes producing the product and/or service in the manner which best satisfies our customer’s needs?

**Financial Management** – Do we manage our resources effectively and efficiently? Do we know how much it costs for us to produce our product and/or service?

**Growth & Learning** – Are we developing the critical competencies necessary to meet future competition? Are we learning from our mistakes?

Any performance measurement system should address each of these areas if it is to gain a complete look at the overall performance of the organization.

Once the vision of the organization is fully understood and goals and objectives have been defined, the organization must format these objectives into a series of metrics which can be consistently tracked. The key to a successful performance measurement system is not to monitor any more metrics than is absolutely necessary to gain a clear picture of where the organization is in respect to its quest toward its vision.

Let’s continue using the example from above to further illustrate this aspect of performance analysis. Given the vision, goal, and objective defined by this Supply Operations Depot, we would need to set up a manageable system to track the performance of the organization on a consistent basis. Here’s a possible way to do just that:

<table>
<thead>
<tr>
<th><strong>Vision:</strong></th>
<th>Be the supplier of choice within the Commercial Construction industry.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Goal 1.0:</strong></td>
<td>Lead the industry with the lowest delivery time on supplies.</td>
</tr>
<tr>
<td><strong>Objective 1.1:</strong></td>
<td>Deliver supplied parts within 3 days of request by the end of FY 2006.</td>
</tr>
<tr>
<td><strong>Metric 1.1:</strong></td>
<td>Delivery Time (Customer Request to Customer Receipt)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Monitored:</strong></th>
<th>Monthly</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Data Collection System:</strong></td>
<td>Parts Distribution System (PDS)</td>
</tr>
<tr>
<td><strong>Responsible POC/Dept:</strong></td>
<td>Program Manager</td>
</tr>
</tbody>
</table>

**Scorecard Perspective:** CUSTOMER SERVICE
The data captured by this system must be reported to the organizational element responsible for reaching the vision, in a commercial organization that person is usually the President and/or CEO, while in a government organization this could be either the Director or the Senior Civilian. Decisions on directional changes, as well as process change, should be based on such data.

However, it is very important to note that when an organization’s leadership is inundated with too much data, however, decision-making becomes slow and tedious. As more data is presented, we feel obligated to use it in our decisions. Only monitoring certain aspects of an organization’s performance is necessary at the senior levels. Most senior leaders can make effective decisions about the direction of the organization with only ten to fifteen very clearly defined measures. When that same senior leader is flooded with hundreds of metrics, he/she will find himself/herself spending most of their time sifting through the data as opposed to making intelligent decisions.

Once these measures have been clearly defined and a system of capturing performance data has been established, the actual scorecard can be created. The scorecard, itself, is simply a way to display all of the performance data in a single format. Many organizations use the “Traffic Light” method for displaying the performance data with “Green” indicating the organization is doing well, “Amber” indicating the organization should pay closer attention to a particular area of performance, and the dreaded “Red” which indicates the level of performance in a particular area of performance is unacceptable and must be fixed immediately.

Many vendors have software on the market that automates some of the display and analysis aspects of the system, but the challenge continues to be the input data itself. Without clearly defined, and accessible, performance data being input to the system, the scorecard becomes nothing more than another reporting tool. The value lies in the capturing of “real” performance data and using that data to make decisions that affect the very survival of the organization.

- **Conduct Performance Gap Analysis and prepare breakthrough objectives.**

While the results of strategic planning have many uses within the organization, one of the most important is to provide information that can be used to develop a series of breakthrough objectives.
objectives that, if accomplished, move the organization toward its vision or desired future state. Breakthrough objectives are the most critical inputs to process reengineering. With this information, process reengineering teams can work out the details of how to achieve the breakthrough objectives because they now know what level of performance the organization is trying to achieve and when it must reach it.

A breakthrough objective is one that describes a quantum leap in one or more performance areas. It describes the "gap" between an organization's performance today (As-Is) and the performance it must achieve to realize its vision (To-Be). For example, if the same Supply Operations Depot discussed above were currently delivering parts within 30 days of their customer's request, then a breakthrough objective may be to reduce that time to two or three days.

The Breakthrough Objective would be stated:

**Breakthrough Objective:** Reduce the time to deliver supplied parts from 30 days to 3 days by the end of FY 2006.

Because breakthrough objectives are transforming from an organizational standpoint, they must be developed with or by the most senior leaders in the organization. Breakthrough objectives can only be accomplished as top-down initiatives. The impacts on every facet of the organization are profound, and the risks associated with implementing them are substantial.

The development of Breakthrough Objectives is the final element of strategic planning. It is the point at where senior leadership can decide whether or not the performance gap is large enough and must be closed in a short enough period of time to warrant a full-blown reengineering effort.

**DOCUMENT THE STRATEGIC PLAN**

Once all of the above tasks have been completed, the next task is to document the results of strategic planning in the form of the strategic plan itself. The essence of a strategic plan is substance and clarity, not volume. A complete strategic plan for a typical organizational unit should take no more than ten pages of text supplemented with charts, diagrams, and drawings.
wherever meaningful. Backup and substantiating data should be maintained in separate files for reference and for use in the succeeding planning cycles.

All participants in the strategic planning process should work to ensure that the resulting strategic plan satisfies the “Four Cs” approach to planning. All planning documents should be clear, consistent, coherent, and concise. Boilerplate extracts from policy and marketing documents, working data, descriptions of the planning process, etc. should be excluded from the plan. If needed, these materials can be made available in supporting documents.

**IMPLEMENTING THE STRATEGIC PLAN**

Research has shown that those organizations who have successfully implemented strategic plans have certain characteristics in common. All studies have shown, for example, that without strong and enduring support from Senior Leadership and the Corporate Board, Strategic Plans are not effectively implemented. Most plans become "shelf-dwellers" with the vast majority of the organization never seeing nor hearing about the plan.

Other Characteristics successful organizations have in common include:

- Most organizations (not unexpectedly) have a better-than-average strategic plan, which contain assumptions with clearly and precisely established performance measures;

- Most organizations have a willingness to embrace change and an ability to withstand the uncertainties change can generate;

- Many organizations have systems, processes, or strategies that are worth hiding from competitors.

Strategic plan implementation is an Art not a Science. Therefore, one should not expect that there would be a “Ten Easy Steps” program for the implementation of a Strategic Plan. This realization is the first step to understanding what is required in strategy implementation.

The responsibility for Strategic Plan development and implementation is that of the CEO or Director, and it cannot be delegated. Each leader must continuously guard against the resultant frustration, waning of enthusiasm, and the evaporation of once strong commitment, which can occur in a long-term implementation.

Training is also essential, as it assists employees and managers to understand and bridge the problems and irritations which change brings. Communication, both vertical and horizontal, must be improved if employees and managers are to understand how and what is to be implemented. Good communication also helps ease employees’ fears, which often pervade an organization during significant change. In an organization where most important organizational
decisions are made in secret, it is common to see fear running rampant among the workforce. Keep everyone involved, either directly or indirectly. Remember, the more a person knows the less he/she will resist the changes brought forth by strategic planning.

**SUMMARY**

Strategic planning delivers a set of business goals and requirements that are expressed in terms of customers (process beneficiaries) and customer needs. It takes into account, or guides the development of, the organization's mission, vision, values and beliefs. The strategic plan defines what an organization is all about; which it will serve, what needs it will fulfill, and under what terms it will operate (*values and beliefs*).

The strategic plan must be consistent with the constraints placed upon the organizational unit by higher authority. This means that no element of the strategic plan can conflict with the mission, vision, values and beliefs expressed by higher authority. Benchmarking to develop corporate goals and performance measurements is considered a part of strategic planning.
Appendix B

Chapter 2 - Overhead Slides
**The Planning/Performance Cycle**

**PLAN**
- Set Standards of Performance
- Select Performance Indicators
- Evaluate Planning Recommendations

**PERFORM**
- Perform Business Process
- Track Performance Indicators

**EVALUATE**
- Assess Process Performance
- Analyze Performance Indicators
- Make Planning Recommendations
Planning Myths

Planning Myth #1: Planning is only performed at the highest levels of the organization.

Planning Myth #2: Planning is the job of planners or the planning department.
Planning Myth #3
Planning means trying to predict the future...

Planning Myth #4
We never have enough data to plan well......
Planning Myth #5
It costs too much, and takes too much time to develop good plans...

Planning Myth #6
It is impossible to keep plans up to date....
Planning Myths

Planning Myth #7
Plans seldom influence the day-to-day activities of managers...

Planning Myth #8
It is more important to develop the budget than develop a plan...
Planning and Process Reengineering

Two Levels of Planning:

External -- Long Range

Internal -- Annual

Strategic Planning

Business Planning
“The main thing is to keep the main thing, the main thing!”

Jim Barksdale, CEO, Netscape
Costs of No Strategic Plan

- Loss of competitive edge.
- Crisis management.
- Diverse directions and redundancy.
- At the mercy of outside influences.
- Automated information systems that are out of date and do not meet the needs of customers.
Secure Executive Commitment:

- Gaining & maintaining commitment
- Perception of the executive
- Maintaining commitment during adversity
- Opposition to the change
Secure Executive Commitment:

ADVERSITY ---
"The true character of an individual comes to light only under adverse conditions...."

OPPOSITION ---
"At the crossroads that lead to the future....Every progressive spirit is opposed by ten thousand guardians of the past...."
Definition of Strategic Planning

The essence of Strategic Planning is to help a company develop and sustain advantage in the marketplace through unique resources, agility, superior products and/or superior service. Strategic Planning is "strategic" because it requires an understanding of how the external environment impacts a firm's ability to create value -- What are our competitors doing? Are consumer tastes changing? What businesses should we be in? How do the various parts of our company fit together? Strategic Planning is "planning" because it recognizes that decisions made today will produce important results at a later date.
Key Aspects of Strategic Planning:

- **Mission Analysis:**
  - Identify major customer groupings & specific requirements.
  - Identify key Products and/or Services to meet requirements.
  - Identify and define Core Business Processes.
  - Identify core competencies.
  - Map Core Processes against As-Is organization structure.

- **Environmental Analysis:**
  - Conduct strategic Benchmarking.
  - Conduct SWOT (Strengths, Weaknesses, Opportunities, & Threats) Analysis.
  - Develop organization-level assumptions.

- **Performance Analysis:**
  - Define Organization’s Vision, Values & Beliefs.
  - Develop organization-level goals & objectives.
  - Develop Enterprise-Level Performance Scorecard.
  - Conduct Performance Gap Analysis and prepare breakthrough objectives.

- **Document the strategic plan.**
Mission Analysis -
Who Are We? What is Our Purpose?
Mission Analysis

Develop the Mission Statement:

We Provide **(PRODUCT/ SERVICE)**

to **(CUSTOMER)**

by/ through **(PROCESS), (PROCESS), (PROCESS).**
Mission Analysis

- Identify major customer groupings & specific requirements.
- Identify key Products and/or Services to meet requirements.

Identify External Customers

Identify Key Products and/or Services
Mission Analysis

Fill in the blanks of the Mission Statement:

We Provide (BPR Knowledge)

to (Commercial & Government Organizations)

by/through (PROCESS), (PROCESS), (PROCESS).

_________________________________________________________________________
_________________________________________________________________________
_________________________________________________________________________
_________________________________________________________________________
_________________________________________________________________________
_________________________________________________________________________
_________________________________________________________________________
_________________________________________________________________________
Mission Analysis

Identify & Define Core Business Processes

Enterprise Mission Statement

Core Processes

Sub-Processes (Activities)

Current Business Processes
### Process Development Matrix

<table>
<thead>
<tr>
<th>LIFE CYCLE</th>
<th>Key Product or Service</th>
<th>Key Product or Service</th>
<th>Key Product or Service</th>
<th>Key Product or Service</th>
</tr>
</thead>
<tbody>
<tr>
<td>REQUIREMENTS</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACQUISITION</td>
<td></td>
<td></td>
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<tr>
<td>SUSTAINMENT</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>DISPOSITION</td>
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</tbody>
</table>

### PROCESS DEVELOPMENT MATRIX

<table>
<thead>
<tr>
<th>LIFE CYCLE</th>
<th>Key Product or Service</th>
<th>Key Product or Service</th>
<th>Key Product or Service</th>
<th>Key Product or Service</th>
</tr>
</thead>
<tbody>
<tr>
<td>REQUIREMENTS</td>
<td>Determine Trng Reqts</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>ACQUISITION</td>
<td>Develop Curr.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Acquire Student</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SUSTAINMENT</td>
<td>Deliver Instruction</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DISPOSITION</td>
<td>Graduate Student</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

Complete the Mission Statement:

We Provide (BPR Knowledge)

to (Commercial & Government Organizations)

through (BPR Training) and (BPR Consulting).
Mission Analysis

Identify Core Competencies

• What knowledge, skills, and capabilities can we bring to our mission today, and what knowledge, skills, and capabilities can we develop to be competitive today?

• What will our competitors do?

• What knowledge, skills, and capabilities can we develop to be competitive in the future?
Mission Analysis

Identify Core Competencies

Product: BPR Knowledge
Process: Provide BPR Training
Core Competencies:

   SME-Level knowledge of BPR
   Ability to Teach Effectively
Mission Analysis
Map Core Processes against As-Is organization structure

Process to Organization Matrix

<table>
<thead>
<tr>
<th>Process</th>
<th>President</th>
<th>Faculty</th>
<th>Registrar</th>
<th>Logistics</th>
<th>Marketing</th>
<th>Research &amp; Report</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provide BPR Training</td>
<td>D</td>
<td>D</td>
<td>M</td>
<td>M</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provide Consulting Assistance</td>
<td>D</td>
<td>M</td>
<td>S</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conduct Applied Research</td>
<td>D</td>
<td></td>
<td>S</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Mission Analysis

Map Core Processes against As-Is organization structure
Environmental Analysis -
What’s Out There That Can Harm or Enable You?
Key Aspects of Strategic Planning:

- **Mission Analysis:**
  - Identify major customer groupings & specific requirements.
  - Identify key Products and/or Services to meet requirements.
  - Identify and define Core Business Processes.
  - Identify core competencies.
  - Map Core Processes against As-Is organization structure.

- **Environmental Analysis:**
  - Conduct strategic Benchmarking.
  - Conduct SWOT (Strengths, Weaknesses, Opportunities, & Threats) Analysis.
  - Develop organization-level assumptions.

- **Performance Analysis:**
  - Define Organization’s Vision, Values & Beliefs.
  - Develop organization-level goals & objectives.
  - Develop Enterprise-Level Performance Scorecard.
  - Conduct Performance Gap Analysis and prepare breakthrough objectives.

- **Document the strategic plan.**
Environmental Analysis

Conduct Strategic Benchmarking

Who’s the best in Customer Service?
What are the characteristics they exhibit of great Customer Service?
Environmental Analysis

Conduct SWOT Analysis

STRENGTHS
WEAKNESSES
OPPORTUNITIES
THREATS
Environmental Analysis

Develop Organization-Level Assumptions

Downsizing will continue.....
Skill base will decrease.....
Performance Analysis –
Where Are You on Your Journey to the Top?
Key Aspects of Strategic Planning:

- **Mission Analysis:**
  - Identify major customer groupings & specific requirements.
  - Identify key Products and/or Services to meet requirements.
  - Identify and define Core Business Processes.
  - Identify core competencies.
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- **Performance Analysis:**
  - Define Organization’s Vision, Values & Beliefs.
  - Develop organization-level goals & objectives.
  - Develop Enterprise-Level Performance Scorecard.
  - Conduct Performance Gap Analysis and prepare breakthrough objectives.

- **Document the strategic plan.**
Without a complete view of the organization’s performance, we become like the Captain in an old Mariner’s joke:

“The good news is that we’re making excellent time. The bad news is that we’re hopelessly lost!”
Performance Analysis

Creating the Vision

VISION - Image of Future Success, Desired End State

ENVIRONMENT
COMPETITION
OPPORTUNITIES
ASSUMPTIONS
BELIEFS
VALUES
Performance Analysis

Creating the Vision
Performance Analysis

Define Organization-Level Goals & Objectives

Vision: Be the Parts Distribution Center of choice within the Commercial Construction Industry.

Customer
Competition

C₁/C₂ = 5 Days/4 Days

Goal: Lead the Industry with the lowest delivery time on spare parts.

Objective #1: Deliver spare parts to customers within 3 days of request during CY06.

Time, Cost, & Quality

Performance Analysis

Develop Enterprise-Level Performance Scorecard.

**Vision:** Be the Parts Distribution Center of choice within the Commercial Construction Industry.

**Goal 1.0:** Lead the Industry with the lowest delivery time on spare parts.

**Objective 1.1:** Deliver spare parts to customers within 3 days of request during FY06.

**Metric 1.1:** Distribution Time (Customer Request to Customer Receipt)

**Monitored:** Monthly

**Data Collection System:** Parts Distribution System (PDS)

**Responsible POC/Dept:** Program Manager

**Scorecard Perspective:** Customer Satisfaction
## Performance Analysis

**Develop Enterprise-Level Performance Scorecard.**

![Performance Analysis Diagram](image)

<table>
<thead>
<tr>
<th>Category</th>
<th>Metric 1</th>
<th>Metric 2</th>
<th>Metric 3</th>
<th>Metric 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Process</td>
<td>2.1</td>
<td>1.1</td>
<td>3.1</td>
<td></td>
</tr>
<tr>
<td>Process Cost ($/Transaction)</td>
<td>50.00</td>
<td>12.50</td>
<td></td>
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</tr>
<tr>
<td>Status</td>
<td>BPR Team formed</td>
<td>Monitor for 3 mos.</td>
<td>No Action Required</td>
<td></td>
</tr>
<tr>
<td>Customer Satisfaction</td>
<td>1.1</td>
<td>3.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Distribution Time (Days)</td>
<td>10</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Customer Satisfaction Rate</td>
<td>4.5</td>
<td>5.0</td>
<td></td>
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</tbody>
</table>

**Vision:** Be the Parts Distribution Center of choice within the Commercial Construction Industry.

Performance Analysis

Conduct Performance Gap Analysis and prepare breakthrough objectives.

Breakthrough Objective #1:
Decrease the time it takes to deliver spare parts from 30 days to within 3 days of request during FY06.
Document the Strategic Plan
Document the Strategic Plan

The Four C's of Strategic Planning

CLEAR

COHERENT

CONCISE

CONSISTENT

Strategic Plan

The Four C's of Strategic Planning

CONSISTENT

COHERENT

CLEAR

CONCISE

Strategic Plan
“Even if you’re on the right track, you’ll get run over if you just sit there.”

-- Will Rogers
Chapter 3

Process Analysis:
*Looking for Problems and Opportunities*
"The tremendous potential of reengineering business processes prior to automating is not being fully tapped, in neither the government nor the private sector. For the organizations to reduce costs, increase service, and raise productivity, new information systems should not be developed simply to automate existing inefficient or ineffective processes, they must become the true enabler of the process."

INTRODUCTION

This chapter discusses the basic elements of baselining an organization through process and data modeling and activity-based costing; and how these techniques can be used to identify process improvement opportunities across the enterprise. We will also be addressing the reasons why the use of IDEF0, Process modeling, IDEF1X, Data Modeling, and Activity-Based Costing (ABC) have been identified as the techniques of choice by many government and private sector organizations.

PROCESS ANALYSIS - UNDERSTANDING THE BUSINESS

This section focuses on how process analysis and process modeling help an organization understand how it currently does business, and how achieving this understanding is the first step in improving an organization's business practices.

General Process analysis Techniques.

There is no single process analysis technique that is suitable for all situations. In fact, most process analysis methodologies are collections of different techniques that only address certain portions of process analysis. The analyst's job will continue to require initiative and ingenuity to respond to different situations. Keep in mind that different kinds of problems require different kinds of techniques; different aspects of any particular problem may require different kinds of
techniques; and there are no panaceas. This means that to be a really effective analyst, you must keep a rich bag of tricks and know when and how to apply the right one at the right time.

Now, let's look at an overview of several different general process analysis techniques. The techniques are grouped into four categories:

- Observation and Interviewing
- Modeling
- Facilitated Group Decision-Making
- Performance Analysis

A very important message to convey at this point is that these categories of techniques are not mutually exclusive and are not sequential. In many situations, all four categories of techniques need to be applied to the analysis of a problem. For example, it is unlikely that an accurate model of an activity can be created without first observing the performance of the activity and interviewing the people who are involved in the activity. On the other hand, observation and interviewing will be much more organized and productive if these tasks are performed to gather information that can be used to build a model.

Let's take a look at each of these categories more closely.

I. Observation and Interviewing.

Before the observation and interview process begins, the analyst should have proposed an initial definition of the problem and specified the purpose of the analysis. It is also useful to identify the different viewpoints from which the problem is to be analyzed. The problem definition, purpose, and viewpoints should be reviewed and validated with the sponsors of the analysis. In the Structured Analysis and Design methodology, the purpose is defined by explicitly stating the questions to be answered by the creation of the process model, and the viewpoint is defined by selecting the proper perspective from which to describe the process.

It is important to note that process analysis is an iterative process. The initial problem definition, purpose, and viewpoints are useful in organizing the process analysis but may be modified based on new information.
Benefits and Risks of Observation

**BENEFITS:** Gain firsthand knowledge about day-to-day operations; provide basis for question formulation and problem verification.

**RISKS:** Too much observation can lead to identifying too closely with the way things are currently done; this loss of objectivity can inhibit the identification of alternative ways of describing and accomplishing process activities.

**Interview Questions for Process analysis**

1. Describe the activities you perform, or have direct authority over. Try to put them into 3-6 categories, and then describe the sub-activities of each category.

2. What inputs, in the form of information, objects, or material do you need in order to perform each of these activities? Who gives them to you?

3. What are the outputs of the activities? Who do they go to?

4. What people, equipment, computers, and/or software are used in each activity to perform the work?

5. What problems do you encounter in performing these activities?

6. What opportunities do you see for improving the cost, quality, or responsiveness of these tasks?

**II. Modeling techniques.**

The purpose of this section is to introduce process modeling as an essential component of process analysis. Since the last four segments of this section deal specifically with process modeling, we are not going to discuss modeling techniques in detail at this point.

**Benefits of Modeling**

- Processes are usually difficult to understand, since they are often large, complex, and confusing. It is also difficult to remember all that is known about a process. (A model provides a method for capturing, organizing, and retaining information about a process.)

- It is difficult to know if the conception of a process is correct. (A model provides a means for understanding and visualizing a process and validating the process through discussions with users).
III. Facilitated group decision-making techniques.

Facilitated group decision-making techniques provide a different approach to gathering the information required to perform a process analysis and to construct a process model. In this approach, structured group sessions and a workshop environment is used to extract information from users in a compressed time frame. The essence of this approach is the interaction of users and analysts working cooperatively as a team to address process requirements.

Some of the strengths and weaknesses of this approach are:

STRENGTHS:

- Encourages commitment of senior management and participants.
- Because the approach depends on the commitment of senior management, participants should feel that their time and contribution to the definition and analysis of requirements is important because of the organization-wide impact.
- Condenses and accelerates process analysis tasks. By combining the numerous activities that comprise the traditional requirements analysis process, facilitated group decision-making techniques accelerate the process for significant time savings.
- Enforces top-down analysis by a joint team.
- Fosters a spirit of cooperation between functional and technical staff. Participants gain a sense of "ownership" of the process.
- Enhances understanding and analysis of the overall process through sharing of knowledge and communication. Both functional and technical knowledge of the overall process is increased through open communications during the workshop sessions. Participants often uncover things during the sessions that traditional procedures would have missed, such as redundancies, overlapping procedures, and commonalties with other functional areas.

WEAKNESSES:

- Requires up front dollar and time commitment.
- Depends upon strong management and user commitment. A lack of management commitment may result in poor participation during the process.
• **Increases procedural and logistical difficulties.** There are procedural difficulties in scheduling session times that are convenient for all participants and in involving all participants in all sessions.

• **Requires trained facilitators, analysts, and scribes.**

**IV. Performance analysis.**

Performance analysis is another form of process analysis that may be used to define and bound activities. Measures of performance, i.e., **cost, time,** and **quality,** can help an organization set its priorities for detailed process analysis.

**Components of Performance Analysis - Cost, Time, and Quality**

• Cost analysis allocates departmental budgets by cost element across the activities performed in the organization. **COST ANALYSIS reveals the high-cost drivers within the organization and reveals where the most significant impact can be made.**

• In many instances, certain activities within the business do not appear to be cost drivers and are not labor-intensive, but may impact the ability of the business to operate. **TIMELINE ANALYSIS allows the analyst to locate the bottlenecks within a process.**

• A process may not be costing a lot of time or contributing significantly to lead time, but may consistently generate poor quality output, which indirectly undermines the effectiveness of the organization. **QUALITY ANALYSIS determines which activities have the greatest bearing on overall product quality.**

**PROCESS MODELING**

*What is process modeling and why do you need to do it?*

First let's define what a model is. A **MODEL** is a representation of a complex reality. **MODELING** is the act of developing an accurate description of a process.

Given these definitions,

**PROCESS MODELING** is the act of developing an accurate description of the activities performed by a process.
When we model a process, we can easily see the interrelationships of the specific activities that make up a process at any level of detail we desire.

This allows us to critically analyze each activity (task) that makes up the process in our search for improvement opportunities. Because the facts about activities are displayed in both graphical and narrative form, this analysis can be objective, rather than subjective. If there are problems with an activity, these problems will be highly visible.

Process models are hierarchical in nature. This means that we can start with a high-level view of our process, then successively break it down (decompose it) into layers of increasing detail.

**Why do we build both baseline (AS-IS) and target (TO-BE) process models?**

A baseline (AS-IS) activity model provides an accurate description of the way activities are currently performed. In addition to providing a means for bounding, validating, and analyzing activities, the model permits accurate performance measures of the activity's cost, time, and quality to be developed. Without such a baseline, it is impossible to analyze alternative methods of performing the activities.

A target (TO-BE) activity model provides a description of how the activities will be performed in the future. The boundaries of the target activity model should correspond to the boundaries of the baseline activity model (or differences should be clearly delineated). Performance measures for the target activity model are estimated to compare to the baseline activity model.

In an ideal situation, separate and complete baseline and target process models would be developed for a process. However, often resource and time constraints do not permit two models to be built and maintained.

**How can models be used to compare alternative methods of fulfilling requirements?**

**There is no easy answer!**

In an ideal situation, a complete model of each alternative process for fulfilling a set of customer requirements would be constructed. Then these alternative models would be compared to the baseline and target models and to each other. In reality, time and resources are usually not available to construct complete models of each alternative. One possible approach is to model only those portions of each alternative that represent the greatest potential pay-off in terms of improved business practices.
This has a number of advantages:

- Assists in Defining and Understanding the Alternative
- Alternatives Can Be Defined in Equivalent Terms
- Focuses on and Bounds the Change
- Facilitates Definitive Comparisons
- Reduces the Time and Resources Required to Perform the Comparisons

**INTRODUCTION TO IDEF0 MODELING AND OVERVIEW OF IDEF0 MODELING TECHNIQUES**

*What is IDEF?*

IDEF0 is still considered an industry standard process modeling technique. It has been proven effective and easy to use by individuals throughout the commercial and government sectors. There are many modeling tools based on IDEF0 which are used to create the models and supporting documentation. These tools also allow activity model data to be loaded into repositories for support of some Computer-aided Software Engineering (CASE) applications.

IDEF is an acronym for Integrated Computer-Aided Manufacturing (ICAM) DEFinition Language. It is a structured methodology for business process analysis that has a long history of successful application.

As has been mentioned before, there are two forms of process models. The first is the AS-IS model, which shows the current (baseline) structure of a business process. The second is the TO-BE model, which shows the objective (target) structure of a business process. The difference between each form can be thought of as a set of improvements. Therefore the AS-IS model plus improvement actions equals the TO-BE model.

*IDEF0 Components*

Now let's look at the component parts of a process model. Each of the components presented below are applicable to both AS-IS and TO-BE models. The components are:

*Project Orientation: Context, Purpose, AND Viewpoint.*

- The **CONTEXT** establishes the subject of the model as part of a larger whole. It creates a boundary with the environment by describing external interfaces.
• The PURPOSE establishes the intent of the model or the goal of communication it serves. Purpose embodies why the model is created (performance levels, implementation design, customer operations, etc.).

• The VIEWPOINT determines what can be "seen" within the context, and from what "slant". It states the author's position as an observer of or participant in the process for the benefit of an audience.

Working Diagrams:

• **Context Diagram**, a Single Diagram that Illustrates the Highest Level Activity and Its Information or Materials

• **Node Trees**, which Graphically Portray Activities in a Hierarchical Format

• **Decomposition Diagrams**, which Represent Refinements of an Activity by Showing its Lower Level Activities and their Information Relationships

• **FEO (For Exposition Only) Diagrams**, which are Used to Focus Attention on a Particular Portion of a Node Tree, Context, or Decomposition Diagram

**Arrows: Inputs, Controls, Outputs, AND Mechanisms (ICOMs).**

• **INPUT** - Information or material used to produce the Output of an activity.

• **CONTROL** - Information or material that constrains an activity; Controls regulate the transformation of Inputs into Outputs.

• **OUTPUT** - Information or materials produced by or resulting from the Activity.

• **MECHANISM** - Usually people, machines, or existing systems that perform or provide energy to the Activity.
Difficulties of IDEF0 Process modeling

- Complexity of diagrams.
- Distinguishing and separating the "As-Is" from the "To-Be".
- Distinguishing and separating different Viewpoints.
- Identifying and distinguishing between Controls and Inputs.
- Establishing the proper boundaries for the Model.

Process models have many uses. For our purposes, we are most concerned about their use in business process reengineering. Process models (AS-IS form) help us understand what we are actually doing to carry out our organizational mission and business objectives. Individuals that actually operate in the process, working in facilitated teams develop these models.

Understanding our Processes

From this understanding, we can develop improvement options or alternatives that will add value to the process and/or lower the cost of the process. With this information, TO-BE models are constructed, which test and/or illustrate the proposed changes. This way it is possible to simulate the proposed set of changes to verify their effectiveness.

Data Models

Process models are also required to develop data models, which we'll discuss next. Since ICOMs show data flows between activities, they are critical in gaining a full understanding of how to structure data resources and information systems.

Aid in Activity-Based Costing

Process models identify the activities that, when performed, consume costs. As inputs are transformed into outputs, producing products and services for the organization’s external customers, costs are exposed through the use of mechanisms that enable the process and certain
inputs which become part of the product or service, such as consumable supplies. Once the costs of the activities are identified, the organization can monitor these costs on a periodic basis to determine whether or not they are within competitive guidelines.

**Supporting Documentation**

Process models provide supporting documentation for briefings, presentations, and development of a Business Case Analysis (BCA).

**Communication**

Finally, process models are wonderful vehicles for employee and contractor orientation and training purposes. A model can simplify the explanation of a very complicated process in just a few slides.

**An IDEF0 Example.**

To explain Process Modeling, or IDEF0, let's go through a simple example of “Distributing Supplies” to Commercial Construction companies.

The first level of process modeling we'll discuss is called a **Context Diagram**. This shows the scope of the activity and the major inputs, controls, outputs and mechanisms for this activity. Here we have an example of the highest level ICOM for the process of **Distribute Supplies**.

For our example, the **Input** is a “Requirement for Supplies” which comes from the external customer. The **Controls** may include budget constraints, Regulations, Inventory Levels. The **Output** is what you expect to receive at the completion of the process, in this case a Supply Item. Finally, the **Mechanisms** that support the process are all of the Personnel and Systems involved in distributing supplies.

Also note that the context diagram specifies the viewpoint in the lower right corner of the visual. This process is going to be modeled from the point of view of the Director, Supply Operations Depot. Do you think the activity might be modeled differently if it were being done from the point of view of someone at a lower level in the organization, such as the Chief, Shipping and Receiving Branch?
The next step in process modeling is to decompose the context diagram into the specific activities that must be completed to requisition a part. In IDEF0 this is called creating a Node Tree. Building a node tree is like building a Work Breakdown Structure (WBS) that project managers use.

In our example, Distribute Supplies, has been decomposed into four activities: Determine Customer Requirements, Process Request, Acquire Supply Item, and Distribute Supply Item. For the purposes of this exercise, we will stop at this first level of decomposition. However, do you think it might be possible to decompose any of these activities further?

Node trees provide a way to rapidly identify a sequential series of steps, or activities, that are performed in the business process. Each entry in the node tree is given an identifier. The top entry, which represents the process, is called the "A-0" node. This node represents the context diagram for the model. All of the nodes directly below the "A-0" node are numbered sequentially, such as A1, A2, and A3. If further levels are needed, an additional level of numbering is used, such as A11, A12. These numbers would represent the nodes below the A1 entry.

Once the node tree has been created, we can build a Decomposition Diagram of our model using ICOMs. First, we array four boxes in a descending, stair step fashion. This arrangement facilitates drawing the lines, which represent the ICOMs, on the diagram. It does NOT necessarily indicate the sequence of events or the time required for each activity, however.

Once the boxes are drawn, we create the inputs, outputs, controls and mechanisms for each box, thereby creating a set of ICOMs for each activity. Notice that the output of the Determine Customer Requirement activity (A1) is a Requisition for Supplies which becomes the input for the Process Customer Request activity (A2). Next, notice that some controls are shared by more than one activity, such as regulations and policies. And, the mechanism, Personnel, supports all four activities.
This simple example of IDEF modeling illustrates several of the features of a typical process model. Some key points to remember about IDEF modeling are:

- Analysis of the model must reflect a single viewpoint.
- The ICOM is the working element of the IDEF diagram.
- IDEF diagramming follows a structured approach from the A-0 level through decomposition to the lowest level needed for the analysis.
- The first time through the development of a process model does not need to be perfect. Subsequent iterations of the model will continue to improve the model’s accuracy at all levels.
- Process modeling is a technique that works well in a team environment to facilitate making decisions and reaching consensus on the working relationships of the business process.

**PROCESS MODELING – SUMMARY**

Activity and data modeling techniques using IDEF0 and IDEF1X are proven methods for use in business process reengineering. These techniques are appropriate for both major process redesign projects involving new or redesigned information systems, and continuous process improvement projects.

Modeling provides a clear, consistent, structured approach to analyzing the workings of business processes (AS-IS) as well as a technique to develop, test and implement improved business processes (TO-BE).

IDEF Modeling sessions have been refined through years of practice and have been proven to be the most economical and effective way of describing processes within the context of process improvement.

*How can IDEF0 models be used to reveal non-value-added activities, problem areas, and opportunities for improvement?*

In the process of building the baseline IDEF0 model, problem areas and opportunities for improvement may be identified simply as a result of defining and describing the activities, inputs, controls, outputs, and mechanisms.

For example, building a model is an effective way of identifying redundancies and disconnects in the activities performed within a process. After the model is built, applying cost and performance measures to the baseline activities will also identify the high and low cost activities,
non-value-added activities, and activities in which cost and performance measures are substantially higher or lower than in related activities.

Later in this course, we will talk briefly about specific ways to exploit improvement opportunities. But for now, let's take a look at another important technique that aids a manager in defining the AS-IS environment --- Activity Based Costing.

**OVERVIEW OF ACTIVITY BASED COSTING**

Activity-Based Costing (ABC) is a form of cost accounting that focuses on the costs of performing a business process rather than on the costs associated with an organizational unit.

ABC analysis allows an organization to determine the actual resource cost of each product or service it produces.

When these costs are known, it becomes possible to analyze each activity in the business process to determine if the performance of that activity adds value to the outgoing product or service. ABC analysis also highlights non-value added costs associated with value adding activities.

With this information, you can identify improvement opportunities that will help lower the cost of producing products and services or add value to our products and services without increasing costs. ABC analysis depends on the existence of AS-IS models. It’s from those models information about the activities you want to analyze is stored.

As we have seen from the section on process modeling, activities are the key elements of work that make up business processes. When you perform process modeling, you are identifying the sequence of activities necessary to accomplish a business process objective along with information about how each activity interacts with each other. You can then study the business process in terms of its component activities in your search for improvement opportunities.

**ABC -- Summary**

Activity-based costing is a natural and integral component of the business process reengineering concept. ABC analysis provides an understanding of what it really costs to produce the products and services you are in business to provide to your customers.

**Some key points about activity-based costing:**

1. ABC is based on the use of approximations, which are refined each time the analysis is iterated.
2. A key problem is finding the data you need to support the cost basis for analysis. This becomes less of a problem with each iteration because you can begin to collect appropriate data for the improved business process.

3. Activity-based costing is not financial accounting. The books and records of the organizational unit must still be kept based on transaction costs.

4. The activity model upon which ABC is based need only be accurate, in general, in terms of the Pareto principle.

5. Because overhead costs are usually allocated to primary activities based on an approximation, the calculated cost of an output product or service is an approximation.

6. ABC analysis is more accurate when the results are based on how a business process actually works; not how people think it works.

7. All assumptions and approximations should be documented so that the next iteration of the analysis can build them.

INTRODUCTION TO DATA MODELING AND OVERVIEW OF IDEFIX MODELING TECHNIQUES

Data models, like process models, provide a graphical tool that aids in our search for improvement opportunities. Data models also identify "business rules" which portray or constrain the way activities are executed. These constraints are enforced in information systems that are designed to support business processes.

For instance, in a payroll process, our data model would prevent the issuance of a paycheck to someone who was not an active employee. However, it's important to understand that data models are necessary whether or not an automated information system is involved in the process.

Our “recommended” technique for building data models is IDEF1X. As with process models, there are automated tools that help us document our data models and provide a means of storing data model representations in repositories.

Data Modeling -- Purpose.

Data models graphically display the data and information required to support business processes. Data models are rigorous, structured models of the business relationships or business rules and data needed by data administration to support the needs of a process. Data models support shared data concepts, help reduce costly data redundancy, improve data integrity, and lower the cost of managing the data resource.
Data models can be developed at various levels of technical detail and complexity. In general, data models are developed at the same level of depth and detail as the process models they support. Users are only required to develop data models to a sufficient level of detail to support the purposes of the FEA. This skill is learned by users through training and process improvement experience.

**Data Modeling -- Formats.**

Like process models, data models are developed in AS-IS and TO-BE formats. The AS-IS model shows the current (baseline) relationships, while the TO-BE model shows the proposed or target data environment. Both forms of data models must be synchronized with their activity model counterparts. Like process models, data models are developed in a workshop environment by facilitated teams.

**Data Modeling -- Components.**

There are three levels of data models:

1. Entity-relationship diagram
2. Key-based data model
3. Full attributed data model

But, before we briefly look at these models, let's review some basic definitions related to data modeling.

- **Data** are defined as facts about real world objects.

- **Information** is two or more facts (data items) expressed in some meaningful form in the context of a business process or activity.

- An **entity** is a collection of data (facts) about a person, place, thing, concept, idea or event.

- An **attribute** is one characteristic (fact or data item) of an entity.

- A **relationship** describes how two or more entities interrelate. A relationship is also called a business rule.

- A **key attribute** describes a data item that acts as a means of accessing an entity.

If these terms and definitions make sense to you, you have most of what you need to create data models.
Entity-relationship diagrams are the highest level data model. In an entity-relationship diagram, we define each entity that is involved with our business process. For instance, in our simple Requisition Part example, we would show entities for such things as Request, Part, Line-Item, or Requester.

As we note the entities, we draw lines between the entities that illustrate how they relate to each other. Our Request entity would be related to all of the Requesters that fill out a requisition and also to all of the Supply Items that are distributed. Relationships (the lines between entities) are the heart of the matter.

Relationships have a property called cardinality. Cardinality expresses a quantitative property of the relationship.

Let's look at the principle types of cardinality using a sociological example:

<table>
<thead>
<tr>
<th>Cardinality</th>
<th>Sociological Rule</th>
</tr>
</thead>
<tbody>
<tr>
<td>One-to-one</td>
<td>Monogamy</td>
</tr>
<tr>
<td>One-to-many</td>
<td>Polygamy</td>
</tr>
<tr>
<td>Many-to-many</td>
<td>Group marriage</td>
</tr>
</tbody>
</table>

In our example, we would have a one-to-many relationship of Requester to Requisition Request. The way we would say this is, "A Requester can fill out many Requisition Requests, but each Requisition Request can be filled out by only one Requester."

There are other types of cardinality, but one to many is the most common. Do you see why we sometimes call relationships "business rules"? They work to constrain the way we want to do business.

The complete entity-relationship diagram shows all of the collections of data (entities) that are needed to support our business process, and the way these entities are used together to constrain the activities in our business process. This is why owners of the process must build the model, because only...
they fully comprehend the import of the business rules imposed by a data model.

A **key-based data model** is a refinement of an entity-relationship diagram. In this level of data modeling, we show the primary data items (elements or attributes) that define each entity. The key-based data model also indicates which of these attributes will serve as a unique identifier or key so that we can access the entity. This is needed whether the entity data will be stored in a computer file or in a file cabinet.

We may also show secondary keys that become, in effect, means of sorting data for report or query purposes. In this example, an attribute of **Requisition Request** with ‘Requisition-Number’ as the unique identifier or key for every Requisition being processed is shown. No two Requisitions could have the same Requisition-Number.

A **fully attributed data model** has all of the information contained in the key-based model, but it also has all of the data-items (attributes) for each entity.

Analysts are seldom required to identify all of the attributes they need in each entity without some support from the technical elements.

Most people have found the construction of process and data models to be an enjoyable and fascinating experience. Even old-hands who have worked in the same functional area or department for many years learn something new about their business as a result of building and refining these models.
Business Process Reengineering (BPR) Fundamentals (with Strategic Planning)

Chapter 3
Process Analysis: Looking for Problems and Opportunities
Inputs, Controls, Outputs, Mechanisms (ICOMs)

Controls

Inputs → Process/Activity → Outputs

Mechanisms
Process Analysis: Process Modeling

Process Modeling -- USES

- Understand our Processes
- Develop Improvement Opportunities/ Alternatives
- Construct TO-BE Models
- Assist in Developing Data Models
- Aid in Activity-Based Costing
- Provide Documentation for FEAs
- Internal/ External Communication
An Example:  Provide BPR Training
Process Analysis: Process Modeling

PROCESS DEVELOPMENT MATRIX

<table>
<thead>
<tr>
<th>LIFE CYCLE</th>
<th>Key Product or Service</th>
<th>Key Product or Service</th>
<th>Key Product or Service</th>
<th>Key Product or Service</th>
</tr>
</thead>
<tbody>
<tr>
<td>REQUIREMNTS</td>
<td>BPR Knowledge</td>
<td>BPR Knowledge</td>
<td>BPR Knowledge</td>
<td>BPR Knowledge</td>
</tr>
<tr>
<td>ACQUISITION</td>
<td>Provide BPR Training</td>
<td>Provide BPR Training</td>
<td>Provide BPR Training</td>
<td>Provide BPR Training</td>
</tr>
<tr>
<td>SUSTAINNMT</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DISPOSITT</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Process Analysis: Process Modeling

Process Modeling -- Context Diagram

Provide BPR Training

- Regs, SOPs
- Budget
- Shipping Instructions
- Curriculum Std.

- Requirement for BPR Knowledge
- Unknowledgeable Person

- Personnel
- Facilities

- BPR Knowledgeable Person
- Knowledgeable Person

Viewpoint: President

Process Analysis: Process Modeling

Process Modeling -- Node Tree Diagram

Node Tree

- Provide BPR Training (A0)
  - Determine Training Requirements (A1)
  - Develop Curriculum (A2)
  - Acquire Attendee (A3)
  - Deliver Instruction (A4)
  - Graduate Student (A5)

A0 | Provide BPR Training | Viewpoint: President
---|----------------------|------------------

An Example: Distribute Supplies
Process Analysis: Process Modeling

Process Modeling -- Context Diagram

Distribute Supplies

- Requirement for Supply Item
- Supply System
- Personnel
- Budget
- Shipping Instructions
- Inventory Levels
- Regs, SOPs

Supply Item

A-0 Distribute Supplies Viewpoint: Director, Supply Depot

Process Analysis: Process Modeling

Process Modeling -- Node Tree Diagram

Node Tree

<table>
<thead>
<tr>
<th>Node</th>
<th>Description</th>
<th>Viewpoint: Director, Supply Depot</th>
</tr>
</thead>
<tbody>
<tr>
<td>A0</td>
<td>Distribute Supplies</td>
<td></td>
</tr>
<tr>
<td>A1</td>
<td>Determine Customer Requirement</td>
<td></td>
</tr>
<tr>
<td>A2</td>
<td>Process Request</td>
<td></td>
</tr>
<tr>
<td>A3</td>
<td>Acquire Supply Item</td>
<td></td>
</tr>
<tr>
<td>A4</td>
<td>Distribute Supply Item</td>
<td></td>
</tr>
</tbody>
</table>
Process Analysis: Process Modeling

Process Modeling -- Decomposition Diagram
Class Exercise: Requisition Part
Given Data:

As-Is Process Time: Seven (7) Days

As-Is Process Cost: $50.00 per requisition (does not include the cost of the part itself)

As-Is Process Quality Measure – Percentage of the time the Maintenance Technician receives the correct Part from inventory: 70%

Breakthrough Objective #1: Reduce the time it takes to requisition a part from seven (7) days to 1 Hour by the end of FY 03.

Breakthrough Objective #2: Reduce the cost of requisitioning a part from $50.00 to $12.50 by the end of FY 03.

Breakthrough Objective #3: Increase the accuracy rate of parts requisitioned from 70% to 95% by the end of FY 03.

Environment: Competition is becoming more important with the rumor of a new Commercial Building Supply opening in your Region within the next 12 months. The new company has a reputation of providing parts requisition services much cheaper and faster, with fewer wrong parts shipped to the customer.
Assignment:

Brainstorm ideas on how you would reengineer the process — Requisition Part.

Impact on: Group #1 Group #2 Group #3

- Process
- Culture
- Controls
- Investment
- Is this Reengineering?
Data Modeling -- Entity-Relationship Diagram

Requester

fills out

Requisition Request

contains

Line-Item

Supply Item

is ordered on
Data Analysis: Data Modeling

Data Modeling -- Key-Based Data Model

Requester
Requester-Number

fills out

Requisition Request
Requisition-Number
Requester-Number (FK)

contains

Supply Item
Part-Number

is ordered on

Line-Item
Line-Item-Number
Requisition-Number (FK)

Part-Number (FK)
Chapter 4

Process Design/Justification
"If we did all the things we are capable of doing, we would literally astonish ourselves"

*Thomas Edison*

**PROCESS DESIGN**

*Process design* is the concept of moving from an AS-IS condition, with respect to a business process, to a TO-BE condition based on the implementation of a set of proposed improvements that have been justified by an economic analysis of alternative solutions or approaches.

The TO-BE model provides several advantages:

- It functions as a strawman for discussion purposes.
- It provides a means of testing improvement assumptions (*"Fly before you Buy"*).
- It helps communicate the proposed slate of improvements.
- Once a set of improvements is implemented, it can easily be adjusted to become the new AS-IS condition for the improved business process.

The final outcome of this phase is the development of the Business Case Analysis (BCA) decision package, which proposes a slate of process improvements and economically justifies the investment in assets and resources needed to implement the improvement package. The BCA is supported with TO-BE condition models. The BCA summarizes the results of the first phases of the *Innovative Management Framework™* methodology.
**TERMINOLOGY ASSOCIATED WITH PROCESS DESIGN**

**Problem**

A **PROBLEM** is defined as a condition existing in a business process that violates a control, constraint, standard or requirement imposed on that process. The problem solution may lie in changing the control, adjusting inputs or resources, or modifying the process and/or its information systems.

**Opportunity**

An **OPPORTUNITY** is defined as a situation existing in a business process where an innovation, new investment, or a change in the order or manner of doing something will increase the effectiveness and/or lower the costs of producing a product or service.

**Initiative**

An **INITIATIVE** is a package of specifications which, when taken together, will solve a set of defined problems or exploit a set of defined opportunities. The expected results of implementing an initiative can be illustrated in a TO-BE set of models.

**Alternative**

An **ALTERNATIVE** is one of several means of implementing a specific initiative package. The initiative is concerned with the benefits that will be achieved upon implementation. The alternative holds the benefits constant for a given initiative and determines the least cost means of implementing that initiative.

Problems and opportunities are developed during the **Analysis Phase**, while initiatives and alternatives are developed during the **Design Phase**.
LEVELS OF PROCESS DESIGN

New Process Design. New process design is performed based on a change of mission, strategic or business plan. A new process design would be required if a previously out-sourced organization were brought in-house. The distinguishing characteristic of new process design is that there is no performance baseline from which to work. Benchmarking can be critical to the success of a new process design effort.

Process Redesign (Reengineering). Process redesign is necessary when a significant change in output product and service requirements, a significant change in controls or constraints imposed on the business process or a significant change in the technological platform supporting the business process. A process redesign effort might also be undertaken following a radical change in the availability of financial resources (i.e. budget cuts or downsizing requirements).

Process redesign usually has significant impacts across organizational boundaries and generally has impacts or effects on external suppliers and customers. For this reason, the process reengineering team must include members from all impacted organizations. Process redesign can have impacts on the organizational structures supporting the business process. This means that process reengineering teams must have the support and backing of senior leadership if reengineering initiatives are to be given frank consideration by review and approval agencies. So, how do we redesign our processes?

Incremental Improvement. Incremental improvement embodies the philosophy that no matter how good something is, it can be made better. And if you don't make it better, someone else will, and then steal all of your customers.

Incremental improvement actions are defined as those improvements which can be undertaken and supported by an organization with minimal impact on external suppliers, customers and other units within the organization.

The focus of this level of process improvement is an emphasis on reducing the overhead associated with self-imposed controls and restrictions, eliminating non-value added activities, reducing non-value added costs, optimizing available resources with respect to process and activity output requirements, and other improvements that can be made within the authority level of the target organizational element.
EXPLOITING IMPROVEMENT OPPORTUNITIES

In this section we will discuss how we take all of the information that we have generated from the previous steps in the methodology and turn it into real improvement possibilities. What this aspect of the methodology does is help us go from possible improvements to probable improvements.

The aim of BPR is to improve our organization's processes. The way we do that is by:

- **Understanding the business** (Activity Analysis)
- **Understanding the costs of doing business** (Activity-Based Costing)
- **Understanding the performance of the business** (Performance Measures)

and,

- **Exploiting improvement opportunities!**

SELECTING PROMISING IMPROVEMENT OPPORTUNITIES

*Why Be Selective?*

First, visualize a typical environment at this point in an initiative: large numbers of activities, large quantities of data, etc. What would be the drawbacks to improving all of the activities we have defined?

Too much change, too fast, can lead to:

- **Organizational chaos - configuration, frustration, . . .**
  Causes organizational chaos - ability to absorb the changes.

- **Difficulties in managing change.**
  May not be possible to manage and control the changes.

- **Extended duration of the implementation phase.**
• Defers benefits into future periods.
• Increased implementation costs.
• Extends the time (duration) required to implement the changes and hence defers paybacks into future periods.
• Placing the business process reengineering initiative at risk

What are the benefits to a 'measured approach'?
• Ease in implementing
• Lower risk
• Quick paybacks

A Measured Approach To Selecting Promising Opportunities

Includes:
• Meaningful improvement objectives
• Clear understanding of constraints

Focus On Meaningful Improvement (Breakthrough) Objectives:

How should I go about selecting from among the alternatives?

1) State improvement objectives as clearly as possible considering:

Time - How soon must improvements be achieved?

Cost - Savings targets.

Quality - Quality standards to be achieved or retained.
(Note that these Improvement (Breakthrough) Objectives are defined in the Strategic Plan. These objectives define the Gap between the organization’s current (AS-IS) performance as compared to its target (TO-BE) performance.)

2) **Understand the limitations on what is achievable**

   *How do I establish a balance among these improvement components?*

**Types of Considerations/Decision Parameters**

1) **Resources** that are available.

   - Investment dollars
   - Operating funds, etc.
   - Manpower (numbers and skills)
   - Time (or duration)

2) **Authority** (Note this deals with the Controls and Mechanisms of the IDEF0 ICOM).

   - What can I control?
   - What can I merely influence?
   - What can I neither control nor influence?

3) **Cultural/Management** discipline.

   - Intangibles - what can the organization manage, absorb?

**Selecting Specific Activities - Considerations**

   *What criteria should I use in selecting activities?*

1) Eliminate from consideration activities over which we have no control.

2) Select from the remaining activities based on the activity's cost, time, and quality characteristics.
1) General

Our Aim:

- Enhance value-added activities
- Obliterate non-value-added activities
- Eliminate, simplify, consolidate, integrate, and automate (where appropriate)

2) Analyze activities based on their contributions (versus objectives) by costs consumed, time consumed, and contribution to quality.

The ideal activity has LOW COSTS, SHORT TIME (DURATION), and HIGH QUALITY characteristics. (Note this approach is sometimes referred to as identifying which activities are high impact.)

What will be the results of this selection?

Result?

- Fewer number of activities to be considered for reengineering.
- High confidence that we have adequate authority to affect the improvements.
- Confidence that reengineering of the selected activities will contribute to the improvement objectives.

The result will be a drastic reduction in the number of activities we need to consider and a much higher level of confidence in our ability to successfully implement needed changes. After promising opportunities are identified, more detailed analysis efforts can be focused on the activities that represent the opportunities.

IDENTIFYING BETTER BUSINESS PRACTICES

How do I identify better business practices?

General Approaches:

- **Borrow** proven practices from another organization.
- **Innovate** - Develop better practices for us.
What can I expect from each of these approaches?

1. **Borrowing proven business practices:**

   May lower risk since practice is already proven.
   - Practice is proven to work - lowers risk.

   Can contribute to speedy implementation.
   - Other organization's experience may allow our organization to climb the learning curve quickly.

   May allow us to expand our improvement objectives
   - Can be efficient - avoids reinventing the wheel.
   - May be difficult to find an appropriate practice.

   Might be difficult to find a **perfect fit to our needs**
   - May be impossible to find a perfect fit to our organization's need, especially where business activities or processes are unique.

   Habitual borrowing from others can have adverse impacts on the organization
   - Stifles innovation -- habitual borrowing may stifle our organization's tendency towards innovation (good ideas begin at home).
   - Not invented here syndrome -- Borrowing may trigger internal resistance - **not invented here** syndrome.

2. **Innovation - Developing our own better business practices:**

   - Places the solution in the hands of those who best understand the problems.
   - Empowers our own workforce.
• Cultural consideration - Is our organization an innovative one?
  - Empowerment of individuals and respect for our organization's culture
  - Methods for promoting innovation?

PROOFING THE CONCEPT

Is it really necessary to proof the concept?

Yes, we need to look at the effects the change will have in the area of risk reduction, impacts on the organization, estimated level of effort to implement the change in our organization, etc.

What are some effective ways to "prove the concept"?

• Observe the practices in operation at another organization (Benchmarking).

• Simulate the practices.

• Prototype the practices in our own organization
  - "In line" prototype
  - "Off line" prototype

Benchmarking:

Formal Definition:

Benchmarking is the continuous process of measuring products, services, and practices against the toughest competitors or those companies recognized as industry leaders. (Dams T. Keams, Chief Executive Officer, Xerox Corporation.)
Working Definition:

**Benchmarking** is the search for industry best practices that lead to superior performance.

*Observing the practice in another organization* (applies only if we are borrowing another organization's practices):

- May be accomplished quickly and inexpensively
  - Might be least expensive and quickest way to proof - no set up time and costs, etc.
- Can be difficult getting reliable performance measurements
  - Can be difficult to get reliable measures of the practice
  - Impossible to duplicate our organization's environment
  - The impact of cultural differences is particularly hard
- This approach might be attractive if we must buy 'time and costs' and sacrifice our hopes for high levels of confidence.

**Simulating the Practice:**

Formal definition of simulation:

*Acting out, looking like; imitation.*

What are the pros and cons of simulating?

Cultural impacts may be missed, as simulation techniques usually do not address those types of impacts well. (Note that simulation might accurately portray a highly automated assembly line, but may have trouble portraying accurately an intensively human-judgment focused practice.)

The simulation can facilitate "What If" analyses if computerized:

- Does allow for rapid "what if" analyses of the practice (Very complex business practices can be "proofed".
- Simulation can handle a highly complex practice that is affected by a large number of variables, each of which interacts in a random or probabilistic way. Simulation may be the only realistic way to 'observe' these types of practices.
• Value is limited by limitations inherent in the art and science of "simulation" itself:
  - Very difficult to accurately simulate certain types of practices. Cost and time investments in simulation are generally dependent on the size and complexity of the practice to be observed.
  - Simulation design requires special skills. Simulations must be built by individuals with special skills in doing simulations, including program languages when a computerized simulation is to be used.

Prototyping the Practice:

Prototyping may be "in line" or "off line". An in-line prototype is an operational one where the current business practice, or some subset of it, is substituted with the proposed business practice. An off-line prototype is essentially the acting out of the new practice outside the actual operational area. In that regard, an off-line prototype is somewhat similar to simulation and shares many of the same pros and cons.

What are the pros and cons of prototyping?

Prototyping -- Off-line

• An "acting out" is similar to simulation.
• Allows for addressing cultural issues.
• Can be very expensive.

Prototyping -- In-line

• Benefits due to being an exact duplication
  - An in-line prototype probably gives us the best understanding (of all prototyping approaches), of how the proposed practice will perform in our organization as it most nearly duplicates the exact environment of our own organization.

• Facilitates getting good performance measurements
  - Hence we are able to get good estimates of probable costs, paybacks, 2d, 3d, 4th order effects, and gain good insights on exactly what it will require to fully implement the practice.
• **Enhances understanding and expansion of improvements**
  
  - There is some evidence that an in-line prototype enhances an organization's ability to discover additional improvements that can be made, either to the practice being prototyped or other practices that are closely related to that one.

• **Can be very expensive**

• **Possibly high risk since the business suffers immediately if the prototype fails**
  
  - Inserting an unproved practice in-line can be risky because if the practice proves faulty the business will suffer immediately.

**OVERVIEW OF BUSINESS CASE ANALYSIS (BCA)**

All of the techniques described up to this point have one major objective. It is to provide a basis for identifying and analyzing improvement opportunities. Once opportunities for improvement have been identified, it is necessary to find out which is the most cost effective alternative to recommend to management in the form of a Business Case Analysis (BCA).

There are two steps to this process:

• Perform an Economic Analysis (EA) to identify and cost out a set of improvement alternatives.

• Use the results of the economic analysis to develop the Business Case Analysis (BCA) decision package.

**Perform an Economic Analysis**

Economic analysis (EA) is a systematic approach to answering one of two questions:

• What are the consequences of a decision already made?

• Which of two or more alternative solutions should I choose?

Economic analysis is not the same as activity-based costing for these reasons:

• While ABC is concerned with past and present dollars, EA is concerned with future dollars.

• While ABC looks backward for its data (historical), EA looks forward.
• While ABC is centered on cost issues, EA is centered on investment issues.

ABC analysis provides baseline data that improves the value of an economic analysis.

Investment Risk

All decisions about the future involve risk. Therefore, all investment decisions made in the present, in order to obtain a future benefit, involve risk.

Some of these risks include:

• Poorly defined problems or objectives.
• Assumptions (predictions) about the future may be wrong.
• Inappropriate alternative solutions.

The purpose of an economic analysis is to reduce exposure to risk when making investment decisions.

Relative Worth

Every investment decision involves a choice of alternatives, each of which may provide different benefits. For instance, if you have $1,000.00 to invest, should you put it in a Certificate of Deposit at 3.0%, or in a mutual fund where the historical return is about 12.0%.

In one case, there is a guaranteed low return with little risk, and in the other case, there is a potentially greater return but at a higher risk. Which is the better choice?

You really don't have enough data to make that decision. Economic analysis is a means of getting the necessary data to make the optimum decision.

There are many variables associated with investment decisions, most of which are centered on the future about which you know nothing. They include:

• Assumptions about what will happen in the future.
• Constraints on what courses of action we may choose.
• The economic life of a resource, (e.g. technology).
• Future costs, (e.g. operations, maintenance).
• Future benefits, (e.g. relative worth of alternative investments).
• Inflation rates.
• Interest rates.
• Environment, (e.g. political, economic, social, business).
Since you know nothing about the future, assumptions upon which you are willing to take risks must be made. It is only prudent to try to minimize risks while trying to maximize potential benefits.

**Develop Business Case**

There are two key steps in BCA preparation:

- Establish baseline performance and cost.
- Develop at least two alternative proposals for improvements other than the status quo (baseline).

The baseline is established using activity and data modeling and activity-based costing techniques. Current baseline architectures for information system support round out the baseline presentation.

Alternative solutions are derived during economic analysis and should be related to their impacts on the baseline. Information system impacts of alternative solutions are documented in the Data and Technical Plans attached to the BCA.
Business Process Reengineering (BPR) Fundamentals (with Strategic Planning)

Chapter 4
Process Design & Justification
Terminology of Process Design:

- Problem
- Opportunity
- Initiative
- Alternative
Levels of Process Design:

- New Process Design
- Process Redesign (Reengineering)
- Incremental Improvement
Exploiting Improvement Opportunities

Moving From:

- It's Possible
- It's going to happen!

To:

---

Process Design

A Measured Approach:

Breakthrough Objectives

- Cost
- Time
- Quality

Understand Limitations

- Resources
- Authority
- Culture
Process Design

Best Business Practices:

Borrowing

Innovation

Process Design

Best Business Practices:

- Proofing the Concept
- Benchmarking
- Simulation
- Prototyping
## Business Case Illustration

<table>
<thead>
<tr>
<th>Initial Investment</th>
<th>Alternative A</th>
<th>Alternative B</th>
<th>Alternative C</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$1 Million</td>
<td>$5 Million</td>
<td>$10 Million</td>
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<tr>
<td>LCM Costs</td>
<td>$1 Million</td>
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<tr>
<td>LCM Savings</td>
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<td>$20 Million</td>
</tr>
<tr>
<td>Benefit Gain/Loss</td>
<td>Increased Benefit</td>
<td>Same Benefit</td>
<td>Decreased Benefit</td>
</tr>
</tbody>
</table>

**Recommendation:** You Make the Call!!
Chapter 5

Business Process Reengineering and Organizational Change
Chapter 5
Business Process Reengineering and Organizational Change

"It's not so much that we're afraid of change or so in love with the old ways, but it's that place in between that we fear.... It's like being between trapezes. It's Linus when his blanket is in the dryer. There's nothing to hold on to."

-- Marilyn Ferguson, American Futurist

INTRODUCTION

After going through the time-consuming process of improving your agency's activities, you would expect it to run smoother, demand fewer resources, and allow you to provide world-class service to your customers, right? After all, you did go out to the "Best in Class" organizations in government and the private sector and model the way their processes were designed. So, shouldn't your agency be world-class? Maybe not!

Even though you have followed all of the steps of the BPR methodology and you've really cut out waste, there may be a problem achieving the savings or gaining the efficiencies and the level of effectiveness you were expecting.

One of the most often sited reasons why many reengineering projects do not achieve the level of success the organization expects deals with the issue of organization culture change. You can have the most efficient process in the world, on paper or in a model, and still not have a "world-class" operation. We must remember that people have to execute the plans, perform the activities, and provide the interface to the customer. If you have left the feelings of people out of the reengineering effort, your project will not succeed.

CULTURE CHANGE DEFINED

Let’s first begin with a question. Do human beings fear change? Every time that question is asked the answer almost always comes back with a resounding, “YES!” But, what most people don’t realize is that human beings don’t really fear change. In fact, human beings are constantly
changing throughout their lives. We progress through a significant amount of physical and mental changes from birth through adolescence to adulthood. And, since our mind changes and evolves, so do our perceptions about ourselves and how we relate to our environment. So, in essence, we really don’t fear change.

If we don’t fear change, then what do we fear? We fear the UNKNOWN! We resist change. This resistance to changing our environment is based on the fact that many times we don’t know how that change will impact us. Let’s illustrate this point with a real life situation. I want to introduce you to a friend of mine, his name is Tom. Tom was at the top of his game. He has just been told he has been diagnosed with a terminal disease. Tom reacts with total disbelief. He doesn’t understand how this can happen. He has always exercised and watched his diet. He felt he had total control of his environment and always felt that something like this couldn’t possibly happen to him. After the initial shock of the diagnosis, he becomes deeply afraid. But, what is he really afraid of?

The fear Tom is exhibiting comes from his not knowing the outcome of his disease. This uncertainty causes fear because he doesn’t understand the impact the disease will have on his “known” environment. He is not only very familiar with his existing environment, he is very comfortable with what happens in that environment. He has created certain “rules”, or habits, that define his comfort zone. Now, that environment has just been turned upside down.

Tom’s resistance to change is a normal reaction. We see the same type of reaction any time a significant change happens, especially in an organization going through a reengineering effort. Understanding the difference in fear of the unknown and resistance to change is the basis of understanding culture change in an organization. People faced with significant change during reengineering react in much the same way as Tom did.

So what is culture change? Let’s start with the definition of culture. We define culture from an individual’s perspective, so given that, culture is, “an individual’s perception of himself/herself in his/her environment.” It would follow that culture change is, “the changing of an individual’s perception of himself/herself in his/her environment.” Individuals’ perceptions of their environment will determine how they act and perform. If reengineering calls for “fundamental rethinking and radical redesign of business processes and culture”, then it stands to reason that any change in the environment would require individuals to change their perceptions of that environment.

Pain vs. Pleasure

Culture change does not come only as a result of a change in the process. As we have seen, it also comes as a result of consistent change in the way a person feels about that process and the environment in which that process is performed. Human beings must perceive there is less pain (emotional cost) and more pleasure (benefit) associated with the change than not changing. Psychologists have understood and operated under this notion for years. However, it has only
been in the last few years that the business and government communities have realized the importance of this relationship to their "bottom-line".

When an organization is planning a change of any kind that will affect the day-to-day activities of people, the relationship between pain (emotional cost) and pleasure (benefit to the individual) must be considered. Human beings are stimulated, or held-back, based on their association of personal benefit or cost to a change in their environment. As a person is faced with change, he/she will evaluate or question whether or not making the change will cost a great deal in emotional stability or provide a great deal of personal benefit. It is this relationship that determines real, lasting change in a person.

Before we go any further, let's define what we mean by pain and pleasure in the context of organizational culture. Everything we, as human beings, do in our daily lives is based on two things: our avoidance of pain or our quest for pleasure. What do we mean? Pain is the feeling of dread a person feels when faced with a new situation. Pleasure, on the other hand, is the benefit or sense of accomplishment, satisfaction, contentment, or happiness a person feels as a result of being in the situation they are in. Here are a couple of examples.

Try to remember back when you were a child and your parents wanted you to take swimming lessons. Do you remember the first time they brought you to the swimming pool for your lesson? If you are like most people, you felt very comfortable while you were in the shallow part of the pool, where your feet could touch the bottom.

But, what happened when the swimming instructor asked you to move into deeper water? Did you willingly and happily move into the deeper end of the pool or were you hesitant?

Again, most people when faced with this situation on their first time in the water, not only were hesitant, but they felt a profound sense of dread or pain. In their mind they were evaluating whether or not they wanted to "change" from an environment where they
felt comfortable (at the shallow end of the pool) and enter a "new" environment (the deep end of the pool). Some children never get past this obstacle of feeling afraid of the deep end of the pool and most eventually quit swimming lessons.

On the reverse side, most children find that the "pleasure" they would get from learning to swim in the deep end of the pool outweighs the "pain" of not "changing" their situation. Maybe the reason they changed their way of looking at the deep end was their need to impress their friends. They may have been done by jumping off of the diving board at the deep end of the pool, or maybe it was as a result of peer pressure where they were concerned that they would feel isolated or left out if they didn't do what the others did. Either way, the change happened.

Even though this is a very simple example of the relationship between pain and pleasure, it illustrates the very essence of culture change, changing my perception of whether the change is going to cost me or I will gain from it. You can easily apply this same notion to the workplace.

For instance, a supply distributor has elected to change the way they distribute supplies to their customers. The current system (or the way the process is now performed) has been in place for ten years. The current employees that process supply requisitions have "grown up" using this system and see no reason to change it.

They have been told of the benefit the organization will realize if the change is made, in terms of cost savings, ability to process more supply requisitions more easily, etc. So, why do these employees resist the change to the new process?

The answer is simple. They associate more pain to changing than not changing. They may feel that when management says, "cost savings," they really mean job abolishment. When they say "ability to process more supply requisitions" they really mean the employees' workload will increase. With this interpretation, or mis-interpretation, of the situation, is there any wonder why these depot employees are not interested in changing the way they do business?

This is a real situation. It happens every day throughout all organizations. So, let's explore what these individuals actually went through as the decision-making process (transition from old to new) took place. The following will give you an idea of what the employees at the supply depot, as well as, the children faced with swimming lessons, in the examples above were going through. Consider these different reactions to change.
REACTIONS TO CHANGE

Shock.

Once a change has been announced, usually the first reaction people have is to meet the change with a sense of shock. They ask themselves, "Where did this come from?", "What is going on?", "I didn't know anything about this!", or "This isn't what I agreed to!" How many of us have been confronted with a change and felt this way?

Anger.

After you've gotten over the shock of the new situation, most people, if they view the change as a negative impact on their personal situation, become very angry. Many times they will begin a process of looking for the person or persons to blame. They may begin to talk about the new situation in very negative terms, such as, "It won't work!" or "I'm not going to support this!" This anger, if not addressed, may lead to some actually trying the sabotage the change process.

Denial.

This phase is a little harder to define. Many people, depending on their basic values and beliefs, go directly from anger to the fourth phase, Acceptance. However, there are a significant number of people who go through a denial phase, so it is necessary to show you what to look for. A person going through this phase will make up excuses why he should not be held accountable for anything that goes wrong with the organization as a result of the change. For example, he may make the excuse, "The change will never work because I haven't been directly involved with the solution!" or "Don't blame me if it doesn't work!" This attempt to disassociate himself from the new situation often causes the person to alienate himself from the group.

Acceptance.

Only after a person gets through the first phases can he truly begin to accept the change that is taking place. Once the person has accepted the change as real and that it is going to happen, he begins to rationalize his role in the new situation. It is important to understand that not only can an individual accept the situation and begin to work toward the new vision, but one can also accept the situation as having a negative impact and choose to leave the organization. Either way, the individual has accepted the fact that the new environment exists.
It is extremely important for you to understand that people will go through each of these phases, in varying degrees, as they transition from the old way of doing business to the new. How we manage this transition period is the key.

**MANAGING THE TRANSITION**

Without a doubt, culture change is the most important aspect of reengineering. Understanding what it takes to facilitate culture change is critical to the success of any reengineering effort. Here are a few ideas to ensure the change actually takes place.

- Recognize there is a definable culture in every organization.
- Learn the strengths and weaknesses of the culture.
- Learn what motivates the culture.
- Stay consistent in direction.
- And, above all, change must be LEAD, not pushed.

Change cannot be accomplished without the commitment and involvement of the organization's leaders. We have talked about how important leadership is to reengineering. As we transition from an old way of doing business to a new way of doing business, leadership becomes the glue that will hold the organization together. Let's look at the role a leader should play during the change process.

- **Leaders must have a clear vision of the organization after the change is made.** They must have a clear idea of what results the change will generate.

- **Leaders must have a solid model of how the change will happen.** They should have a "mental model" of how the change will happen which will guide analysis of the situation and help him/her to formulate the strategy on how change will be implemented.

- **Leaders should initiate change at the point where they have the most control, no matter what level of the organization the leader exerts influence.**

- **Leaders should recognize that change in any one part of the organization affects the whole enterprise.**

The most important task of a leader is creating the climate that is conducive to the change being attempted. An emotional atmosphere in which people feel that the leader is empathetic and non-
judgmental toward the employees and their needs is a climate in which people will be more open about their feelings and resistance.

**SUMMARY**

If the process represents the “What” and organization does, then **culture** represents “Why” an organization does what it does. If reengineering is going to realize its full potential of dramatically improving the way organizations do business, changing the culture must be considered an integral part of the process. Systems cannot be developed irrespective of the people that will be managing and operating those systems.

One of the biggest reasons why many process reengineering projects do not achieve the level of success the organization expects is because the organization did not address the issue of organization culture change in an open, honest manner. You can have the most efficient process in the world, on paper or in a model, and still not have a "world-class" operation. We must remember that people have to execute the plans, perform the activities, and provide the interface to the customer. If you have left out of the improvement process a plan on how to change the behavior of the human resource, your project will not succeed.

Remember, culture change does not come only as a result of a change in the process. It also comes as a result of consistent change in the way a person feels about that system. Human beings must see that there is less **pain** (emotional cost) and more **pleasure** (benefit) associated with the change than not changing.
Appendix E

Chapter 5 - Overhead Slides
BPR and Organizational Change

The Pain-Pleasure Relationship

Pain

Pleasure
BPR and Organizational Change

The Big Decision

“What will I get out of this?”

“Will changing benefit or cost me?”

“Why should I change?”

BPR Fundamentals – Chapter 5

BPR and Organizational Change

The Faces of Change

Shock

Acceptance

Denial

"Not my fault, it's not my fault!"

Anger

BPR Fundamentals – Chapter 5

BPR and Organizational Change

Key Aspects of Changing Culture:

- Recognize there is a Culture defined in every organization.
- Learn the strengths and weaknesses of the Culture.
- Learn what motivates the Culture.
- Stay consistent in direction.

- And, above all, have the courage to LEAD!!
BPR and Organizational Change

Process vs. Culture

What We Do

Why We Do It
Chapter 6

BPR Project Planning
Chapter 6
BPR Project Planning

“I have always thought that one man of tolerable abilities may work great changes, and accomplish great affairs among mankind, if he first forms a good plan, and, cutting off all amusements or other employments that would divert his attention, make the execution of that same plan his sole study and business.”

Benjamin Franklin (1706–90), U.S. statesman, writer. Autobiography, ch. 7 (written 1771–90; published 1868).

ESTABLISH PROCESS IMPROVEMENT PROJECT

The strategic plan has been developed, senior managers have decided what direction the process improvement initiative should take, so, what’s next? The organization should establish a Process Improvement Project Plan that lays out the necessary actions that will cause the performance increases that the strategic plan has defined in terms of the breakthrough objectives.

At this point, all of the information needed by a process improvement team has been recorded in the strategic plan. Since new performance levels were defined for core business processes, process reengineering teams will have specific performance objectives to guide their process improvement efforts.

When this step is completed, all planning activities will have been accomplished. This means process improvement teams will be ready to move to Phase 2 of the methodology, process reengineering. The following tasks are performed in this step, which when completed establish a process improvement project:

- Specify process improvement project
- Select and confirm a process manager and project manager
- Validate the Process vs. Organization Matrix
- Record functional management considerations
- Document the scope/mission/objectives of functional elements

Figure 6 - 1
• Select and train the cross-functional process improvement team
• Develop a preliminary process vision
• Develop the process improvement strategy
• Develop the project plan
• Review and approve the project plan.

Define Process Improvement Project.

A process improvement project is an expensive and risky undertaking. If the objective is true process reengineering, the project may extend for a year or more and consume not only funding resources, but also huge amounts of intellectual capital of people whom otherwise would be doing something else. For these reasons, process improvement projects must be commissioned and directed by the senior leader based on the criticality of the breakthrough objectives in the strategic plan to the success of the organization.

The process improvement project must be funded through the planning stage—this step. The chief output of this step is a project plan that will include complete process improvement project cost, time and staffing estimates with contingencies. The process improvement project (planning step) should be formally inaugurated with an assigned executive sponsor and a letter to proceed that specifies initial funding and planning objectives. All of this is captured through the use of a BPR Team Charter. The Charter lays out the expectations, roles and responsibilities of those involved in the process reengineering effort, the performance objectives, deliverables, team members, and the estimated cost of the effort.

Select/Confirm Process and Project Manager.

The first and most important decision that is made is the selection of the project manager. The project manager should be experienced in project management, knowledgeable of the process to be improved, and equipped with superlative communications and team skills.
Validate Process vs. Organization Matrix.

The planning activities described above should have produced a Process vs. Organization Matrix. This matrix must be reviewed and confirmed by the project manager because it will be the basis for staffing the process improvement team and coordinating all process improvement actions and communications. The matrix shows the relationship of the process to the functional or departmental elements that support or perform the process. It also indicates the level of responsibility and involvement of each functional/departmental element in the process. The matrix should be reproduced in wall chart form and posted in the project room for easy reference.

Identify Functional/Department Management Considerations.

One of the first duties of the project manager is to develop an understanding with each of the functional managers involved in the process. They should agree on the current status of the process with respect to strategic and business plans, and accept of the improvement objectives and goals described in the strategic and business plans. It is not enough that these plans have been reviewed and accepted by higher authority; they must also be endorsed by the process owner who will most likely be a manager of one of the functional units.

Each function/department manager should understand and concur with the following:

- Process baseline status as indicated by performance cell measures or other means
- Validity of the Process vs. Organization Matrix.
- Assignment of improvement objectives with respect to the process
- Degree of participation required of the functional manager and a preliminary list of candidates for assignment to the improvement team
- The charter that launched the process improvement project
- The proposed method of designing the process improvement project—especially how communications will occur and project status will be reported
- Specific considerations expressed by the functional managers with respect to the process and the improvement project.


At this point, the project manager should be able to construct a statement of process improvement mission, scope and general objectives. It may even be possible at this point to document some or all of the performance measures that will be used to design the improvement
project and measure its success. This will be especially true if the performance cell technique was used. Note that we recommend completion of this task before the actual process improvement team is formed, because the project manager should achieve this understanding with the functional managers to optimally staff the improvement project.

**Select/Train Cross-Functional Process Improvement Team.**

At this point it is possible to select staff members to work on the process improvement plan. This must be done with the full cooperation and support of the functional managers, and with reference to the process map. Staff members should be trained in process improvement skills including change management and technology deployment.

Until the project plan has been reviewed and approved and resources are made available to continue the project, it is only necessary to have a small team of people who are highly knowledgeable of the process. These team members should be process and activity managers who understand both the outputs of the process and the primary customer groups who benefit from these outputs.

**Develop a Preliminary Process Vision.**

This is a very important task in the improvement project planning step. In a workshop environment, project team members will endeavor to create the process vision that will ultimately guide all process improvement efforts. This step may also be accomplished during the development of the organization’s Business Plan, but for now, we will assume it is part of the BPR Project Plan.

The key activities in this task include the following:

- Assess existing business strategy (strategic and business plans) for process directions. This provides a foundation for constructing the process vision.

- Consult with process customers for performance objectives. This activity supplements the data collected during strategic and business planning. It will provide a much more detailed look at the specific performance levels that are acceptable to your customers. Negotiation skills are critical during this step of project planning.

- Conduct Benchmarking to develop or validate process performance targets and to discover innovative uses of technology to improve process performance (best practices.)

- Formulate process improvement performance objectives. This activity validates the performance objectives developed in the process improvement component of the business plan. It should be remembered that functional managers constructed the business plan, and it is now necessary for the process improvement team to validate and/or revise these objectives based on the results of the activities above.
It should also be remembered that process improvement itself is a highly iterative process, and it is always necessary to review and validate previous deliverables as new information is gained. This activity continues until this question can be answered to everyone's satisfaction: "What business objective is this process suppose to accomplish?"

Develop process attributes. Process attributes are the specific strategies for accomplishing the process objective. They form the principles of process performance and/or the concept of operation. They include such categories as technology, people, delivery of service, supplier partnerships, and other stakeholder specifications. It is not necessary to determine how these attributes will be accomplished as that is a task in the process reengineering phase.

The final result of this task should be a short statement that summarizes the process vision. It must be written in less than a page and acceptable to all project team members and their functional sponsors.

**Develop Process Improvement Strategy.**

Once the process vision has been established, the project team next works out the strategy for realizing the process vision. The strategy includes a series of actions that will be taken once the project plan is approved. If the process vision includes the use of innovative technology, the project team should develop a strategy for incorporating this technology in the process. If organizational enablers are needed to realize the process vision, the project team should address how they will proceed to make these organizational changes. The strategy should be high-level but sufficient for functional managers to understand the general approach that will be made in the process improvement project should it proceed to the next phase. In fact, the statement of strategy will be one of the determinants of project continuation.

**Develop the Project Plan.**

Finally, the project plan itself is constructed. Everything that has been done to this point in the methodology and all of the data that have been gathered and analyzed are input for the project plan. The project plan, in general, should include the following sections:

- Process vision including objectives, attributes, and strategies
- Statement of purpose describing the intended project, brief historical statement, authority for the project, and a summary of the time frame and estimated costs
- Benefits to be obtained in the project as they relate to the strategic and business plans, stakeholders, and performance measures
- Critical success factors for the project
• Project scope with respect to the organization’s Enterprise Architecture Model

• Work breakdown structure showing the major tasks to be completed

• Organizational breakdown structure showing all functional participants

• Resource assignment matrix showing how the tasks in the work breakdown structure will be resourced

• Schedules and milestones in Critical Path format

• Detailed budgets and cost estimates

• Resource allocation plan including labor, contract requirements, facilities, and equipment

• Project management plan showing how the project will be managed, how problems and issues will be resolved, the degree of project communications and status reporting, and document management.

The project management plan should be the basis for the decision to proceed with the project immediately, delay project initiation, or cancel the project. It should be written in a way that facilitates that decision so that the decision itself will be acceptable to the project team and their functional sponsors. It other words, the project plan should be a true representation of the findings and analysis of the project team members. The project team may feel that a briefing package should be developed to communicate the results of the project team and ask for a specific recommendation.

**Review and Approve Project Plan.**

The project plan is submitted to higher authority for review and approval. In some cases, the review team will need to supply clarification or conduct further research or analysis. For this reason, the project team should remain in place until the decision is made. Once the decision is made to move forward with the BPR project, it is critical that the team get started quickly. It is very easy to become complacent and lose the momentum that came from the initial strategic planning and project planning sessions.

**At this point, you just have to get started!**
Appendix F

Chapter 6 - Overhead Slides
BPR Fundamentals – Chapter 6

Business Process Reengineering (BPR) Fundamentals (with Strategic Planning)

Chapter 6
BPR Project Planning
Establish Process Improvement Project

- Define Process Improvement Project
- Select/ Confirm Process & Project Manager
- Develop/ Validate Process Map
- Identify Functional Management Considerations
- Document Scope/ Mission/ Objectives of Functional Elements
- Select/ Train Cross-Functional Team
- Develop a Preliminary Process Vision
- Develop a Process Improvement Strategy
- Develop the Project Plan
- Review and Approve Project Plan
BPR Project Planning

Select/Confirm Process and Project Manager
BPR Project Planning

Validate Process vs. Organization Matrix
BPR Fundamentals – Chapter 6

BPR Project Planning

Identify Functional Management Considerations

Where do We Fit In?
BPR Fundamentals – Chapter 6

BPR Project Planning

Select/Train Cross-Functional BPR Team

The BPR Project TEAM

BPR Training

What is BPR?
Develop Preliminary Process Vision

What do I want this Process to look like?
BPR Project Planning

Develop Process Improvement Strategy

- Increase Use of Technology
- Move to Process Management Teams
- How do we Change the Culture??
BPR Fundamentals – Chapter 6

BPR Project Planning

Develop the Project Plan

Business Process Reengineering Fundamentals
(with Strategic Planning)

MHC-1012

Additional Appendices
Business Process Reengineering Fundamentals
(with Strategic Planning)

MHC-1012

Appendix G

Opening Slides – Introduction to the Course
BPR Fundamentals (with Strategic Planning)
(MHC-1012)

Course Director:  Mr. Derril Watts
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Email:  Derril_Watts@mhc-net.com
WebSite:  http://www.mhc-net.com
MHi BPR Certification Program

**FasTrak Series**

**WEEK #1:**
BPR Fundamentals (with Strategic Planning), MHC-1012 5 Days

**WEEK #2:**
IDEF Fundamentals/ABC Principles, MHC-1034 5 Days

**WEEK #3:**
Process Analysis & the Business Case, MHC-1056 5 Days

**WEEK #4:**
Group Facilitation Skills for BPR Teams, MHC-1070 4 Days

Total Training Days 19 Days

Course Outline

I. Introduction to BPR
II. Strategic Planning Principles
III. Process Analysis
IV. Process Design/Justification
V. BPR and Organizational Change
VI. BPR Project Planning
Participant Introductions

- Name
- Organization
- What do you do?
- What do you expect from this course?
The CEO CHALLENGE

Accelerated Downsizing ... both People & Dollars

... and Escalating Costs

The CEO Challenge

• Cost/Price Crunch Will Become the Norm
• Global Trade is Critical to Survival
• Cross-Cultural Challenges in the Global Marketplace
• Consolidation isn’t Always the Answer
• The New Look of Competition
• The Changing Role of Human Capital
Appendix H.

Glossary of Terms

**ACTION PLAN** -- A document used to guide the implementation of business process improvements. It contains task assignments, schedules, resource allocations, assignments, and evaluation criteria.

**ACTIVITY** -- A named process, function, or task that occurs over time and has recognizable results. Activities use up assigned resources to produce products and services. Activities combine to form business processes.

**ACTIVITY ANALYSIS** -- The breakdown of an enterprise into manageable segments for detailed analysis regarding cost and performance.

**ACTIVITY-BASED COSTING** -- A form of cost accounting that focuses on the costs of performing specific actions (processes, activities, tasks, etc.), rather than on the costs of organizational units. Activity-based costing generates more accurate cost and performance information related to specific products and services than is available to managers through traditional cost accounting approaches.

**ACTIVITY-BASED MANAGEMENT** -- A system of management that seeks to optimize the value added activities performed by the enterprise while at the same time minimizing or eliminating the non-value added activities, resulting in overall improvements in the effectiveness and the efficiency of the enterprise in serving its customers.

**ACTIVITY MODELING** -- A structured means of describing an organization’s processes in graphical terms. The DOD standard activity-modeling tool is IDEF 0.

**ASSUMPTION** -- A statement of possible events that will take place in the future that will form the baseline environment for future planning.

**BALDRIDGE AWARD** -- An award named after the late Secretary of Commerce Malcolm Baldrige. The official title is the Malcolm Baldrige National Quality Award. The purpose of the award is to encourage organizations to examine their current state of quality and to become more involved in the movement toward continuous quality improvement.
BASELINE -- A standard for comparisons. A baseline is a reference position for measuring progress in process improvement. The baseline is usually used to differentiate between a current and a future representation.

BENCHMARKING -- A method of measuring processes against those of recognized leaders. It helps establish priorities and targets leading to process improvement. It is undertaken by identifying processes to benchmark and their key characteristics; determining who to benchmark; collecting and analyzing data from direct contact, surveys, interviews, technical journals, and advertisements; determining the "best of class" from each benchmark item identified; and evaluating the process in terms of the benchmarks set and the improvement goals.

BEST PRACTICE -- A way or method of accomplishing a business function or process that is considered to be superior to all other known methods.

BUSINESS PROCESS REENGINEERING (BPR) -- Government business process reengineering is a radical improvement approach that critically examines, rethinks, and redesigns mission product and service processes within a political environment. It achieves dramatic mission performance gains from multiple customer and stakeholder perspectives. It is a key part of a process management approach for optimal performance that continually evaluates, adjusts or removes processes.

BPR METHODOLOGY -- The BPR Methodology is a structured sequence of activities that constitutes the typical BPR Project. The typical BPR methodology develops an enterprise level model; identifies scope performance measure, opportunities and constraints; defines the current process and measures cost; benchmarks, analyzes and defines improvement; eliminates no-value added activities; defines improved process (including measurement, cost and simulation); prototypes and field tests; prepares business case analysis; and implements the planned improvement.

BUSINESS CASE -- A structured proposal for business process improvement that functions as a decision package for enterprise leadership. A business case includes an analysis of business process needs or problems, proposed solution, assumptions and constraints, alternatives, life cycle costs, benefits/cost analysis, and investment risk analysis. In some government agencies, a business case is called a Functional Economic Analysis (FEA).

BUSINESS MODERNIZATION -- The state of habitual practice of contemporary and proven superior business practices, typically achieved through elimination, simplification, consolidation, integration, and finally, automation of an organization's business processes and methods.

BUSINESS PLANNING -- A set of actions with specific target completion dates and an assignment of organizational responsibility.
**BUSINESS PRACTICE** -- The formal or usual way in which business, or an activity, is conducted within the business.

**BUSINESS PROCESS** -- An end-to-end set of decisions and activities that work together to produce a pre-defined product or service for an external customer. All business processes in an enterprise exist to fulfill the mission of the enterprise.

**CHANGE MANAGEMENT** -- Change Management is the balanced management of the resources (human and technical) associated with the change initiative. It is about people leading the change effort and those who are expected to implement the new strategies. It is concerned with the organizational culture and context in which change can occur; and the management of the emotional connections essential for a successful transformation. A number of strategies involved in change management include education, training, and communications.

**CONTINUOUS PROCESS IMPROVEMENT** -- A policy that encourages, mandates, and/or empowers employees to find ways to improve process and product performance measures on an ongoing basis.

**CORE COMPETENCY** – A set of skills, knowledge, and capabilities an organization must possess, and at which it must excel, to be successful in its environment. Core competencies define the essence of “who the organization is”.

**COST CENTER** -- A function in a business where the cost of producing a product or service is tracked and personnel are held accountable for performance.

**CUSTOMER** -- The recipient of an output product or service. May be internal or external to the organization.

**CUSTOMER ANALYSIS** -- A Customer Analysis is the collection and dissemination of market intelligence about who our customers are and their needs. A customer analysis includes both quantitative data (demographics, satisfaction metrics, competitive ratings, etc.) and qualitative (customer profile, behavior patterns, focus group results, etc.). A Customer Analysis is a critical element of Strategic Planning, BPR, and TQM.

**DATA MODELING** -- A structured means of describing an organization’s data requirements (data required or produced by a business process) in graphical terms.

**ENTERPRISE** -- When used generically, an enterprise is defined as the aggregate of all functional elements participating in a business process improvement action regardless of the organizational structure housing those functional elements.
**ENTERPRISE LEVEL** -- The Enterprise Level provides the geographic, technological, and managerial platform upon which all information systems development activity is based; it is the foundation that must support all that is built above it in the higher levels.

**ENTERPRISE MODEL** -- A high-level model of an enterprise's mission, function, process, and information architecture used as a standard reference for constructing data and activity models and information systems.

**FEE-FOR-SERVICE** -- The practice of assigning a cost to each service performed by an organization and charging all recipients of the service (or customers) with a fee for that service. From the manager's perspective, it is the purchase of goods and services on an as-needed basis.

**FIXED COST** -- A cost that does not vary with the amount or degree of production. The costs that remain if an activity or process stops.

**INNOVATIVE MANAGEMENT FRAMEWORK (IMF)** – A structured methodology developed by the Mountain Home Institute for Innovative Management (MHi) that leads an organization through the process improving the organization’s business processes from initial strategic planning through process and data modeling, activity based costing, and culminating in the development of a decision package called a functional economic analysis, or a business case. The methodology then guides the organization through the implementation of the changes made during process improvement efforts.

**FUNCTION** -- A specific set of skills and resources that can be used to perform one or more activities that make up a process. Usually, several functions are associated with a single process.

**FUNCTIONAL MANAGEMENT** -- A philosophy of management that organizes and manages an enterprise by type of work performed.

**FUNCTIONALITY ASSESSMENT** -- Functionality Assessment is the term the Navy uses to identify the process-based, reengineering methodology that focuses on creating significant, dramatic changes in existing business units in order to achieve its goal of appreciably reducing infrastructure costs.

**LEADERSHIP** -- Leadership is the study of the organizational direction provided by senior managers. Leadership covers, but is not limited to, the dynamics of visioning, planning, decision making, motivating, organizing, developing, empowering, and directing the activities of others to achieve specific goals.

**LIFE CYCLE MANAGEMENT (LCM)** -- A management process that governs a process or system from conception to final disposition.
**METRIC** -- A unique identifier of performance. A metric is what is actually measured.

**ORGANIZATION-LEVEL GOAL** -- A high-level statement of intent, that when accomplished, will move an organization closer to its vision.

**ORGANIZATION-LEVEL OBJECTIVE** -- A high-level standard of performance, that when measured, will provide the organization with a clear picture of how well it is performing its mission. Objectives are measurable and must be clearly defined, have a uniquely identifiable measurement indicator (or metric), and have a pre-determined timeframe.

**PERFORMANCE MEASURE** -- An indicator that can be used to evaluate quality, cost, or cycle time characteristics of an activity or process against a target or standard value. It is an established, consistent way to measure the rate of change within an organization.

**PROCESS** – See Business Process.

**PROCESS MANAGEMENT** -- A philosophy of management that advocates an integrated approach to the management of an end-to-end process, including its lower level activities, which produces a product or service for a given customer. Process management focuses on the process of providing a product or service rather than on the internal procedures of an organization.

**PROCESS ORGANIZATION** -- A process organization is an enterprise viewed from a "process" perspective. A Process Organization redesigns their processes first, and then they determine the optimum organization form needed to make the process work best. The goal of a process organization is to create a HIGH PERFORMANCE WORKPLACE, a high quality work environment noted for excellence in efficiency, effectiveness and customer satisfaction. With a focus on process, it is very common to see process organizations managing interdisciplinary WORK TEAMS instead of specialized units more commonly seen in traditional organization charts.

**RESOURCES** -- Enterprise assets that are assigned to activities and consumed (used up) in the process of producing an output product or service. Examples or resources are labor hours, funds, machine hours, materials, contract labor.

**STRATEGIC PLANNING** -- An assessment of an organization's external environment that focuses on the long-range direction of the enterprise and establishes the means by which that direction is reached. It includes the definition of mission and vision -- how the enterprise sees its purpose and where it wants to go. Some of the organization's basic strategic decisions might relate to questions such as: What business are we in? What business should we be in, now and in the future? What should be the geographical scope of operations? Where are we the weakest? strongest?
TOTAL QUALITY MANAGEMENT (TQM) -- TQM is both a philosophy and a set of guiding principles that represent the foundation of a continuously improving organization. TQM is a strategic, integrated management system for achieving customer satisfaction. It involves all managers and employees and uses quantitative methods to improve continuously an organization's processes. At the foundation of TQM are three principles: Focus on achieving customer satisfactions; seek continuous improvements; and fully involve the entire workforce. Achieving these principles requires the establishment of a cultural shift within an organization aimed at making the new culture more participative.

VISION -- A description of where an organization wants to go and what it wants to become.
Appendix I

Recommended Reading List
Appendix I.

Recommended Reading List

Publications


*Awaken the Giant Within – How to take immediate control of your mental, emotional, physical & financial destiny!*; Anthony Robbins; Summit Books, New York, 1991.

*Balanced Scorecard, The*; Robert S. Kaplan and David P. Norton; HBS Press; Boston, 1996.


Firing on All Cylinders; Jim Clemmer, Business One Irwin, Homewood, IL, 1992.


INFORMATION ANXIETY 2; Richard Saul Wurman; Que, Indiana, 2001.

Intelligent Business Alliances; Larraine Segil; Random House, New York, 1996.


Reengineering Tales From The Front. (Examples Of Corporate Reengineering Efforts); Management Review, Jan 1995.


Business Process Reengineering Fundamentals
(with Strategic Planning)

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Appendix J.
Case Study
BPR Fundamentals (with Strategic Planning)

MHC-1012

CASE STUDY
EXERCISE AND CASE STUDY INFORMATION

• BACKGROUND

David Jones retired from government service 5 years ago. He had some experience in the food service area and had managed several service support activities before his retirement. Dave and his wife, Donna bought the exclusive rights for a special recipe to make delicious doughnuts. They decided their town, a bedroom community for folks that worked at the plant or in the resorts along the Gulf of Mexico, would be a great place to start a business. Several years before Dave formally retired, they leased a small storefront, about 2,250 sq. ft, in a strip mall on the main thoroughfare to a major manufacturing plant that is considered one of the largest employers in the area. The location was about a quarter mile before an intersection where traffic split to go either to the plant or downtown where local shopping, business and resort areas are located.

DAVE’S DOUGHNUTS experienced great success during the first few years of operation. The local taxes were low; rent was significantly lower than other areas of the country, and with the fire department only a couple of blocks away insurance rates were reasonable. The customer base consisted mainly of the morning crowd (primarily plant personnel on the way to work two miles away) and other people in the local area who stopped by on the way to work (35-45 minutes drive to the resort areas). A second group of patrons would come in during the noon and afternoon periods. There were only two major supermarkets in the area and only one had a bakery/deli. Dave and Donna were pleased with what they had achieved with their small but prosperous business.

With business booming, the Jones’ were confident they could expand. Donna took pastry-cooking lessons and developed several award-winning recipes for her pies and cakes. When the department store next door closed, David negotiated an extraordinary lease for the 6,180 sq. ft area. They bought new ovens and commercial kitchen equipment to produce a full line of specialty pies and cakes. Some catering orders were for birthdays, weddings and special events like promotions and retirements. The catering brought in a new customer group. New storage equipment was purchased and installed, and a small well-used van was purchased for transporting goods to the catering locations. With the expansion, Dave and Donna could no longer go it alone. They hired both full-time and part-time employees. Business continued to show a profit and all looked well for the foreseeable future. Recently, Donna and a couple of good friends branched out to create a Wedding Planning and Supply service, with Dave’s Doughnuts providing catering support. Rave reviews from customers for Donna’s attention to detail and the quality of her service has demand for the service on the rise. David saw no need for Strategic or Business Planning; things were just fine.
• THE TIMES THEY ARE A CHANGING

• Total area population increased by 15%.
• Draw down of operations at the plant decreased manning by 20%.
• Two new supermarkets have opened with bakery/deli operations and are presently undercutting Dave’s prices on doughnuts and pastries by 25% along with a rapidly increasing share of the market.
• Dave’s Doughnuts has been averaging a backorder rate of 13%, while the industry average in the area has been 5%.
• A local newspaper food critic recently rated Dave’s Doughnuts number 4 of the area’s doughnut producers—down from number 1 a year ago.
• A new bridge to the resorts across the bay in the opposite direction from Dave’s Doughnuts cuts driving time to that area to 15 minutes.
• Numerous new construction projects have expanded the resort community across the bridge significantly.
• The state highway department funded a major construction project to widen the highway in front of Dave’s all the way to the rapidly expanding residential community near the bridge.
• Local county commission approved development and construction of a major convention center in the resort area.
• The area has experienced two hurricanes and three tropical storms in the last 10 years. Taxes, Insurance and Rent have all increased.
• A Super Wal-Mart is now open near the resort across the bridge.
• At least ten new condominium complexes and eight hotels have already or will open within the next two years.
• An external scan of the wedding planning and catering market indicated few competitors and an increasing share of the market for Donna’s Wedding Planning Service.

• DAVID AND DONNA ARE CONCERNED

• They are committed to Quality Products, Customer Service, and Honesty.
• They’d like to be the number one provider of Doughnuts and Pastry in the area.
• They want to maintain Donna’s dominance in the Wedding Planning arena.
• Overall profits are declining but they can’t put their finger on why. Or what to do.
• Dave’s Doughnuts share of the market has declined from its previous 40% level to become the number 3 provider of doughnuts, cakes, and pies—at only 5%.
• Dave’s Doughnuts recently participated in a Regional Food Service Market Analysis Group Customer Satisfaction Survey to define customer expectations and evaluate their performance from a customer perspective. Their overall rating was “Average”. The surveys indicate the following:
  • 98% of customers rate Dave’s the best tasting doughnuts in the area, and the pies and cakes superior to any offered by the competition.
  • Customers expect to pay not more than $6.00/dozen for quality plain doughnuts and $8.00/dozen for deluxe varieties. (Dave currently charges $7.00 and $9.00 /dozen respectively)
• Customers want next day delivery on all special orders. (Backorders for material caused Dave to establish a policy of three days notice for special orders to ensure material could be on hand to complete the order).
• 80% of call-in customers requested delivery. (Comments indicate these orders are tourist staying in the resort areas that have heard about Dave’s super doughnuts and pastry. 95% of the tourist orders are not completed since Dave offers no delivery service).

In an effort to stem the tide against sliding revenue levels, Dave has asked your team to assist him with identifying areas for possible streamlining and/or cost reductions.

• Some Initial Findings

Dave and his wife own and operate two business units earning revenues for one overall company, Dave and Donna, Incorporated. When asked why the business exists, Dave replied, “To make money.” After some discussion, they both agreed that they, “produce and sell high quality doughnuts and pastries, as well to provide wedding planning and supply services for the local community”. Further, they see their future as, “The number one provider in their industries within the local community.”

Through your initial discussions, you found that Dave and Donna perform all the administrative tasks, such as maintaining the financial records. Beyond that, though, the two business units diverged sharply.

Donna and her two partners were confident in their position in the market, so they stepped up first to volunteer information. Since it was just the three of them, no formal organization existed. The Wedding Planning and Supply Services were run out of Donna’s office. However, they recognized that their work is definitely a process that begins with a customer request and establishment of a contract. The second step in the sequence is the planning of the event, followed by ordering the necessary supplies, material, and labor support. With all that in place, they then execute the wedding arrangements. The process is complete when the event is cleaned up after the reception, and a bill is presented to the customer. Donna’s financial records indicate the Wedding Planning and Supply is showing a better than 10% profit margin. Once Donna and her partners finished discussing operations within the wedding service, the team turned their attention to Dave and his doughnut shop.

Since Dave’s Doughnuts is such a small organization, it was a relatively easy task to assemble a cross-functional group of experts to begin identifying the key processes and activities of the shop.

Description of the work:

They all seemed to feel that the process began with someone at the counter receiving an order from a customer.
All orders are received, processed, and recorded by the clerks at the store’s front counter. Orders are filled from pre-made doughnuts, cakes, or pies in the display case. The transaction is complete when the customer’s money has been collected. If a customer’s order can’t be filled from pre-made stock, the customer is given the option to wait, or select a different product. If the customer elects to wait, the clerk processes the order by filling out a multi-copy order form, giving the customer a copy as a receipt, and passing the form to the Logistics Department for further processing. Typically, only 10% of all orders received need to be processed and recorded to fill a backorder (out-of-stock) situation. Only backorders are processed and recorded.

When an order is received by the Logistics Department, stocks are checked to ensure needed ingredients are on-hand. If they are, all are pulled from their storage locations and grouped to accompany the order to the Production Department. If all ingredients are not on-hand, the order is held and the required ingredient is special ordered. A concerted effort is made to avoid out-of-stock situations, as filling special orders typically costs 15% more than re-supply during regularly scheduled supplier visits. Dave has established a policy of ordering the very best ingredients and other supplies available, within the confines of what the annual budget allows. To ensure that happens, each delivery is inspected upon receipt prior to stocking onto the shelves.

Once the Production Department receives an order and the required materials, the needed ingredients are measured out, mixed, cooked, and finished according to the recipes provided, and within the guidelines of applicable food service laws and policies. All equipment is joint use, with the obvious exception of the deep fryer used solely for doughnuts. Conversely, pies and cakes are the only users of the baking oven.

When the orders have been finished by the Production Department, they are taken to the Marketing & Sales Department for final delivery to the customer. The delivery process entails everything from simply waiting for the customer to arrive and pick up their order, to actually delivering the catering orders to their destination in a vehicle purchased and used solely for that purpose. In addition to their role in taking, processing, and filling customer’s orders, the Marketing & Sales Department handles advertising and sales to local stores.

With the store’s sales clerks assigned to the Marketing & Sales Department, it was relatively easy to figure out that they were the decision makers as to how orders would be written up. Dave has some influence as well through his serving of his long-term customers.

In the area of logistics, Dave plays a key role in negotiating prices with suppliers. He works closely with the shop’s Logistics and Marketing Departments in selecting materials of the quality required to achieve Dave’s vision for the company. However, Dave defers reorder decisions to his Logistics Department manager. The Marketing Department has some say in what brand of supplies are purchased, however, they too defer reorder decisions to the Logistics Department.

The Production Department is responsible for making the appropriate amount of products in accordance with the recipe provided by Dave and Donna. The Marketing & Sales Department has some influence on production decisions through market
information on taste and flavor preferences of the public or bulk customer requests. The Logistics Department has significant input on production processes through its work with the Production Department in calculating economically efficient batch sizes and optimum ingredient mixtures.

In the Production Department, orders are processed either on a custom-order or batch basis. Equipment in the section is mostly joint use, with the exception of doughnuts, which must be deep fried, thus necessitating exclusive use of the deep-fryer vat. Cakes and pies jointly use the shop's ovens, cooling trays, mixing machines, etc.

During the discussions, it was discovered that both the staff and the Marketing & Sales Department claimed ownership for which product, and how much of each product is produced and sold. Dave claimed that, as the one who built the company, his instincts had paid off for years, and were in fact the reason the company was still in existence. Therefore, he felt, his instincts should continue to be the barometer of production. The Marketing & Sales Department, on the other hand, had been quietly gathering market data as well as anecdotal information on competitor strategies that, they felt, gave them the upper hand in claiming to be the ones to set production levels based on firm facts and figures. Responsibility for advertising and sales is typically performed by the Marketing & Sales Department. They use marketing studies as well as objective customer surveys to target local retail outlets as potential bulk customers.

FIGURE 1
DAVE’S DOUGHNUT SHOP

DAVE OWNER
(1 FTE)

DONNA COMPTROLLER
1 Handyman
(2 FTEs)

Marketing & Sales
3 Clerks
1 Ad Agent (4 FTEs)

LOGISTICS
2 Supervisor
2 SUPPLY
(4 FTEs)

Production Dept
1 Head Chef
2 Asst Chefs
2 Go-fers (5 FTEs)
YOUR ASSIGNMENT:

Using the information provided above apply perform the following planning activities:

I. **Mission Analysis:**
   - Identify external customers.
   - Identify key products and services produced for external customers.
   - Construct a Process Development Matrix.
   - Write a mission statement.
   - List core competencies.
   - Build a Process to Organization Matrix for the defined processes.

II. **Environmental Analysis:**
   - Conduct SWOT analysis.
   - Develop assumptions.

III. **Performance Analysis:**
   - Develop vision and values statements.
   - Develop Goals: Intent (Future State)
     - Develop Objectives: (Specific Target)
       - Develop Breakthrough Objective: (Operational (closes the gap between present state and target))
   - Select a process for further analysis.

IV. **Develop BPR Team Charter.**
I. Mission Analysis:

- Identify external customers.

  MAJOR CUSTOMERS:

  ______________________________________
  ______________________________________
  ______________________________________
  ______________________________________
  ______________________________________

- Identify key products and services produced for external customers.

  MAJOR PRODUCTS:

  ______________________________________
  ______________________________________
  ______________________________________

  MAJOR SERVICES:

  ______________________________________
  ______________________________________
  ______________________________________
- Construct a Process Development Matrix.

**PROCESS DEVELOPMENT MATRIX**

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<td>REQUIREMENT</td>
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<td>ACQUISITION</td>
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<td>DISPOSITION</td>
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- Write a mission statement.

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- List core competencies.

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- Build a Process to Organization Matrix for the defined processes.

**PROCESS TO ORGANIZATION MATRIX**  
*Enterprise-Level*

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**SEE ADDITIONAL FORMS**

**PROCESS TO ORGANIZATION MATRIX**  
*Process: Provide Doughnuts & Pastries*

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**SEE ADDITIONAL FORMS**
II. Environmental Analysis:

- Conduct SWOT analysis.

Strengths:

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Weaknesses:

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Opportunities:

________________________________________________________________________

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Threats:

________________________________________________________________________

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________________________________________________________________________

________________________________________________________________________
• Develop assumptions.

III. Performance Analysis:

• Develop vision statement.

• Develop Goals: Intent (Future State)
• Develop Objectives: (Specific Target)
• Develop Breakthrough Objective: (Operational (closes the gap between present state and target))

1. Goal: __________________________________________

Objective:
________________________________________________________

B/O:
________________________________________________________
2. Goal: ______________________________________________________
   
   Objective: ___________________________________________________
   
   B/O: _________________________________________________________

3. Goal: ______________________________________________________
   
   Objective: ___________________________________________________
   
   B/O: _________________________________________________________

4. Goal: ______________________________________________________
   
   Objective: ___________________________________________________
   
   B/O: _________________________________________________________

5. Goal: ______________________________________________________
   
   Objective: ___________________________________________________
   
   B/O: _________________________________________________________
Additional Forms
## PROCESS DEVELOPMENT MATRIX

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