

بهره وري هوشمندانه كار كردن است

Business Process Improvement



Organizational focus

- Employees are the problem.
 - Employees.
 - Doing my job.
 - Understanding my job.

 - Measuring individuals.
 - Change the person.
 - Can always find a better employee.
 - Motivate people.
 - Controlling employees.
 - Don't trust anyone.
 - Who made the error?
 - Correct errors.
 - Bottom-line driven.
-



Process focus

- The process is the problem.
 - People.
 - Help to get things done.
 - Knowing how my job fits into the total process.
 - Measuring the process.
 - Change the process.
 - Can always improve the process.
 - Remove barriers.
 - Developing people.
 - We are all in this together.
 - What allowed the error to occur?
 - Reducing variation.
 - Customer driven.
-



Moving from an organization orientation to a process orientation is a difficult culture change. It requires a major change in the way the organization is managed. Change is not easy. Everyone is for change. Everyone thinks *he* should change, *she* should change, *they* should change, but *me* change? No way. Why do I need to change? I have proved that this is the right way to do things. Change is not a simple process. It requires a lot of thought, a well-developed plan, a sophisticated approach, and unfaltering leadership.



10 قاعده براي فرآيند تغيير

بهره وري هوشمندانه کار کردن است

1. The organization must believe that change is important and valuable to its future.
2. There has to be a vision that paints a picture of the desired future state that everyone sees and understands.
3. Existing and potential barriers must be identified and removed.
4. The total organization must be behind the strategy to achieve the vision.
5. The leaders of the organization need to model the process and set an example.
6. Training should be provided for the required new skills.
7. Measurement systems should be established so that results can be quantified.
8. Continuous feedback should be provided to everyone.
9. Coaching must be provided to correct undesired behavior.
10. Recognition and rewards systems must be established to effectively reinforce desired behavior.



$P_1 = Present\ condition.$ When you start the change process, the existing condition is one in which the average performance is lower than you would desire, and there is a great deal of variation.

$P_2 = Preferred\ condition.$ This is the condition that you want to achieve as a result of the change process. Normally, it provides better output to your customer at reduced costs and less variation.

$P_3 = Pain.$ Even at the present condition, when performance falls below a certain level, the organization and/or the people in it begin to feel pain. People are scolded, transferred, demoted, or in extreme cases, fired. The organization loses prestige, money, customers, and sometimes even its stockholders. This can be thought of as the lower control limit. As the change process begins to take hold, this lower control limit needs to move upward. Minimum acceptable performance standards need to increase to show that the acceptable behavior level has changed. Performance that was acceptable in the past becomes unacceptable.



$P_4 = \text{Pleasure}$. The P_4 line ties together the superior performance point and the present (P_1) and preferred (P_2) performance conditions. This is the point at which people are recognized for superior output. Here, too, as the change process continues, management must set increasingly higher standards for the outstanding performance. In some extreme instances, performance that was considered outstanding before becomes unacceptable under the new standards.

$A_1 = \text{Average performance for a traditional education cycle}$. Note that during the initial phase of the education cycle, there is a major improvement in the average performance. However, it soon drops back to the previous performance level if there is no change in the supporting management process. There must be a close connection between when a student learns a new concept and when it is put to use in a real job application. In addition, the implementation of new concepts must be supported by a new set of performance requirements (P_3 and P_4). If people do not apply the information presented to them in the first week after they attend a class, there is only a 20 percent chance they will ever use the techniques or methods taught.



$A_2 = \bar{A}$ Average performance when the pain and pleasure levels are changed in conjunction with an educational experience. When management helps the employees immediately apply their new knowledge and sets new performance standards to support the change, things really happen. The new performance standards (P_3 and P_4) reinforce the lessons learned in class, thus helping the employees to change. Changing the pain and pleasure levels is an important reinforcement that brings about dramatic positive results.



فرآیند تغییر

بهره وری هوشمندانه کار کردن است

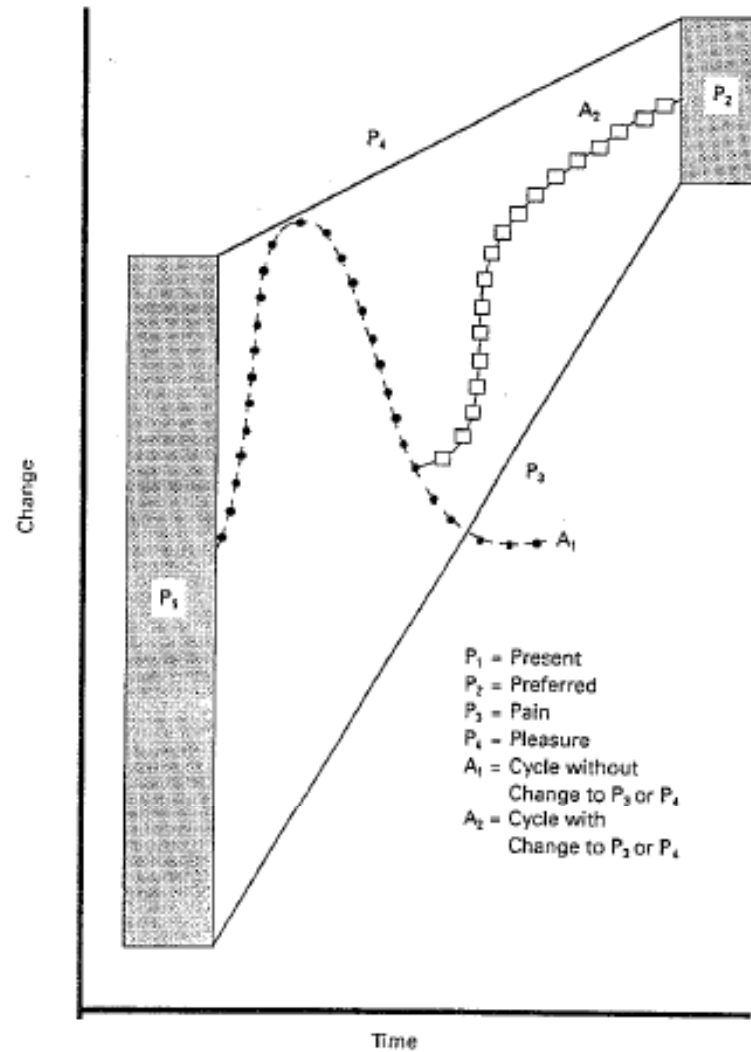


Figure 1.1 Harrington's change process chart.



تعاریف

بهره وری هوشمندانه کار کردن است

System. The controls that are applied to a process to ensure that it is operating efficiently and effectively.

Process. Any activity or group of activities that takes an input, adds value to it, and provides an output to an internal or external customer. Processes use an organization's resources to provide definitive results.

Production process. Any process that comes into physical contact with the hardware or software that will be delivered to an external customer, up to the point the product is packaged (e.g., manufacturing computers, food preparation for mass customer consumption, oil refinement, changing iron ore into steel). It does not include the shipping and distribution processes.



Business process. All service processes and processes that support production processes (e.g., order process, engineering change process, payroll process, manufacturing process design). A business process consists of a group of logically related tasks that use the resources of the organization to provide defined results in support of the organization's objectives.

Organization. Any group, company, corporation, division, department, plant, sales office, etc.

Function. A group within a functional organization. Typical functions would be sales and marketing, accounting, development engineering, purchasing, and quality assurance.

Department. A manager or supervisor and all the employees reporting to him or her.



فرآیندهای تولیدی و غیر تولیدی

بهره وری هوشمندانه کار کردن است

In all companies, there are literally hundreds of business processes going on every day. Over 80 percent of them are repetitive, things we do over and over again. I believe that these repetitive processes (white-, blue-, and gray-collar) can and should be controlled in much the same way as manufacturing processes are controlled. We manage many business processes that are as complex as the manufacturing process.



برخی از فرآیندهای تعریف شده توسط IBM

Function	Process name
Development	Records management
	Acoustics control design
	Advanced communication development
	Cable component design
	Reliability management
	Cost target
	Design test
	Design and material review
	Document review
	High-level design specification
	Industrial design
	Interdivisional liaison
	Logic design and verification
	Component qualification
	Power system design
	Product management
	Product publication
	Release
	System-level product design
	System reliability and serviceability (RAS)
	System requirements
	Tool design
	User-system interface design
	Competitive analysis
Design systems support	



برخي از فرآيندهاي تعريف شده توسط IBM

بهره وري هوشمندانه کار کردن است

Function

Process name

Development (*cont.*)

Engineering operations
Information development
Interconnect planning
Interconnect product development
Physical design tools
Systems design
Engineering change management
Product development
Tool development
Development process control
Electronic development
Phase 0 requirements



برخي از فرآيندهاي تعريف شده توسط IBM

بهره وري هوشمندانه کار کردن است

Function	Process name
Distribution	Receiving Shipping Storage Field services and support Teleprocessing and control Parts expediting Power vehicles Salvage Transportation Production receipts Disbursement Inventory management Physical inventory management



برخي از فرآيندهاي تعريف شده توسط IBM

بهره وري هوشمندانه کار کردن است

Function

Financial accounting

Process name

Ledger control
Financial control
Payroll
Taxes
Transfer pricing
Accounts receivable
Accrual accounting
Revenue accounting
Accounts payable
Cash control
Employee expense account
Fixed asset control
Labor distribution
Cost accounting
Financial application
Fixed assets and appropriation
Intercompany accounting and billing
Inventory control
Procurement support
Financial control



برخي از فرآيندهاي تعريف شده توسط IBM

بهره وري هوشمندانه کار کردن است

Function

Process name

Financial planning

Appropriation control

Budget control

Cost estimating

Financial planning

Transfer pricing

Inventory control

Business planning

Contract management

Financial outlook

Information systems

Applications development methodology

Systems management controls

Service-level assessment



برخي از فرآيندهاي تعريف شده توسط IBM

بهره وري هوشمندانه کار کردن است

Function	Process name
Production control	Consignment process Customer order services management Early mfg. involve. and product release EC implementation Field parts support Parts planning and ordering Planning and scheduling management Plant bus. vols. perf. management Site sensitive parts Systems WIP management Allocation Inventory projection New product planning WIP accuracy Base plan commit. Manufacturing process record



برخي از فرآيندهاي تعريف شده توسط IBM

بهره وري هوشمندانه کار کردن است

Function

Process name

Purchasing

Alteration and cancellation
Expediting
Invoice and payment
Supplier selection
Cost
Delivery
Quality
Supplier relations
Contracts
Lab procurement
Nonproduction orders
Production orders
Supplier payment
Process interplant transfer



برخي از فرآيندهاي تعريف شده توسط IBM

بهره وري هوشمندانه کار کردن است

Function

Process name

Personnel

Benefits
Compensation
Employee relations
Employment
Equal opportunity
Executive resources
Management development
Medical
Personnel research
Personnel services
Placement
Records
Suggestions
Management development and research
Personnel programs
Personnel assessment
Resource management



برخي از فرآيندهاي تعريف شده توسط IBM

بهره وري هوشمندانه کار کردن است

Function

Process name

Personnel (*cont.*)

Personnel programs
Personnel assessment
Resource management

Programming

Distributed systems products
Programming center
Software development
Software engineering
Software manufacturing products

Quality

New product qualification
Supplier quality

Site services

Facilities change request

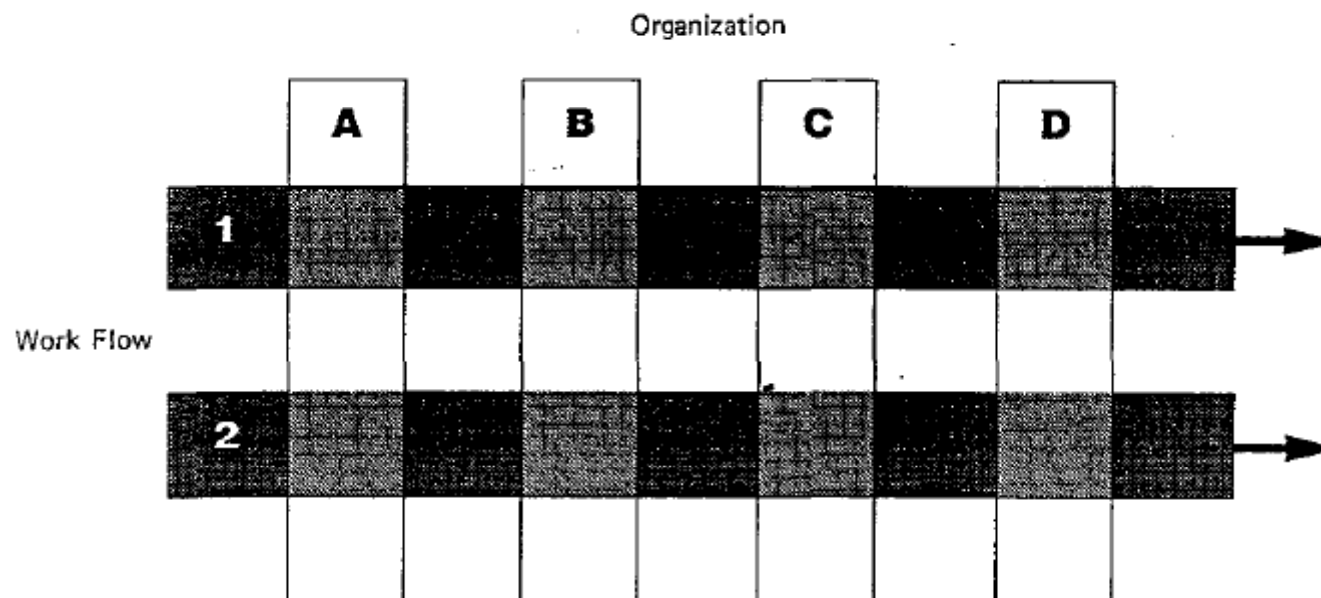
Miscellaneous

Cost of box manufacturing quality
Service cost estimating
Site planning



جریان کار و سازماندهی

بهره وری هوشمندانه کار کردن است



اهداف تغيير

بهره وري هوشمندانه كار كردن است

- Making processes effective—producing the desired results.
- Making processes efficient—minimizing the resources used.
- Making processes adaptable—being able to adapt to changing customer and business needs.



مشخصات فرآیند مناسب

بهره وری هوشمندانه کار کردن است

- They have someone who is held accountable for how well the process performs (the process owner).
 - They have well-defined boundaries (the process scope).
 - They have well-defined internal interfaces and responsibilities.
 - They have documented procedures, work tasks, and training requirements.
 - They have measurement and feedback controls close to the point at which the activity is being performed.
 - They have customer-related measurements and targets.
 - They have known cycle times.
 - They have formalized change procedures.
 - They know how good they can be.



اثرات بهبود فرآیند

بهره وری هوشمندانه کار کردن است

- Enabling the organization to focus on the customer
- Allowing the organization to predict and control change
- Enhancing the organization's ability to compete by improving the use of available resources
 - Providing a means to effect major changes to very complex activities in a rapid manner
 - Helping the organization effectively manage its interrelationships
 - Providing a systematic view of organization activities
 - Keeping the focus on the process
 - Preventing errors from occurring
 - Helping the organization understand how inputs become outputs
 - Providing the organization with a measure of its poor-quality costs (waste)
 - Providing a view of how errors occur and a method for correcting them
 - Developing a complete measurement system for the business areas
 - Providing an understanding of how good the organization can be, and defining how to get it there
 - Providing a method to prepare the organization to meet its future challenges



اشتباهات رایج در مورد فرآیند

بهره وری هوشمندانه کار کردن است

▪ *Ineffective business processes do not cost the organization much money. Wrong—*Ineffective business processes are costing U.S. businesses billions of dollars every year. Between 40 and 70 percent of the white-collar effort adds no value. Eliminating white-collar errors and bureaucracy can cut overhead costs by as much as 50 percent, make your organization a leader in your field, and greatly improve your customers' perceptions of your organization.



اشتباهات رایج در مورد فرآیند

بهره وری هوشمندانه کار کردن است

▪ *There is little to be gained by improving business processes.*
Wrong—We already talked about the dollars and customers you save, but in addition, business process improvement can have the biggest single positive impact on the culture of your organization. No one likes to fight the many roadblocks we have placed in our business processes. People do not like to feel that their efforts are wasted. As these roadblocks are removed, morale will improve. Employees will stop being individuals and will become teams. Work will become fun, as little empires are crushed. The response time to internal and external customers will be cut in half. Studies at IBM in the mid-1980s showed that its productive sales time (time spent face to face with the customer) per salesperson had dropped to a small portion of what it had been just a few years earlier. Why? More and more administrative paperwork was the primary reason.



اشتباهات رایج در مورد فرآیند

بهره وری هوشمندانه کار کردن است

▪ *The organization can work around business processes. Wrong*—The organization can work around your present business processes. You already have proven that. But do you want to work around them? Why have them if you are going to work around them? It is no wonder everyone is so hassled. Employees are so busy trying to find ways around the process that they don't have time to do their jobs. Tom spends huge amounts of his time making friends in purchasing so that he can get around the parts ordering process. His friend stops work that she is presently involved in to process Tom's request, without understanding how that affects the total process. Then purchasing employees wonder why they are spending all their time expediting hot jobs and setting inspection priorities in receiving inspection. They are in a whirlpool, and they see no way out. Sure, you can work around the business processes, but without a doubt, it is a bad business decision.



اشتباهات رایج در مورد فرآیند

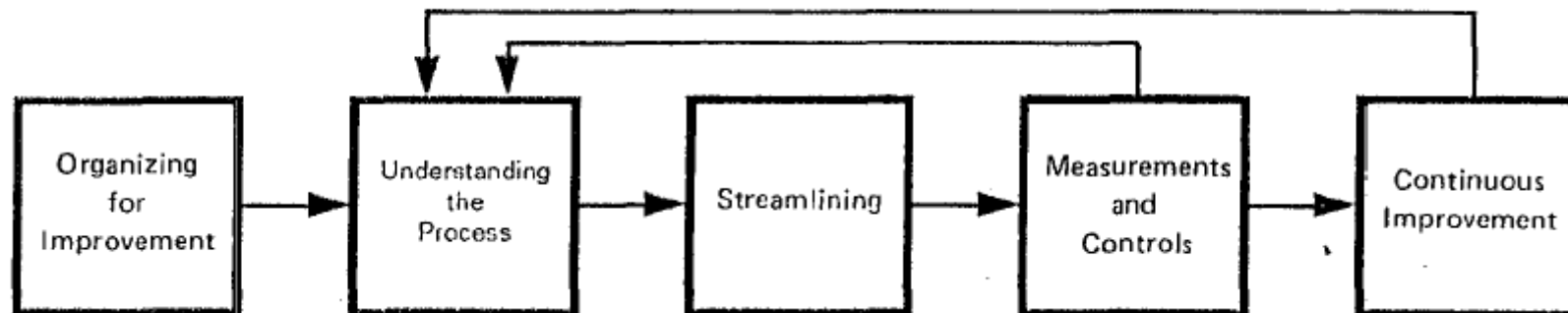
بهره وری هوشمندانه کار کردن است

- *Business processes cannot be controlled. Wrong*—Not only can they be controlled, they must be controlled. We need to stop missing schedules, losing customers, and fumbling business opportunities. Second-class business processes are only for second-class organizations. We need to control business processes much like we control manufacturing processes, to ensure high-quality results that will guarantee success.
- *Business processes are unimportant compared to production processes. Wrong*—Customers are 5 times more apt to turn away from you because of poor business processes than poor products. Without a good interface between you and your customers, even the very best product will not attract them.



فازهای بهبود فرآیند

بهره وری هوشمندانه کار کردن است



فازهای بهبود فرآیند

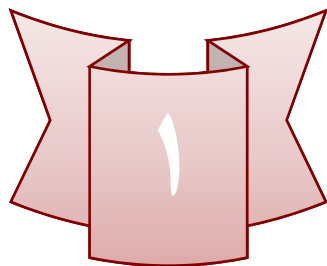
بهره وری هوشمندانه کار کردن است

Objective

To ensure success by building leadership, understanding, and commitment

Activities

1. Establish EIT
2. Appoint a BPI champion
3. Provide executive training
4. Develop an improvement model
5. Communicate goals to employees
6. Review business strategy and customer requirements
7. Select the critical processes
8. Appoint process owners
9. Select the PIT members



فازهای بهبود فرآیند

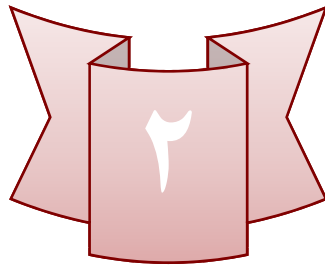
بهره وری هوشمندانه کار کردن است

Objective

To understand all the dimensions of the current business process

Activities

1. Define the process scope and mission
2. Define process boundaries
3. Provide team training
4. Develop a process overview
5. Define customer and business measurements and expectations for the process
6. Flow diagram the process
7. Collect cost, time, and value data
8. Perform process walkthroughs
9. Resolve differences
10. Update process documentation



فازهای بهبود فرآیند

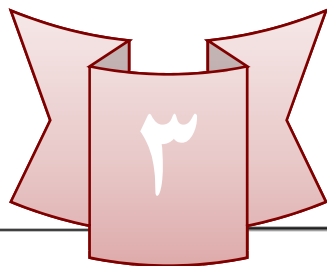
بهره وری هوشمندانه کار کردن است

Objective

To improve the efficiency, effectiveness, and adaptability of the business process

Activities

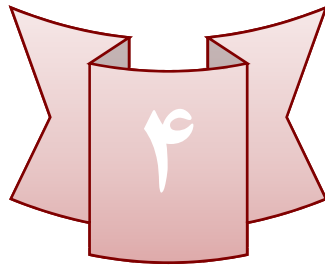
1. Provide team training
2. Identify improvement opportunities:
 - Errors and rework
 - High cost
 - Poor quality
 - Long time delays
 - Backlog
3. Eliminate bureaucracy
4. Eliminate no-value-added activities
5. Simplify the process
6. Reduce process time
7. Errorproof the process
8. Upgrade equipment
9. Standardize
10. Automate
11. Document the process
12. Select the employees
13. Train the employees



فازهای بهبود فرآیند

بهره وری هوشمندانه کار کردن است

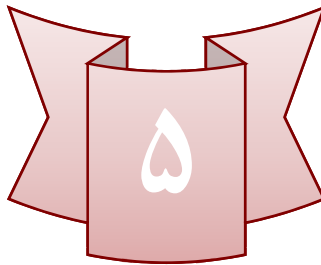
Objective	To implement a system to control the process for ongoing improvement
Activities	<ol style="list-style-type: none">1. Develop in-process measurements and targets2. Establish a feedback system3. Audit the process periodically4. Establish a poor-quality cost system



فازهای بهبود فرآیند

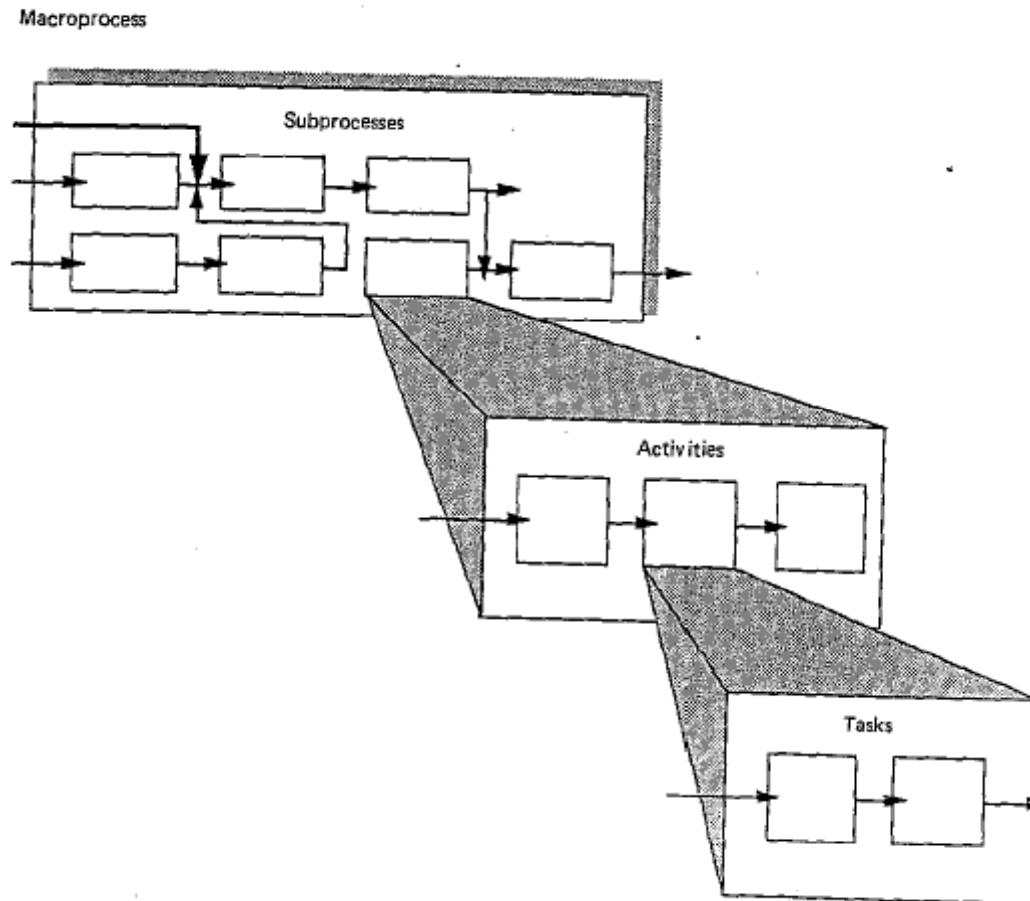
بهره وری هوشمندانه کار کردن است

Objective	To implement a continuous improvement process
Activities	<ol style="list-style-type: none">1. Qualify the process2. Perform periodic qualification reviews3. Define and eliminate process problems4. Evaluate the change impact on the business and on customers5. Benchmark the process6. Provide advanced team training



فرآیند را تحلیل نمایید

بهره وری هوشمندانه کار کردن است



بهره وري هوشمندانه کار کردن است

Approach	Assessment
Total approach	Risky
Management selection approach	Practical
Weighted selection approach	Good
Informed approach	Best

TOTAL APPROACH : COMPANY WIDE

MANAGEMENT SELECTION APPROACH : THE FIRST 20% IMPORTANT AREA'S

WEIGHTED SELECTION: PROJECTS & PROCESS RATINGS

INFORMED APPROACH: CUSTOMER CENTRIC



بهبود با معیار مقایسه وزنی

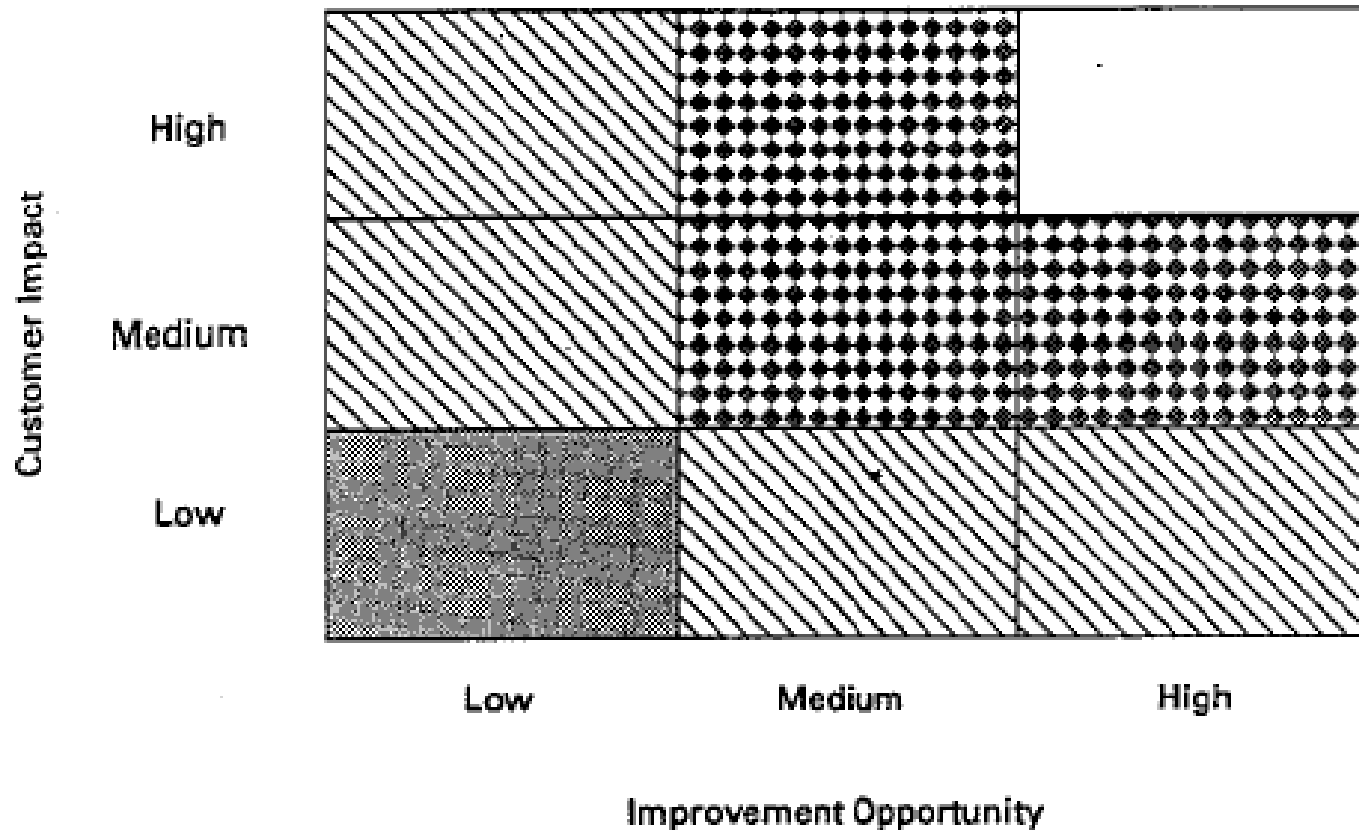
بهره وری هوشمندانه کار کردن است

Process Name	Changeability	Opportunities	Business Impact	Customer Impact	Total
Hiring Process	3	4	5	4	16
Accounts Payable	2	2	4	3	11
Engineering Change Release	5	3	5	3	16
Request for Quotations	4	4	4	3	15
Employee Appraisal Process	5	5	5	4	19
New Management Training	4	8	3	3	18



بهبود فعالانه مشتری گرا informed approach

بهره وری هوشمندانه کار کردن است



بهبود فرآیند با تمرکز بر 4R

بهره وری هوشمندانه کار کردن است

- *Resources.* There is a limited amount of resources available, and the present processes must continue to operate while we are improving them. Often, this means that a new process will be operating in parallel with the old process while the new process is being verified. Don't over-extend yourself.
- *Returns.* Look closely at the potential payback to the business. Will the process reduce costs? Will it make you more competitive? Will it give you a marketing advantage?
- *Risks.* Normally, the greater the change required, the greater the risk of failure. Major changes always are accompanied by resistance to change. Breakthrough activities have the biggest payback but also have the biggest chance of failure.
- *Rewards.* What are the rewards for the employees and PIT members working to improve the process? How much will their quality of work life be improved? Will the assignment be challenging and provide them with growth opportunities?



واگذاری مسئولیت

بهره وری هوشمندانه کار کردن است

The BPI champion should prepare a BPI directive and review it with the EIT. After approval, the business unit or division leaders should all sign this directive, and it should be distributed to the entire work force. The contents of this directive typically include:

- The need for improvement
- The concept of business processes
- The approach the company is taking
- Individual and group responsibilities
- Process qualification criteria



ملاک انتخاب مسئولیت پذیر

بهره وری هوشمندانه کار کردن است

Ownership. Business processes seldom improve, because there isn't anyone who really feels that he or she owns them. Therefore, the first criterion must be ownership. One way to decide who feels (or should feel) the most ownership of a particular process is to answer the following questions. Who is the person with the most:

- Resources (people, systems)?
- Work (time)?
- Pain (critiques, complaints, firefighting)?
- Actual (or potential) credit?
- To gain when everything works well?
- Ability to effect change?



ملاک انتخاب مسئولیت پذیر

بهره وری هوشمندانه کار کردن است

Power to Act on the Process. A second issue to consider in process owner selection is that the critical processes identified by the EIT may come from varied organizational levels (corporate, divisional, regional, etc.). Therefore, the EIT must ensure that the owner has sufficient power to act on the selected process. Because many major business processes are interfunctional or even international, most of them do not have an organizational structure leader. Consequently, the EIT must give the process owner authority and responsibility for the total process.

The business process owner should be an individual who operates at a level high enough in the organization to:

- Identify the impact of new business directions on the process
- Influence changes in policies and procedures affecting the process
- Commit to a plan and implement changes
- Monitor the effectiveness and efficiency of the process



ملاک انتخاب مسئولیت پذیر

بهره وری هوشمندانه کار کردن است

Leadership Ability. A third criterion for process owner selection concerns the person's ability to lead a team. He or she should be:

- Perceived as highly credible
- Able to keep a group on schedule
- Able to lead and direct a group
- Able to support and encourage PIT members in their improvement efforts
- A skilled negotiator
- Willing to embrace change
- Able to deal with higher-level management
- Able to knock down roadblocks
- Able to see the big picture
- Unafraid to take risks
- Able to live up to commitments
- Able to handle poor performers



ملاک انتخاب مسئولیت پذیر

بهره وری هوشمندانه کار کردن است

Process Knowledge. The final criterion is that the process owner should have a good understanding of the process. If the process owner understands the total process, it is much easier for him or her to do the job, and there will be very few restarts. This is a desirable characteristic but is not mandatory, because as soon as the process is flowcharted, every member of the PIT will have a good understanding of how the total process works. As a result, a customer of the process who has little understanding of the internal workings of the process can be selected as the process owner.



بهره وري هوشمندانه کار کردن است

پرسش و پاسخ

