

ENGINEERING BUSINESS PROCESS

Business Process Reengineering

INTRODUCTION

The world is driven by 3 C:

- 1. Competitor
- 2. Change
- 3. Customer

REENGINEERING

"The <u>fundamental rethinking</u> and <u>radical redesign</u> of <u>core business processes</u> to achieve <u>dramatic</u> <u>improvements</u> in critical performance measures such as <u>quality, cost, and cycle time</u>"

BUSINESS PROCESS REENGINEERING

Michael Hammer : "Fundamental, rethinking, and radical redesign of business processes to bring about dramatic improvements in performance"

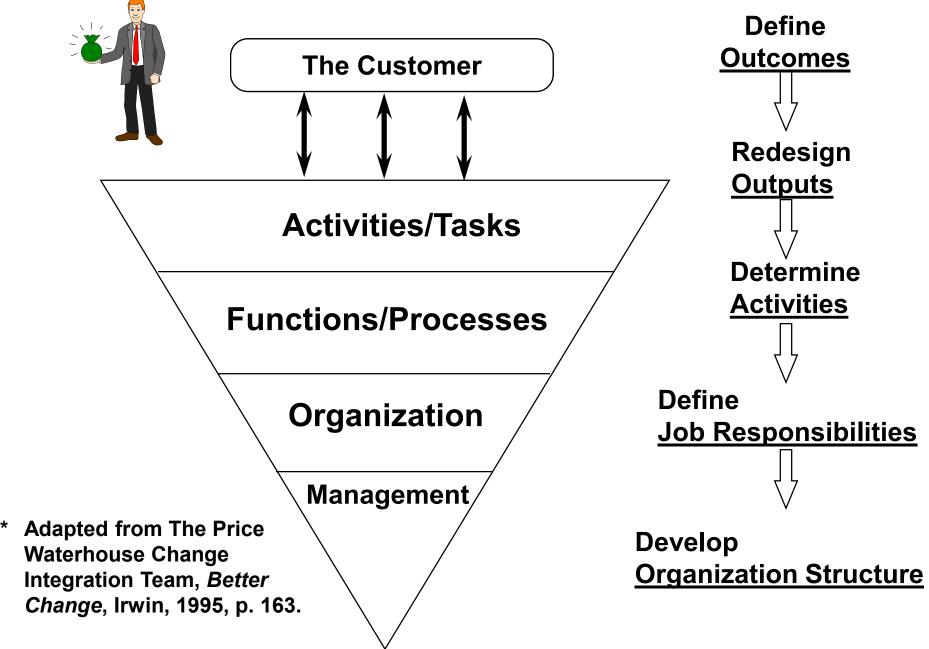


BUSINESS PROCESS REENGINEERING

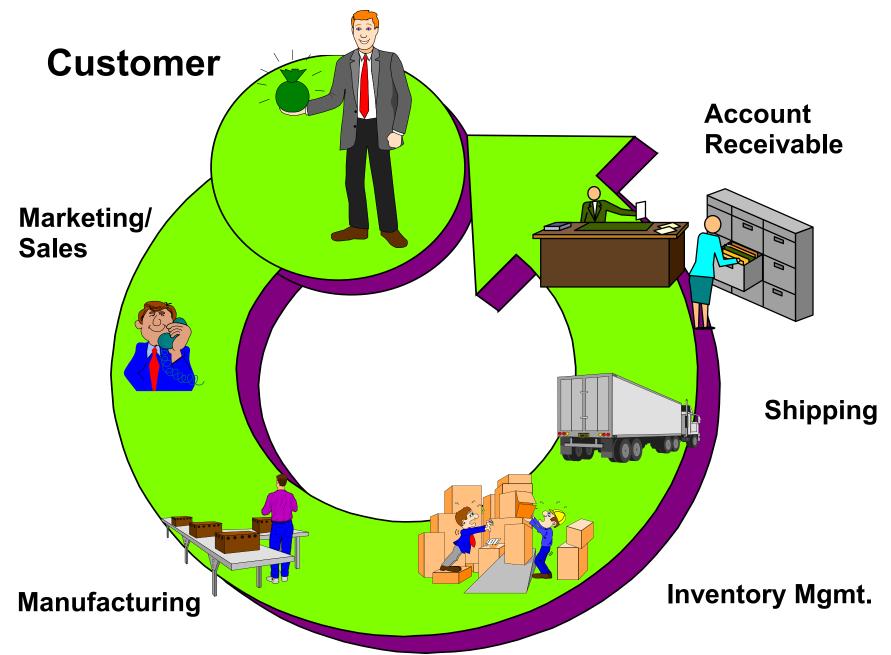
BPR advocates company go back to the "ROOT"

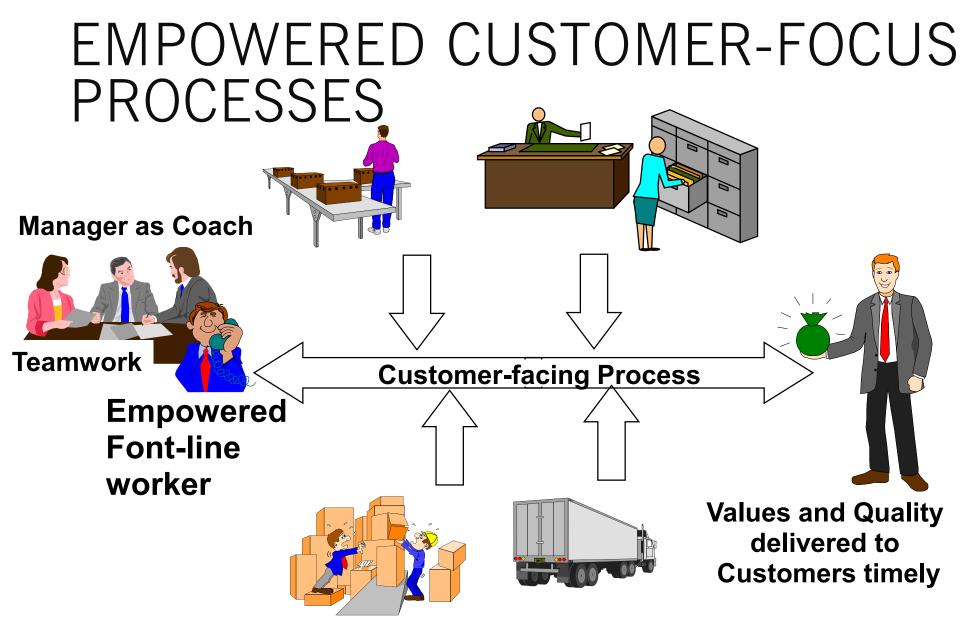
Know the customer wants and hopes BPR doesn't believe small change

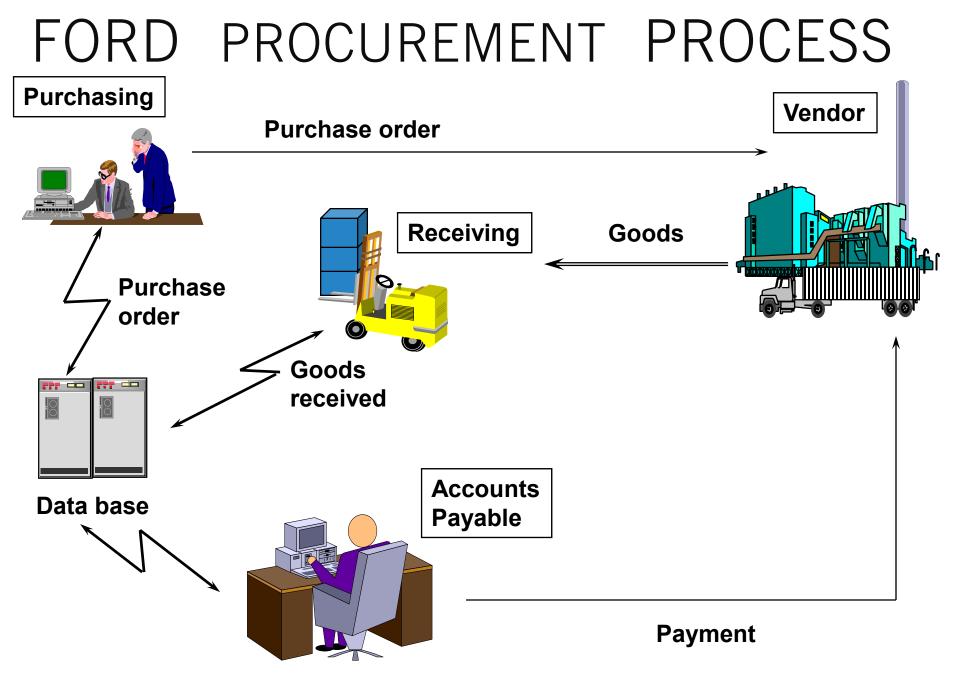
THINK FROM THE CUSTOMER BACK



END-TO-END PROCESSES







Before

FORD ACCOUNTS PAYABLE

More than 500 accounts payable clerks matched purchase order, receiving documents, and invoices and then issued payment.

It was slow and cumbersome.

Mismatches were common.

After

- Reengineer "procurement" instead of AP process.
- The new process cuts head count in AP by 75%.
- Invoices are eliminated.
- Matching is computerized.
- Accuracy is improved.

BPR PRINCIPLES

Organize around outcomes, not tasks.
E.g decreasing market share, revenue, innovation, new product/services

Have those who use the output of the process perform the process.

Subsume information-processing work into the real work that produces the information.

Source: Michael Hammer, "Reengineering Work: Don't Automate, Obliterate," Harvard Business Review, July-August, 1990, pp. 104-112.

BPR PRINCIPLES

Treat geographically dispersed resources as though they were centralized (cross functionalized)

Link parallel activities instead of integrating their results.

Put decision points where the work is performed and build controls into the process.

Capture information once and at the source.

Source: Michael Hammer, "Reengineering Work: Don't Automate, Obliterate," Harvard Business Review, July-August, 1990, pp. 104-112.

CRITERIA FOR SELECTING PROCESSES

Broken

Bottleneck

Cross-functional or cross-organizational units

Core processes that have high impacts

Front-line and customer serving - the moment of the truth

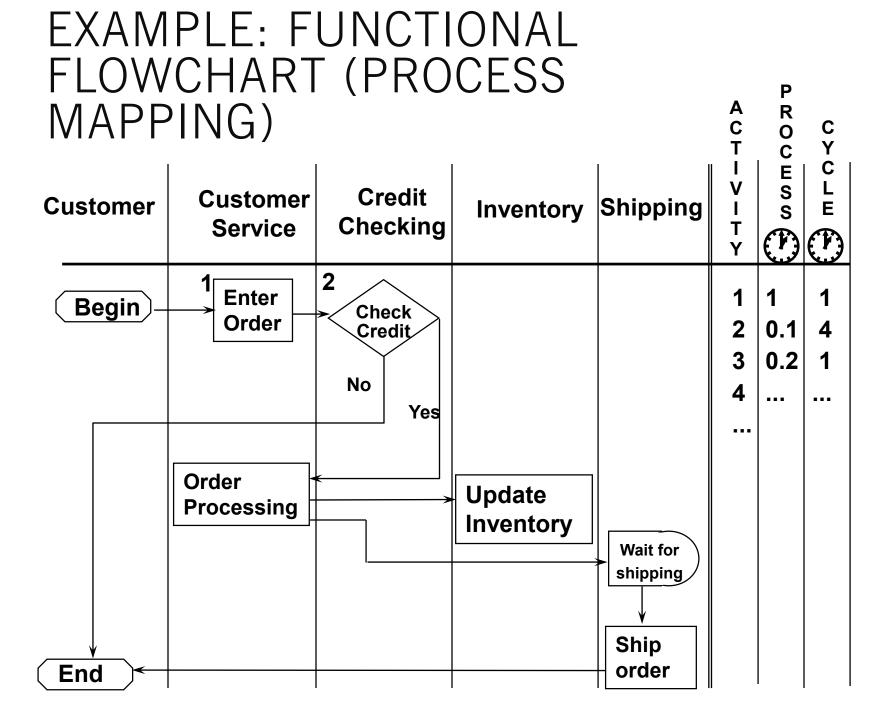
Value-adding

New processes and services

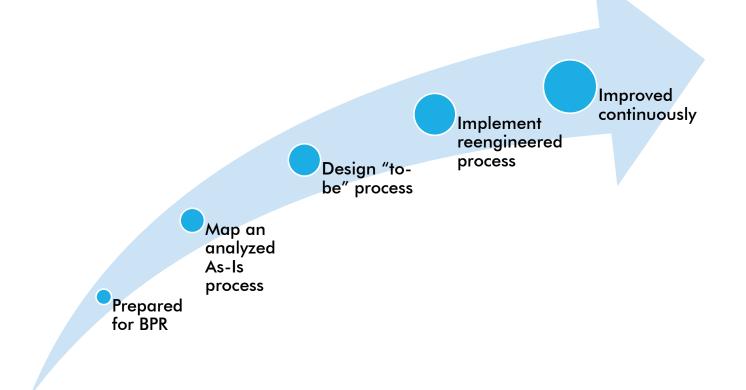
Feasible

WHAT TO REENGINEER?

Business process Know the process map --A picture flow of how work flows through the company



REENGINEERING PROJECT MODEL



PREPARED FOR BPR

- Planning and prepare for BPR
- ✓ BPR is viewed as the project
- There should be significant needs that process should be reengineered
- Established cross functional team
- Understand your customer

MAP AND ANALYZED AS-IS PROCESS

Understand the existing process

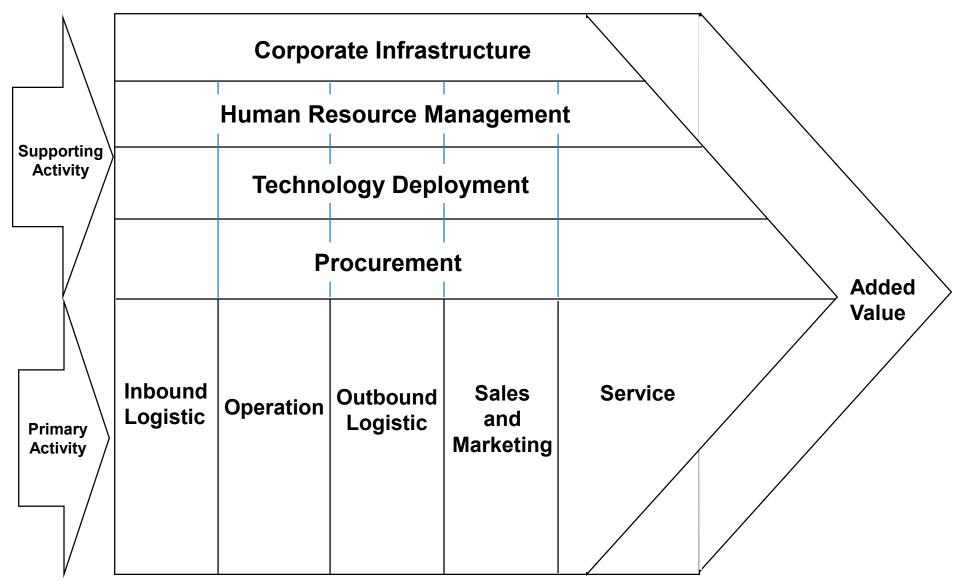
□Know well the process map

The improvement should be dramatic result

An "as is" business process defines the current state of the business process in a organization.

Typically the analysis goal in putting together the current state process is to clarify exactly how the business process works today, kinks and all.

USING VALUE CHAIN TO IDENTIFY HIGH-LEVEL PROCESSES



MAP AND ANALYZED AS-IS PROCESS

'As-is' analysis is the assessment of the current situation in various aspects:

- 1. What is the problem? The problem is usually defined from a customer perspective.
- 2. How are things done? This relates to the actual business process but also to the incentive structure of an organization.
- **3.** Where are the root causes of the problems?

DESIGNED TO-BE PROCESS

Produces proposed design, find more than one alternative You can use "benchmarking as the first step" Peform simulation to analyzed cost and time involved Performing trade-off analysis

IMPLEMENTED REENGINEERED PROCESS

This is the most challenging phase where engineering process effort meets the resistance

- This is the most difficult one
- Top management support
- Implementation viewed as the sub project
- The requirement To-Be process are equipped in WBS
- Using prototyping and simulation
- Training the workers, educate the people

IMPROVED CONTINUOUSLY

The process can be build and implemented overnight Should be monitoring and controlling so intensively Things should be monitored the progress of action and result

Progress of action:

How much more informed the people feel, how well management educate the people, how the big guys support and commitment

Progress of result:

Measure employee attitude, customer perceptions, supplier responsiveness etc