

## Benchmarking from A to Z

Using Benchmarking to Achieve Improved Process Performance

Kay Kendall
Director, Quality and Six Sigma



#### **Definition**

from Webster's Collegiate Dictionary

## Benchmark (n.)

- a mark on a permanent object indicating elevation and serving as a reference in topographical surveys and tidal observations
- a point of reference from which measurements may be made
- something that serves as a standard by which others may be measured





#### **Outline**

- Why Benchmark?
- Selecting Targets
- Terminology
- Cost/Benefit Analysis
- Keys to Successful Benchmarking
- The Benchmarking Process
- Tools of Benchmarking
- Identifying Candidate Partners
- The Site Visit and Beyond



## Why Benchmark?

- + Identify opportunities
- + Set realistic but aggressive goals
- + Challenge internal paradigms on what is possible
- + Understand methods for improved processes
- + Uncover strengths within your organization
- + Learn from the leaders' experiences
- + Better prioritize and allocate resources

#### **Performance Improvement**

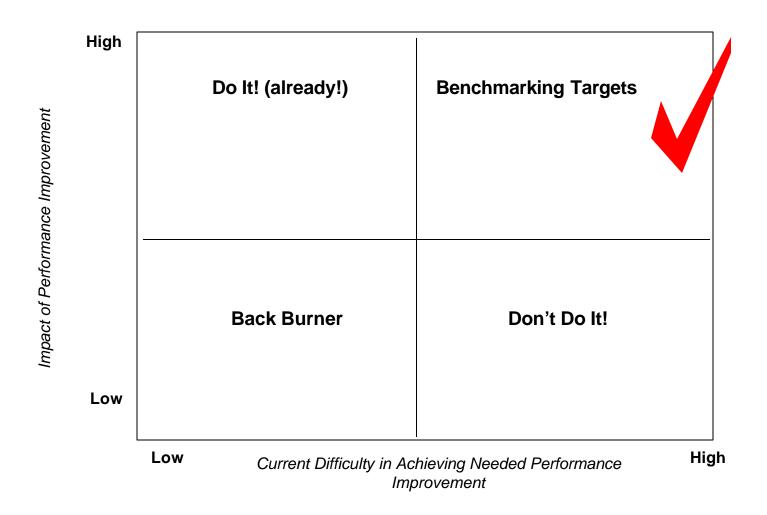


# **Comparing Scenarios**

	Without Benchmarking	With Benchmarking
DEFINING CUSTOMER	Based on history/gut feel	<ul> <li>Based on market reality</li> </ul>
REQUIREMENTS	<ul> <li>Acting on perception</li> </ul>	<ul> <li>Acting on objective</li> </ul>
		evaluation
ESTABLISHING	<ul> <li>Lack external focus</li> </ul>	Credible, customer-focused
EFFECTIVE GOALS	Reactive	Proactive
	<ul> <li>Lagging industry</li> </ul>	<ul> <li>Industry leadership</li> </ul>
DEVELOPING TRUE	<ul> <li>Pursuing pet projects</li> </ul>	<ul> <li>Solving real problems</li> </ul>
MEASURES OF	<ul> <li>Strengths and</li> </ul>	<ul> <li>Performance outputs known,</li> </ul>
PRODUCTIVITY	weaknesses not	based on best in class
	understood	
BECOMING	<ul> <li>Internally focused</li> </ul>	<ul> <li>Understand the competition</li> </ul>
COMPETITIVE	<ul> <li>Evolutionary change</li> </ul>	<ul> <li>Revolutionary ideas with</li> </ul>
	Low commitment	proven performance
		High commitment
INDUSTRY PRACTICES	<ul> <li>Not invented here</li> </ul>	<ul> <li>Proactive search for change</li> </ul>
	<ul><li>Few solutions</li></ul>	<ul> <li>Many options</li> </ul>
	<ul> <li>Continuous improvement</li> </ul>	<ul> <li>Breakthroughs</li> </ul>

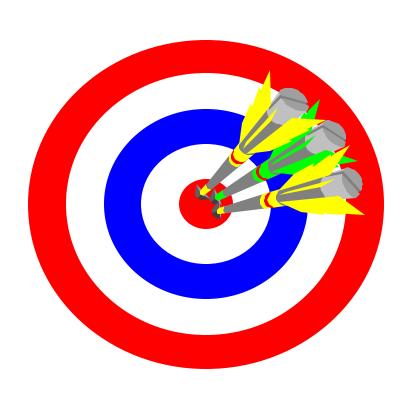


## Selecting Benchmarking Targets





## **Evaluating Targets**



- Is this process important to our customers?
- Would improvements in this process support our business goals and objectives?
- Is the process owner committed to making changes in this process? (Do we know who the process owner is?)



## Terminology

#### Types of Benchmarking

#### Internal

Comparisons between yourself and similar operations within your own organization

#### Competitive

Comparisons among competitors for a specific product

#### Functional

Comparisons to similar functions within the same industry

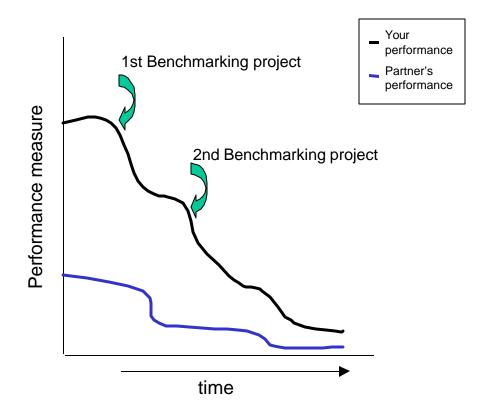
#### Generic

Comparisons of processes independent of industry or overall functions



## "Benchtrending"

- The latest approach to benchmarking
- Continuous monitoring of specific process performance with a select group of benchmarking partners





## Cost/Benefits Analysis

#### **Costs**

- Costs associated with conducting a benchmarking study:
  - Direct labor for team members
  - Data gathering/data analysis
  - Research to identify potential benchmarking partners
  - Publication and distribution of final report
- Costs occasionally associated with conducting a benchmarking study:
  - Training on specific skills and tools
  - Long-distance telephone and fax charges
  - Travel expenses
  - Consultant fees for third-party competitive benchmarking

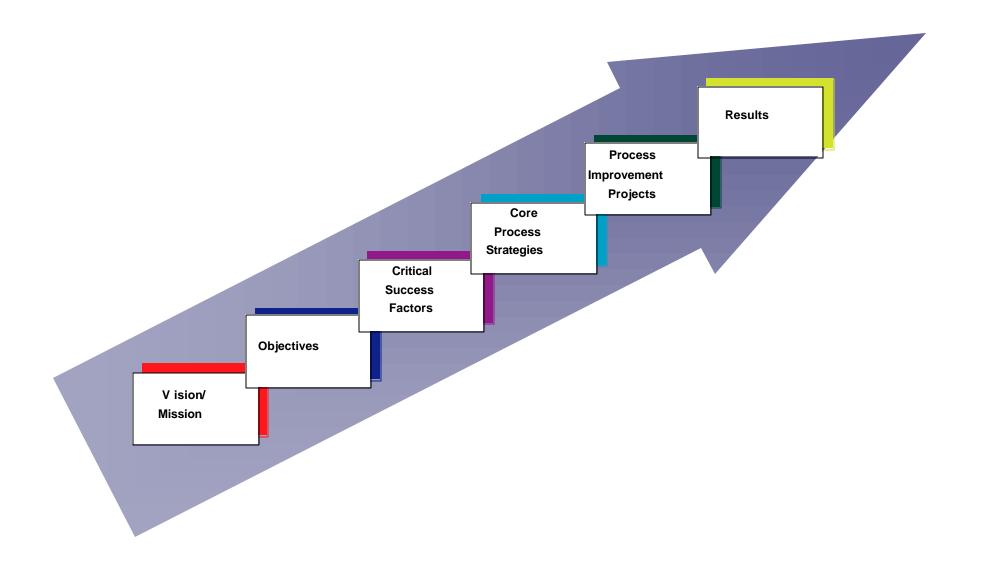
#### **Benefits**

- Improving processes critical to our business
  - Enhanced customer satisfaction
  - Cost reduction
  - Cycle time reduction
  - Enhanced employee satisfaction
- Establishing market-driven goals
- Gaining professional development and personal enthusiasm from seeing "the best" in action
- Identifying additional opportunities for improvement beyond the scope of the benchmarking project
- Establishing professional contacts
- Challenging "the way it's always been done"
- Becoming more competitive
- Shortening the process improvement cycle itself (accelerated learning)

And, of course, implementation costs!



# Leveraging the Benefits





## Keys to Successful Benchmarking

What You Need to Make Benchmarking Effective

- Focus on the processes that are critical to your business
- Desire to use benchmarking in conjunction with strategic planning
- Willingness to admit that you're not the best
- Openness to new ideas from potentially unexpected sources
- Commitment to provide resources and to overcome resistance to change
- Recognition given to successful benchmarking teams
- Understanding of the benchmarking process
- Communication to the organization about the objectives of the benchmarking project



#### When You Shouldn't Benchmark

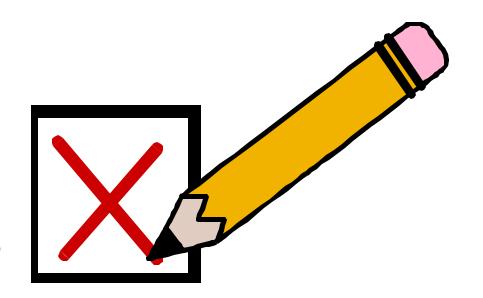
- You aren't targeting a process or it isn't critical to the business
- You don't know what your customers require from your process
- Key stakeholders aren't involved in the benchmarking project
- Inadequate resources have been committed
- You have an unreasonable fear of sharing information with benchmarking partners
- There are no up-front plans for implementing your findings
- You haven't done your "homework" before contacting benchmarking partners
- You're benchmarking an organization rather than a process
- There is a strong resistance to change (NIH syndrome)
- When you are expecting results instantaneously



## Understanding the Current Process

Doing Your "Homework"

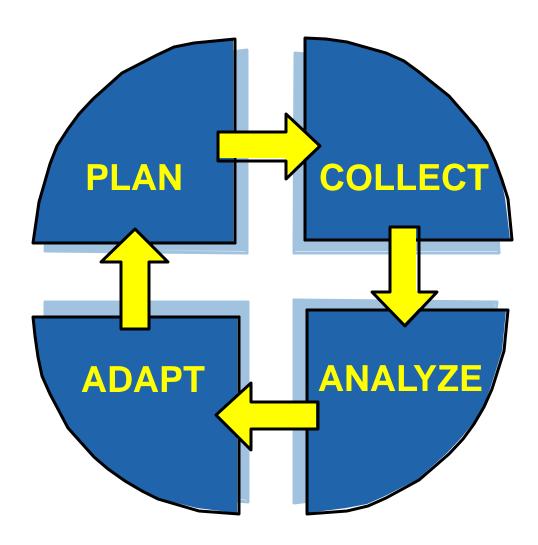
- Use process mapping tools to define your current process
- Identify customer expectations for your process
- Determine current process performance
- Use analysis tools to understand the causes for inefficiencies in the process (hint: you don't have to wait to make improvements)
- Identify targets based on analysis



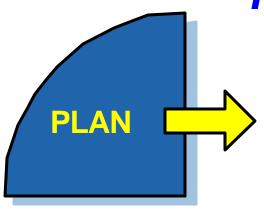


## The Benchmarking Process

APQC's Four-Phase Model



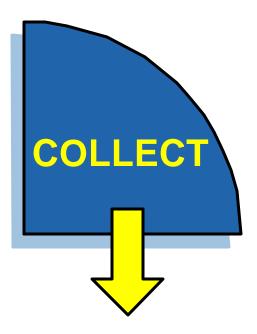




### Planning Phase

- 1. Form (and train, if needed) benchmarking team
- 2. Analyze and document the current process
  - a. Identify the area of focus
  - b. Identify the critical success factors (CSF)s for the area
  - c. Develop measures for the CSFs
- 3. Establish scope of benchmarking study
- 4. Develop purpose statement
- 5. Develop criteria for benchmarking partners
- 6. Identify target benchmarking partners
- 7. Define a data collection plan and determine how the data will be used/managed/distributed
- 8. Identify how implementation of improvements will be accomplished



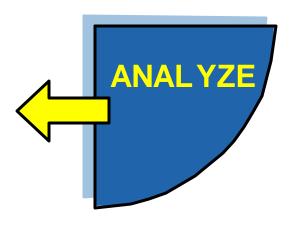


#### **Collection Phase**

- 1. Secondary research based on select/sort criteria
- 2. Evaluate results and identify potential partners
- 3. Develop data collection instruments
- 4. Pilot data collection instruments internally
- 5. Identify and contact best practice partners and enlist participation
- 6. Screen partners and evaluate for best "fit" with criteria
- 7. Develop detailed questionnaire
- 8. Conduct detailed investigation
  - a. Detailed questionnaire
  - b. Follow-up telephone interviews
  - c. Site visits



## **Analysis Phase**



- 1. Compare your current performance data to your partners' data
  - Sort and compile data
  - Make your performance data comparable (normalize)
  - Identify gaps
- 2. Identify operational best practices and enablers
  - What are participants doing that you are not doing
  - How do they do it (enablers)
- 3. Formulate strategy to close the gaps
  - Assess adaptability of practices and enablers
  - Identify opportunities for improvement
- 4. Develop implementation plan



## **Adapting Improvements**

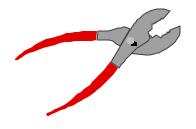


- 1. Implement the plan
- 2. Monitor and report progress

☆ ☆ ☆ Celebrate!!! ☆ ☆ ☆ (Acknowledge the benchmarking team)

- 3. Document the study
  - Communicate the results (internally and to benchmarking partners)
  - Assist in the internal transfer of best practices
- 4. Plan for continuous improvement
  - Identify new benchmarking opportunities
  - Set new goals







## **Tools of Benchmarking**

- Process mapping
- Process performance measurements
- Project management
- Questionnaire design
- Interviewing skills
- Observation skills
- Etiquette and legal issues



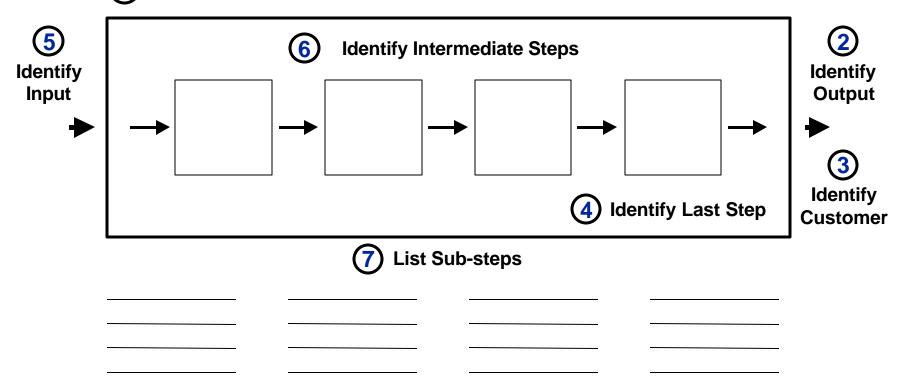




## **Process Mapping**

Instructions for Building a Top-Down Flowchart

1 Draw Process Boxes and Name Process





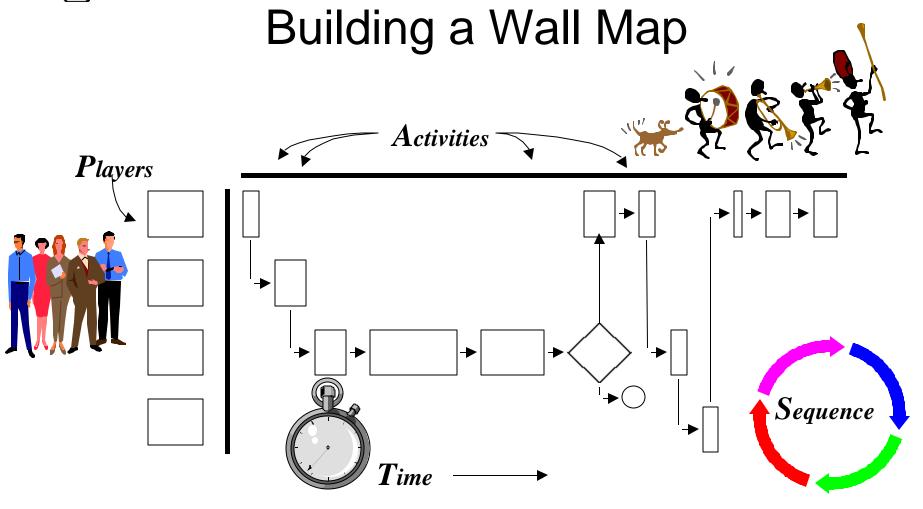
### **Process Definition**

Key to Effective Benchmarking

What's the process for checking into a hotel?

(hint ... the customer defines it)





P. A. S. T.



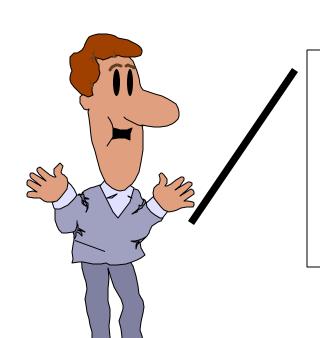
## Product/Process Map

- Think of yourself as the product. Then...
  - Walk the process and see what happens to you
  - Identify each activity
  - Determine if you are being operated on, transported, inspected, waiting, or stored
  - Determine how far you were moved
  - Determine how long each activity took
  - Determine what <u>value-added</u>
     work was done on you
  - Summarize the information

Product Process Map  SUMMARY OF CURRENT PROCESS  SUMMARY OF CURRENT PROCESS										
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ACTIVITIES OF THE PRODUCT	OPERATION	TRANSPORT	INSPECTION	WAIT	STORAGE	DISTANCE	TIME	VALUE-ADDEI	NECESSARY	NOTES
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## **Defining Work**



A step is *value-added* if:

- The customer recognizes the value,
- It changes the product, and
- It's done right the first time

## A step may be non-value-added but necessary if:

- ✓ It is required by law, regulation, or contract
- ✓ It is required for health, safety, environmental, or ethical considerations





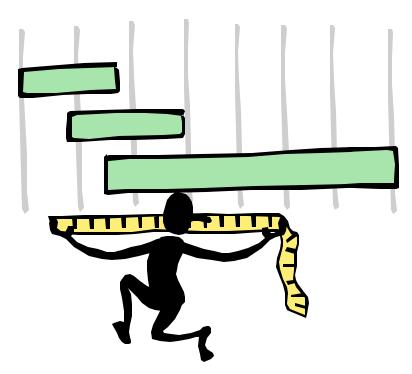
#### Process Performance Measurements

- Tied to customer expectations
- Aligned with strategic objectives
- Clearly reflective of the process (not overly influenced by other factors)
- Data easily obtained and understood
- Can be monitored over time
- Examples
  - Cycle time
  - Rejects per month
  - Costs



## Project Management

- Project management techniques are useful in
  - Planning the benchmarking study
  - Developing the implementation plan
- Tasks
- Resources
- Schedule





## Questionnaire Design

- Keep the questionnaire simple (no more than 2 pages).
- Determine the intent of the questionnaire
  - (1) screen potential benchmarking partners, or
  - (2) obtain specific process-related information from selected partner(s)
- Briefly explain the study's purpose and how their responses will be used.
- Be specific about the process under study. (hint: include a simple process map)
- Use **neutral language**. Don't ask questions that presuppose the answer.
- **Test** the questionnaire internally on people who are unfamiliar with your project.
  - Are the questions clear? Do the responses really address your issues?
- Answer the questionnaire about your own process.
- Ask yourself, "What kind of response do I expect from this question, and what will I
  do with the information when I get it?" Focus on the critical issues.
- Don't use acronyms or organization-specific terminology. (No TLAs)
- Ask the respondents to **forward** the questionnaire if others are better able to answer the questions.
- Provide a contact from the benchmarking team, and an address (or fax number)
  where the questionnaires should be returned or issues clarified.
- Indicate whether the respondent should expect any further contact from your team.
- Thank the participants for their cooperation.



## Interviewing Skills

- Be prepared. Know your own process and its performance measurements. Be familiar with the questions you will be asking, and have other questions thought out that would help you elicit additional information.
- Be sensitive to the protocol and culture of your benchmarking partner. Follow their lead.
- Use a standard set of questions with each benchmarking partner, but be flexible in the interview to permit them to share additional information. You might ask, "Is there anything that we've failed to ask you that might be useful to us?"
- **Practice active listening skills**, and listen more than you speak. Never argue-among yourselves or with your partners.
- Gather facts, but be open to hearing opinions.
- Be candid about the deficiencies of your own process, but don't assign blame.
- **Be considerate** of your benchmarking partners' schedule constraints. Never take more time then you have scheduled unless you are encouraged to do so by your partners.
- **Thank your partners** for their cooperation, and indicate if/when they should expect any further contact from your team.



### **Observation Skills**

- Site visits provide opportunities to observe the enablers in place at your benchmarking partners
  - Resources
  - Process characteristics
  - Cultural attributes

Resources	Processes	Culture
<ul> <li>Facilities</li> </ul>	<ul><li>Work flow</li></ul>	<ul> <li>Management involvement</li> </ul>
<ul> <li>Equipment</li> </ul>	<ul> <li>Procedures</li> </ul>	Empowerment
<ul> <li>Supplies</li> </ul>	<ul> <li>Strategy</li> </ul>	Risk taking
<ul> <li>Training</li> </ul>		<ul> <li>Decision-making approach</li> </ul>
<ul> <li>Investment in</li> </ul>		<ul> <li>Internal communication</li> </ul>
R&D		Amenities (offices, parking, etc.)



## Benchmarking Etiquette

- Don't ask for data that you aren't willing to provide in return.
- Remember that you and your team represent your whole company in the eyes of your benchmarking partners.
- Send questions in advance of telephone conversations or site visits.
- Inquire up-front about confidentiality issues or topics that are "off-limits."
- Never press for information that is not willingly given.
- Don't reveal information that other benchmarking partners have given you unless you are certain it was meant to be shared with other companies.
- You may offer to share findings of the study, keeping in mind any issues of confidentiality between partner companies.
- When in doubt, don't ask!





## Illegal Benchmarking Practices

- Submitting phony requests for information in order to obtain pricing information
- Performing reverse engineering when the product is obtained illegally
- Covert photography or tape recording
- Violations of Antitrust Law/Unfair Trade Practices
  - Requesting information from direct competitors on:
    - Marketing strategies
    - Sales incentives
    - Cost or pricing data (other than commercially available price lists)
    - · Contract terms and conditions
- Unethical practices
  - Misrepresenting yourself, your company, or your intentions in obtaining information
  - Querying job candidates about practices of their present employers
  - Using information that was given to you for a specific purpose for another reason without first obtaining permission from the benchmarking partner who provided it





# Identifying Candidate Partners

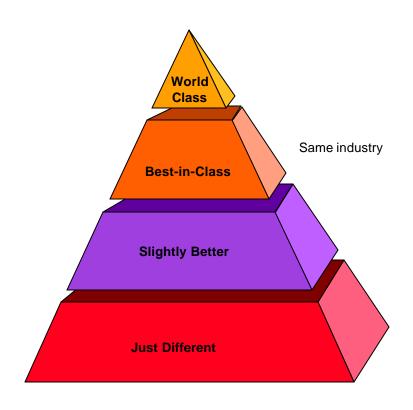
- Starting the search
- Screening partners
- Resources
- Making contact





# Where Do You Start the Search for the Best?

- Focus on the process, not the company
  - All of the processes at world-class companies aren't world-class processes (beware of the "halo" effect)
  - Even mediocre companies can have a world-class process or two
- Weigh the ease of getting access against possible performance compromises
  - Understand the spectrum from parity (just "different"), to some improvement over the current process, to best practice, to best-in-class or world-class
  - Decide "best-in-class" or best-in-Cleveland or somewhere in-between

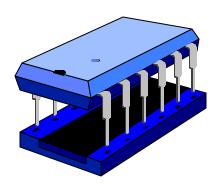




## Whose Livelihood Depends on This



Fast turnaround of equipment



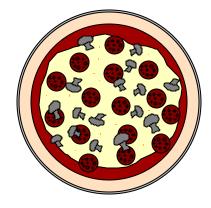
Reducing thefts of computer chips

## Process?



Routine machinery maintenance for safe operation

Better looking bullets



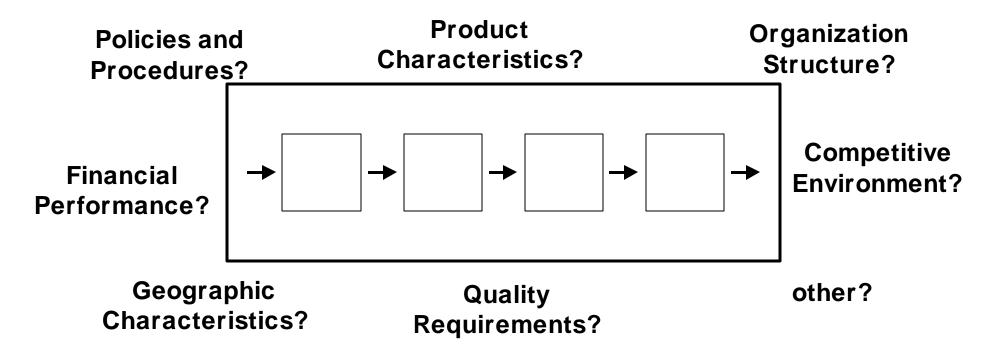
Fast, accurate delivery anywhere in the city





## Screening Potential Partners

What characteristics in a potential benchmarking partner are important to the process under study?





## Tapping into "Hidden" Resources

- Resources that are internally accessible
  - Library databases and literature searches
  - Employees who have worked at other companies, in other industries
  - Sales and marketing personnel
  - Field service personnel
  - Media attention articles, shows
  - Other divisions of your organization
- Resources that require external contact
  - Professional associations
  - Industry publications
  - Customers
  - Suppliers
  - American Marketing Association
  - Seminars and conferences
  - Universities and alumni associations
  - Benchmarking clearinghouses
  - Consultants



## Making Contact



- Initial contact must establish expectations
  - Mutual benefit
  - Effective/disciplined use of information
  - Cultural fit
  - Thorough preparation
  - Willingness to share
  - Respect for any issues of confidentiality



# Establishing a Relationship with Benchmarking Partners

- Process-specific information might include
  - Process map
  - Physical layout of the process (including floor space)
  - Quality data
  - Cycle time data
  - Pictures of equipment and equipment/materials lists
  - Associated procedures, forms, standards, and specifications
  - Customer and supplier requirements
  - Skills required and the syllabus from associated training
  - Descriptions of any associated regulations, environmental factors, and healthy and safety data requirements
- You may also want to offer the following information about your organization and may want to ask for similar information from your benchmarking partners
- Brochures describing the organization
  - Organization charts
  - Newsletters

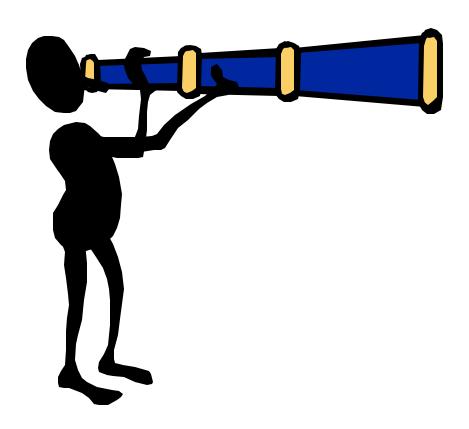


## Preparing for a Site Visit

- Get agreement on the agenda
- Send a confirmation letter (restate your intentions, ensure that the right people are present, and permit your host to review your questions)
- Clarify any issues of confidentiality
- Ensure that each member of your team understands his/her areas of responsibility



## **During Site Visits**



- Pay attention during introductions (names, responsibilities, experience)
- Ask to tour the facilities, if possible, in addition to the areas involved in the subject process
  - Clarify the protocol for talking with employees during the tour
- Take thorough notes
- Use breaks and lunch to build rapport
- Be observant; look for the enablers
- Be open to "the unexpected"



## Learning From the Best

#### Translating Information into Action

- Analyze the data and insights gathered from benchmarking partners
  - Compare process performance measurements
  - Review goals
  - Prepare a gap analysis
- Understand the factors that contribute to your partners' superior performance
  - Which can be adopted?
  - Which can be adapted?
- Map the "to-be" process
- Use project management skills to identify tasks, resources, and schedule to implement process changes
- Identify who must be "sold" on process changes
- Implement and monitor process performance



## Sample Summary

Processes		В	С	D	Е	F	G
Senior Executive leadership of quality efforts		1	$\uparrow$	$\uparrow$	$\uparrow$	<b>\</b>	$\uparrow$
Change management	$\uparrow$	1	$\uparrow$	Î	1	$\downarrow$	$\uparrow$
Corporate identity and embedded values	$\uparrow$	1	$\uparrow$	Î	1	≈	$\uparrow$
Clear constancy of purpose in quality initiatives	$\uparrow$	1	$\uparrow$	$\uparrow$	1	~	1
Self-assessment as a business driver	$\uparrow$	1	$\uparrow$	$\uparrow$	1	1	Î
Policy deployment	$\uparrow$	?	$\uparrow$	$\downarrow$	1	1	æ
Explicit commitment to learning and training	1	1	$\uparrow$	1	1	<b>↑</b>	Î
Disciplined use of benchmarking (strategic and teams)	$\uparrow$	1	$\uparrow$	1	1	1	$\uparrow$
High performance work organization	1	1	1	1	<b>↑</b>	≈	a
Use of common measures to reinforce focus	1	?	1	Î	1	≈	*

- Significantly better than ASI
- ↑ Better than ASI
- **≈** Essentially equal to ASI
- **↓** Worse than ASI



## Last Steps

- Send a letter of appreciation
- Ensure that any concerns your partner raised have been addressed
- When completed, send a courtesy copy of your final report
- Capture lessons learned from the benchmarking process itself
- Review new process performance to ensure that improvements have been sustained
- Identify other candidate processes for benchmarking
  - Potential for additional exchange with benchmarking partners
  - Build on success