Caribbean Tourism Organisation and the National Initiative for Service Excellence workshop on Management of Service Quality

Visit to Banks Brewery
7 October 2008
Benchmarking To World Class Manufacturing
Gareth J. Halliwell

WHAT IS WORLD CLASS?
- Ultimate accolade for a company
- Six stages of development of TQM to World Class
- Process takes 5 to 10 years
- Manufacturing goals for World Class Performance
  - Working together
  - Winning together
  - Finishing first every time
- Key to success is long term commitment
- Ever striving to outstandingly satisfy the company’s stakeholders (customers, shareholders, employees, and suppliers)

GOALS FOR WORLD CLASS PERFORMANCE
- Trouble-free plant
- Zero defects
- Zero breakdowns
- Zero accidents
- Zero dirt/dust

WCM – 6 STAGES TO WORLD CLASS DEVELOPMENT

Six stages of development of TQM to World Class Status

- Uncommitted
- Drifters
- Tool Pushers
- Improvers
- Award Winners
- World Class

- Most Companies are in first 3 stages
- To move into stage 4, need long term TQM and problem-solving in place
- BENCHMARKING becomes a “Distinctive Competency” and way of life.

THE JOURNEY TO WORLD CLASS

TYPICAL SUPPLY CHAIN SCOPE

Procurement
- Purchasing
- Scheduling
- Inbound logistics

Conversion
- Milling & Brewing
- Fermenting
- Processing
- Packaging

Distribution
- Warehousing
- Outbound logistics
- Order fulfilment

Technical Support
- Process improvements, trouble-shooting, product changeovers

Operating Support
- Planning, group purchasing, expert advice, contractor management

Strategy
- Network design, contracting, capital expenditure planning
TYPICAL SUPPLY CHAIN PROCESSES

THE VALUE CHAIN

BENCHMARKING DEFINED

- A process for rigorously examining and comparing business practices with the “Best-in-Class” with the object of creating and sustaining excellence.

BENCHMARKING FOCUS

- Benchmarking is costly and time consuming it must be focused:
  - What are the critical competencies needed?
  - What are the supporting infrastructure requirements?
  - What are the key processes?
  - Who are the process owners?

BENCHMARKING PRINCIPLES

- The Concept
  - Enterprise excellence
  - Doing the best things – not just doing things better
  - Stretch goals and objectives
    - What is enterprise excellence?
    - What is necessary to achieve it?
    - How do we actually achieve it?
  - Project Team approach
    - Cross-functional and multi-level
    - Leadership by current process owners

BENCHMARKING IS A TOOL FOR ASSESSING PERFORMANCE AND ACCELERATING LEARNING

The goal is excellence if not dominance, achieved by:

- Linking challenges and opportunities to the necessary strategic responses
- Determining the required competencies
- Identifying those processes which provide maximum leverage
- Benchmarking resultant practices against “Best-in-Class”
HISTORY OF BENCHMARKING
- Always has been an implicit function of any business activity
- But benchmarking as a rigorous part of the strategy process is a recent technique
  - Beginning in 1979/80
  - Significant growth in recent times
  - Much more than intercompany numerical comparisons
- Numerous success stories
  - Xerox, in overcoming their cost challenge
  - Toyota, in developing the Lexus and its after-sales service
  - 80% of America’s 500 largest corporations

The “RIGHT” VIEW OF BENCHMARKING IS CRITICAL

BENCHMARKING IS NOT
- Our competitor is 15% lower cost than we are
- We must reduce our costs 15% (or more)

BENCHMARKING IS
- The Best in Class company is 15% lower cost than we are
- The reasons their costs are lower are ...
- The processes they use are ...
- An appropriate target for our performance is ...
- ... and we will accomplish that performance through the

TRUE MARKET PLACE success requires both the right strategy and operational performance to support that strategy

BENCHMARKING VALUES
- The Value of Benchmarking
  - Rigour
  - Overcoming Disbelief
  - Accountability
  - Culture Change
  - Making sure the targets are set high enough
  - Convincing ourselves that we can do it better
  - An ongoing process for measuring performance and ensuring improvement
  - An outward-looking company, rather than one which is internally focused

THREE TYPES OF BENCHMARKING

Financial:
- What should financial targets be?

Strategic:
- What Strategy must we implement to achieve financial success?

Functional:
- How does our operational performance support our strategy?

SEVEN-STAGE PROCESS FOR BENCHMARKING

- Determine which functions to benchmark
- Identify key performance variables to measure
- Identify the Best-in-Class Companies
- Measure performance of Best-in-Class Companies
- Specify programmes and actions to “meet & surpass”
- Implement and monitor results
- Measure your own performance

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DETERMINING WHICH FUNCTIONS TO BENCHMARK

Criteria for Selecting Functions to Benchmark

- Suspect that there is room for improvement
- Big impact on competitive performance
- Success in the market place
- Cost
- Core competencies

BENCHMARKING STAGES

1. Determine which functions to benchmark
2. Identify key performance variables to measure
3. Identify the Best-in-Class Companies
4. Measure performance of Best-in-Class Companies
5. Specify programmes and actions to "meet & surpass"
6. Implement and monitor results

IDENTIFYING WHICH VARIABLES TO MEASURE

Key Performance Variables

- Cost
- Quality/Effectiveness
  - Service level
  - Customer satisfaction
  - Reliability
  - Cycle time
- Processes/Procedures
  - Organisational structure
  - Work systems
  - Corporate culture
  - Hiring / training

KEY PERFORMANCE DRIVERS

Any variable in a process which exerts substantial influence on the key performance variables, e.g. labour rates, efficiency, organisational issues, etc.

Each cost driver typically relates to only one performance variable, while process drivers often influence multiple performance variables.

Typical Brewery Kpis

<table>
<thead>
<tr>
<th>Benchmarking Brewery</th>
<th>Caribbean Brewery v. Best in Class</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Output per employee hl/yr</td>
</tr>
<tr>
<td>Caribbean Brewery</td>
<td>750 - 3,000</td>
</tr>
<tr>
<td>Best in Class</td>
<td>15,000 - 22,000</td>
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<tr>
<td></td>
<td>Packaging Efficiency %</td>
</tr>
<tr>
<td>Caribbean Brewery</td>
<td>45 - 55</td>
</tr>
<tr>
<td>Best in Class</td>
<td>75 - 85</td>
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<tr>
<td></td>
<td>Brewing Extract Efficiency %</td>
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<tr>
<td>Caribbean Brewery</td>
<td>95 - 97</td>
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<tr>
<td>Best in Class</td>
<td>99 - 103</td>
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<tr>
<td></td>
<td>Total Extract loss across plant</td>
</tr>
<tr>
<td>Caribbean Brewery</td>
<td>5 - 10</td>
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<tr>
<td>Best in Class</td>
<td>3.5 - 5</td>
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<td>Liquid losses %</td>
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<td>Caribbean Brewery</td>
<td>10 - 20</td>
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<tr>
<td>Best in Class</td>
<td>2 - 4</td>
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<td>Packaging Material Losses</td>
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<tr>
<td>Caribbean Brewery</td>
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<tr>
<td>Best in Class</td>
<td>0 - 1</td>
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<td>Capacity utilisation %</td>
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<tr>
<td>Best in Class</td>
<td>90+</td>
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<td>BOD in wastewater kg/hl</td>
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<td>Caribbean Brewery</td>
<td>&gt; 1,000</td>
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<tr>
<td>Best in Class</td>
<td>1 - 1.5</td>
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<tr>
<td></td>
<td>Water usage hl/hl</td>
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<tr>
<td>Caribbean Brewery</td>
<td>12 - 35</td>
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<tr>
<td>Best in Class</td>
<td>2.5 - 4.0</td>
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<tr>
<td></td>
<td>Thermal Energy usage kWh</td>
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<tr>
<td>Caribbean Brewery</td>
<td>250 - 300</td>
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<tr>
<td>Best in Class</td>
<td>75 - 100</td>
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<tr>
<td></td>
<td>Electrical Usage kWh</td>
</tr>
<tr>
<td>Caribbean Brewery</td>
<td>35 - 100</td>
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<tr>
<td>Best in Class</td>
<td>18 - 25</td>
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<tr>
<td></td>
<td>Capex Greenfield cost $/hl</td>
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<td>Caribbean Brewery</td>
<td>80 - 120</td>
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<td>Best in Class</td>
<td>40 - 70</td>
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<td>Quality Conformance to plan %</td>
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<td>Caribbean Brewery</td>
<td>65 - 80</td>
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<td>Best in Class</td>
<td>100!</td>
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<td>Consumer complaints %</td>
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<tr>
<td>Caribbean Brewery</td>
<td>0.5 - 1.5</td>
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<tr>
<td>Best in Class</td>
<td>Zero</td>
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<tr>
<td></td>
<td>Safety lost time frequency</td>
</tr>
<tr>
<td>Caribbean Brewery</td>
<td>2.5 - 5</td>
</tr>
<tr>
<td>Best in Class</td>
<td>Zero</td>
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</tbody>
</table>

IDENTIFYING KEY DRIVERS OF PERFORMANCE

Document your own process and costs

Segment process into a flow chart / value-added chains

Within each value-added element, isolate all factors / processes which influence performance levels
THE BENCHMARKING “VALUE-ADDED CHAIN”

Typical Percentage of Effort
- Structuring the Process: 25%
- Data gathering: 45%
- Analysis: 15%
- Insights: 5%
- Communication: 5%
- Convincing the Audience: 5%

Optimal Percentage of Effort
- Structuring the Process: 15%
- Data gathering: 25%
- Analysis: 15%
- Insights: 15%
- Communication: 15%
- Convincing the Audience: 15%

BENCHMARKING STAGES

- Determine which functions to benchmark
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BEST-IN-CLASS COMPANIES

- Direct Competitors
  - Sainsbury vs. Tesco
- Same industry but not direct competitors
  - British bank vs. French bank
- Latent Competitors
  - John Deere vs. Honda
- Best-in-Class
  - Motorola vs. Domino’s Pizza

CHOOSING COMPANIES TO BENCHMARK

- High Quality of the Processes
- Low Comparability

BENCHMARKING STAGES

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SOURCES OF INFORMATION

- Published Sources
- Internal Sources
- Sharing
- Interviews
**Comparing the Data**

- Your Data → The Key to the Directional, "Actionable" level of Accuracy, not Accounting Accuracy → Best-in-Class Data

**Benchmarking Stages**

- Determine which functions to benchmark
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**Actions to Close the Gap**

- Programmes / Actions to close the gap
  - Try Harder
  - Emulate
  - Leapfrog
  - Change the Rules of the Game

**Implementation - Keys to Success**

**Recalibration of Business Measures**

- Recalibration
  - Own Progress
    - Was our approach correct?
    - Did we execute?
  - Changing Industry Dynamics
    - Have the appropriate measures changed?
  - New Competitors
    - Has the Best-in-Class changed?
BENCHMARKING FOR WORLD CLASS PERFORMANCE

- Performance improvement to World Class status takes time, (10 yrs)
- "Success is 99% failure" – Soichiro Honda
- "The only place you find success before work is in the dictionary" – May Smith
- The road is not an easy one – it requires commitment from everyone in the company from top to bottom
- What type of company do we want to work for?
  - Companies that make things happen
  - Companies that watch things happen
  - Companies that wondered what happened.
- We have a choice

COMPETITORS ARE MOVING TARGETS

<table>
<thead>
<tr>
<th>Year</th>
<th>Our Company (3% / year)</th>
<th>Competitor (7% / year)</th>
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<tr>
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<td>100</td>
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<tr>
<td>2001</td>
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