



Financial Best Practices: Benchmarks for Sizing Up Your Operation

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Agenda

- Introduction
- History and Definitions of Benchmarking
- Total Quality Management, Benchmarking & Six Sigma
- Benchmarking Processes
- Types of Benchmarking
- Dimension of Benchmarking
- Why Benchmarking Fails

Definition and History

- What is the history of Benchmarking?
- What is Benchmarking?
- Why do we use Benchmarking?

History of Benchmarking

We have a couple of etiologies for the term benchmarking. One suggests that the term first came from cobblers (shoe makers) measuring their client's feet for shoes. The client's foot would be placed on a 'bench' and then 'marked' on leather for making the pattern for the shoe.

It is also believed that the use of the term is derived from the processes of surveying which is the act of 'measuring' and 'recording' changes in a landscape to create and update maps.

As a formal statistical endeavor it was developed by Xerox corporation in the 1970s and became part of formal management activities when Bob Calvin, CEO of Motorola utilized this process as part of his implementation of a Total Quality Management approach to revitalizing his company. This quickly led to Motorola becoming the first recipient of the Malcolm Baldrige award in 1988.

Definitions of Benchmarking

- **Merriam – Webster** A term that came into common usage in the mid-70s “as the study of a ‘competitors’ product or business practices in order to improve the performance of one’s own company.”
- **Qualserv Benchmarking Clearing house** A continuous process of improvement using comparisons to make change.
- **Wikipedia** Benchmarking is the process of comparing the business processes and performance metrics including cost, cycle time, productivity or quality to another that is widely considered to be an industry standard ‘benchmark’ or ‘best practice’.

Definitions of Benchmarking Cont.

- **Office of Public Services, United Kingdom** An efficiency tool based on the principle of measuring the performance of one organization against a standard whether absolute or relative to other organizations.
- **Westinghouse** "... a continuous search for and application of significantly better practices that leads to superior competitive performance."
- **Public Sector Benchmarking, Kenneth A Bruder** "Simply put, benchmarking is a rigorous yet practical process for measuring your organization's performance and processes against those of best-in-class organizations, both public and private, and then using this analysis to improve services, operations and cost position dramatically."

Summary Key Concepts

- **Systematic** approach for **measuring** and **recording** critical performance levels
- **Comparing** to a competitor or standard
- Utilizing for the purpose of **improving performance** through efficiencies
- Identifies and **adopts better practices**
- Not a short term project but a **continuous process**
- **Customer driven**

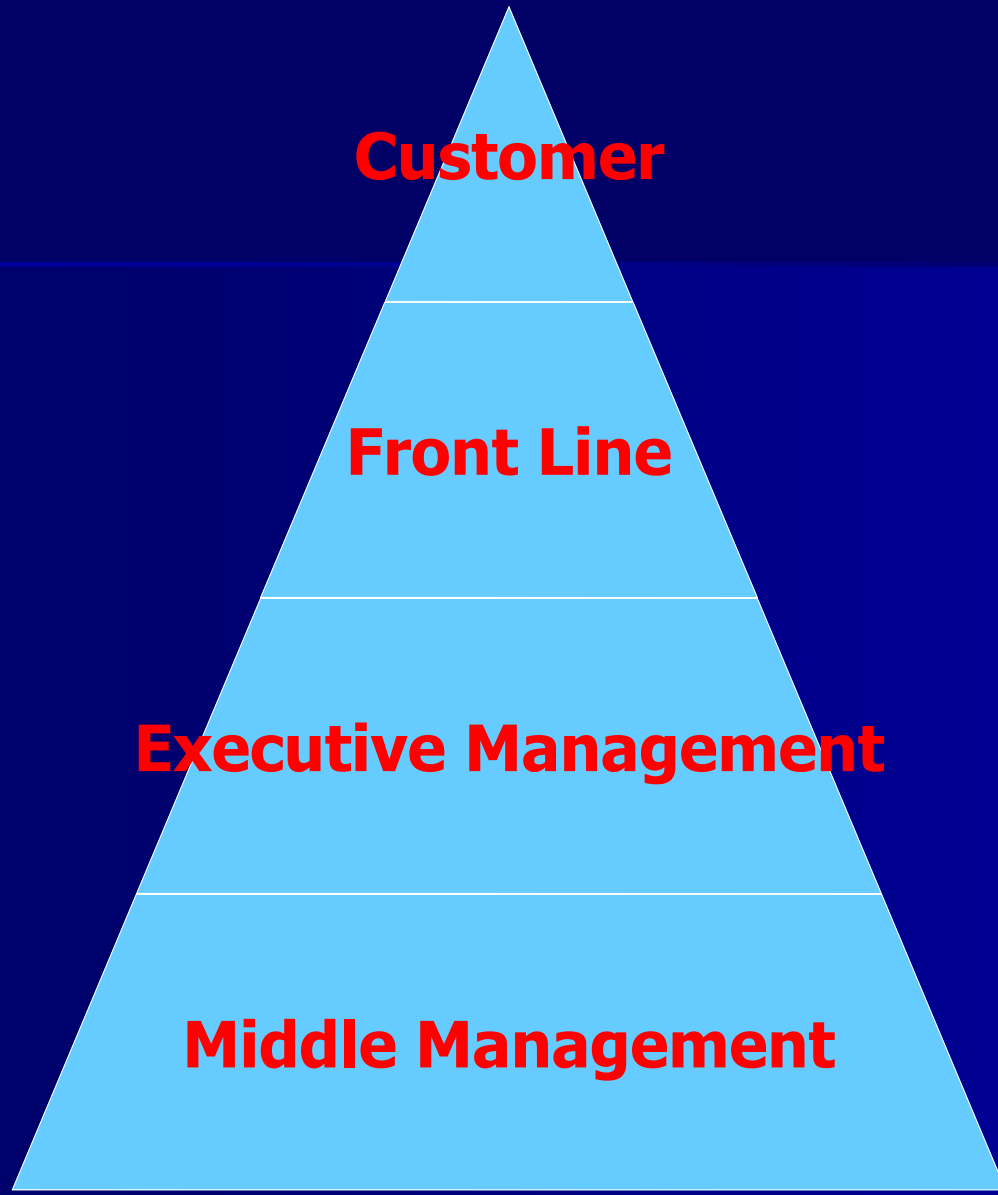


**Executive
Management**

Middle Management

Front Line

Customer



Customer

Front Line

Executive Management

Middle Management

Terminology

Total Quality Management

System of managing an organization that includes Planning, Organizing, Controlling and Leading. This type of management creates the awareness of quality in all organizational processes that become customer focused. Everyone is working to create **total customer satisfaction** and towards lowering costs. This got its prominence and rapid growth in industry with Deming & the Japanese Automobile Industry. It is where the term 'Quality and the concept of the Customer (and their complete Satisfaction) became the top priority for a business.

Terminology

Benchmarking

If we think of TQM as the strategy, then Benchmarking is one of its most important tactics.

Terminology

Six Sigma

A concept developed by Motorola primarily for the purpose of reducing 'defects' in production so that customer satisfaction and cycling times could be improved. It is a measurement of success by counting 'defects'. Sigma stands for standard deviations and 6 Sigma equates to 3.4 defects per million or 99.9997 % success. The goal is to continually improve processes so as to achieve this level of quality or success.

Terminology

Drilling Down

Process of reaching further and further back into the data and/or process to discover the primary cause or theme either creating or contributing to the 'failures' being studied.

Benchmark Process

Robert Camp, 1989

1. Identification – what to benchmark, who to compare with and collect data
2. Analysis – determine current performance 'gap'
3. Integration – Communicate findings, gain acceptance of future goals
4. Action – Develop plan, implement actions
5. Monitor progress, adjust hypotheses & recalibrate
6. Maturity – practices fully integrated into process

Benchmark Process

Business Performance Improvement Resource (BPIR)

- Identify/select area of improvement
- Measure current performance levels
- Benchmark performance
- Identify approach or strategy for improvement
- Develop ways to implement strategy for change
- Implement strategies and measure results
- Review results and re-calibrate for continued improvement

Benchmark Process

DMAIC

- **D**efine the goals of your improvement strategy
- **M**easure your current system
- **A**nalyze current performance levels and design/test and verify new procedures
- **I**mprove levels of competency/quality/success until reach 6 Sigma
- **C**ontrol the process by managing changes and supporting new system's success

Types of Benchmarking

- Performance
- Product
- Operational
- Process
- Functional
- Financial
- Strategic
- Best-In-Class

Performance Benchmarking

- Review of current measures either as a 'snapshot' or over a period of time.
- Review processes either objectively (measurement by numbers) or qualitatively
- The most common type used in our industry.
- Can be accomplished by comparing your results with:
 - Your own firm (over time, between different shifts...)
 - Related similar companies (20 group) 21 pages with avg. of 50 items per page
 - Industry comparisons (LCT Fact Book) & general business practice values

Ride Volume Statistics

Monthly Volume / % Change from Previous Year

	JAN	FEB	MARCH	APRIL	MAY	JUNE	JULY	AUG	SEP	OCT	NOV	DEC	Annual TOT/AVG	Annual % Change
2007	1,523	1,751	1,817	1,751	2,065	2,185	1,564	1,616	1,794	1,977	1,854	1,498	21,395	
	15.43%	26.58%	10.75%	5.65%	4.26%	21.49%	-5.14%	1.79%	1.65%	-8.24%	-1.45%	1.85%	1,783	
2008	1,472	1,615	1,592	1,664	1,680	1,615	1,262	1,144	1,282	1,422	1,390	1,199	17,336	
	-3.36%	-7.77%	-12.39%	-5.00%	-18.63%	-26.09%	-19.31%	-29.23%	-28.54%	-28.08%	-25.01%	-19.98%	1,445	-18.97%
2009	1,035	1,112	1,301	1,195	1,202	1,107	832	722	917	1,196	1,122	1,114	12,635	
	-29.67%	-31.14%	-18.28%	-28.17%	-28.47%	-31.45%	-34.08%	-36.89%	-28.49%	-15.89%	-19.28%	-7.09%	1,053	-27.11%

Daily Volume (Includes Weekends)

	JAN	FEB	MARCH	APRIL	MAY	JUNE	JULY	AUG	SEP	OCT	NOV	DEC
2007	49	56	59	58	67	73	50	52	60	64	62	48
2008	47	58	51	55	54	54	41	37	43	46	46	39
2009	35	40	42	39	39	30	27	23	31	39	37	36

Ride Volume Statistics Cont.

Cumulative Statistics

	JAN	FEB	MARCH	APRIL	MAY	JUNE	JULY	AUG	SEP	OCT	NOV	DEC	Totals
2007-2009	4,069	4,478	4,710	4,585	4,946	4,696	3,657	3,482	3,993	4,595	4,345	3,811	51,366
% of Yr	7.92%	8.72%	9.17%	8.93%	9.63%	9.14%	7.12%	6.78%	7.77%	8.95%	8.46%	7.42%	
Avg/Mo	1,356	1,493	1,570	1,528	1,649	1,565	1,219	1,161	1,331	1,532	1,448	1,270	
Avg/Day	44	53	51	51	53	52	39	37	44	49	48	41	

Revenue Statistics

Revenues / % Monthly Change from Previous Year

	JAN	FEB	MARCH	APRIL	MAY	JUNE	JULY	AUG	SEP	OCT	NOV	DEC	
2007	128,800	145,400	148,400	145,600	184,324	205,168	145,760	155,440	172,400	186,636	175,354	141,200	1,934,481
	19.49%	53.26%	12.30%	5.12%	9.09%	32.61%	-1.37%	11.76%	14.77%	-2.07%	5.13%	9.20%	14.11%
2008	134,000	150,420	155,129	159,600	164,520	167,480	131,200	121,600	128,556	139,778	134,911	101,721	1,688,914
	4.04%	3.45%	4.53%	9.62%	-10.74%	-18.37%	-9.99%	-21.77%	-25.43%	-25.11%	-23.06%	-27.96%	-11.73%
2009	93,575	101,650	121,750	114,470	115,880	118,225	82,494	77,995	90,720	124,110	114,385	109,658	1,079,068
	-30.17%	-32.42%	-21.52%	-28.28%	-29.56%	-29.41%	-37.12%	-35.86%	-29.43%	-11.21%	-15.21%	7.80%	-24.37%

Revenue Statistics Cont.

Cumulative Statistics

3 Year	JAN	FEB	MARCH	APRIL	MAY	JUNE	JULY	AUG	SEP	OCT	NOV	DEC	Tot./Avg
Total	346,375	377,780	397,524	398,862	446,711	458,719	359,454	355,035	391,676	436,694	401,555	332,079	4,702,464
Mo %	7.37%	8.03%	8.45%	8.48%	9.50%	9.75%	7.64%	7.55%	8.33%	9.29%	8.54%	7.06%	

Average Revenue Per Trip

Year	JAN	FEB	MARCH	APRIL	MAY	JUNE	JULY	AUG	SEP	OCT	NOV	DEC	Ann Tot.
													% Change
2007	84.62	81.43	83.99	83.14	89.25	94.03	93.60	96.08	96.20	94.39	94.60	94.23	\$90.46
	3.56%	18.72%	4.28%	-0.50%	4.63%	9.30%	4.41%	10.25%	13.15%	6.73%	6.66%	7.21%	7.37%
2008	91.06	93.15	97.44	95.94	97.91	103.72	103.99	106.29	100.28	102.06	117.44	100.95	\$100.85
	7.61%	14.39%	16.02%	15.39%	9.70%	10.30%	11.11%	10.63%	4.24%	8.12%	24.14%	7.14%	11.57%
2009	90.41	91.41	93.58	95.79	96.41	106.80	99.20	108.03	98.95	103.77	101.95	98.44	\$98.73
	-0.71%	-1.87%	-3.96%	-0.15%	-1.53%	2.97%	-4.61%	1.63%	-1.32%	1.68%	-13.19%	-2.49%	-1.96%

2009													Monthly
													Average
Rev	93,575	101,650	121,750	114,470	115,880	118,225	82,494	77,995	90,720	124,110	114,385	109,658	\$105,409
Vol	1,035	1,112	1,301	1,195	1,202	1,107	832	722	917	1,196	1,122	1,114	2,311

Product Benchmarking

- Reviewing current and new products to determine their effectiveness or need for upgrading

Operational Benchmarking

- Almost any area of your business can fall into this category
 - Staffing
 - Paper flow
 - Analysis of Procedure

Call Center Benchmarking

Period of Study: January 2009

Staff Name	# Reservations	Res. \$Value	Avg. Price/	Hrly Wage	Error Rate	Shift
Web Res.	318	31,434	\$98.85	N/A	N/A	N/A
Affil. - Out	85	7,590	\$89.29	N/A	N/A	N/A
Fran	376	36,822	\$97.93	\$12.50	0.023	Morning
Joan	264	27,100	\$102.65	\$13.00	0.028	Afternoon
Joslyn	190	18,775	\$98.82	\$11.50	0.021	Weekend
Kasey	330	30,113	\$91.25	\$12.50	0.025	Morning
Mary	186	17,986	\$96.70	\$11.50	0.031	Weekend
Chad	515	47,678	\$92.58	\$10.75	0.015	Overnight
Ramon	253	24,503	\$96.85	\$12.50	0.022	Afternoon
Remy	193	20,371	\$105.55	\$12.50	0.030	Weekend
Saturn	121	13,613	\$112.50	N/A	N/A	N/A
Totals:	2,831	\$275,984	\$98.45		0.024375	

Process Benchmarking

- Reviewing processes with the goal of determining 'best practices' by comparing to other firms.
- Usually to assess cost and efficiency for possible outsourcing.

Functional Benchmarking

- Review a single function/activity solely for the purpose of improving it in particular
- Should be specific and not general in nature.

Financial Benchmarking

- Financial analysis in an effort to compare your relative competitiveness and productivity.
- Can be run for your company over time, among similar companies (20 group) or GAAP industry standards.
- They should be used as indicators, combining several in order to get a general picture of the firms financial status.

Payroll Expense Analysis

	2009	% of Sales	2008	% of Sales
Sales	<u>\$2,338,920</u>	<u>100.00</u>	<u>\$3,248,500</u>	<u>100.00</u>
<i>Payroll expenses</i>				
Driver	729,743	31.20	990,793	30.50
Dispatch	132,576	5.67	150,785	4.64
Reservation	77,587	3.32	85,239	2.62
Admin	<u>40,000</u>	<u>1.71</u>	<u>40,000</u>	<u>1.23</u>
Total Payroll	<u>\$979,906</u>	<u>41.90</u>	<u>\$1,266,817</u>	<u>38.99</u>

Driver Productivity

Week #	Week Ending	Hours Paid	Billable Hours	Non-Billable Hours	% Billable	Non-Billable Cost
1	1/3/2010	1,426	1,125	301	78.89%	\$3,612
2	1/10/2010	1,725	1,477	248	85.62%	\$2,976
3	1/17/2010	1,842	1,602	240	86.97%	\$2,880
		<hr/> 4,993	<hr/> 4,204	<hr/> 789		<hr/> \$9,468
1	1/4/2009	1,396	1,125	271	80.59%	\$3,252
2	1/11/2009	2,015	1,698	317	84.27%	\$3,804
3	1/18/2009	1,983	1,602	381	80.79%	\$4,572
		<hr/> 5,394	<hr/> 4,425	<hr/> 969		<hr/> \$11,628

Revenue by Vehicle

	Week #1		Week #2		Week #3	
	2010	2009	2010	2009	2010	2009
Sedan # 1	5,728	7,446	8,749	10,936	10,273	13,047
Sedan # 2	3,956	5,143	8,430	10,538	15,230	19,799
Sedan # 3	4,267	5,547	10,253	13,329	12,863	16,336
Sedan # 4	3,289	4,276	9,372	12,184	6,283	8,168
Sedan # 5	1,639	2,131	5,329	6,928	6,396	8,123
Stretch #1	2,430	3,159	5,329	6,661	6,328	8,226
Stretch #2	3,759	4,887	7,329	9,528	4,328	5,626

Liquidity Ratios

Ability to meet short term financial obligations

- Current Ratio $\text{Current Assets} / \text{Current Liabilities}$
- Quick Ratio $\text{Current Assets} - \text{Inventory} / \text{Current Liabilities}$
- Cash Ratio $\text{Cash} + \text{Mkt Sec} / \text{Current Liabilities}$

Debt Service Ratio

It is a popular benchmark used in the measurement of an entity's (person or corporation) ability to produce enough cash to cover its debt (including lease) payments.

- Formula generally is $\text{EBITDA} + \text{discretionary items} / \text{Principal Repayment} + \text{Interest Payments} + \text{Lease Payments}$

This ratio is a key benchmark used by lenders to assess credit worthiness.

Sales & Receivable Ratios

How efficiently firm is collecting AR

- Receivables to Sales Ratio $\text{Avg AR} / \text{Total Sales}$
- Average Collection Period $\text{AR} / (\text{Annual Credit Sales} / 365)$

Financial Leverage Ratios

Extent to which firm is using long term debt

- Debt Ratio $\text{Total Debt} / \text{Total Assets}$
- Debt to Equity Ratio $\text{Total Debt} / \text{Total Equity}$
- Interest Coverage $\text{EBIT} / \text{Interest Charges}$

Profitability Ratios

Measures success of firm to generate profits

- Gross Profit Margin $(\text{Sales} - \text{COGS}) / \text{Sales}$
- Return on Assets $\text{Net Income} / \text{Total Assets}$
- Return on Equity $\text{Net Income} / \text{Shareholder Equity}$

Altman Z Score

- The Z-score model is a quantitative model developed in 1968 by Edward Altman to predict bankruptcy (financial distress) of a business, using a blend of the traditional financial ratios and a statistical method known as multiple discriminant analysis.
- The Z-score is known to be about 90% accurate in forecasting business failure one year into the future and about 80% accurate in forecasting it two years into the future.

Altman Z Score Cont.

- Used by analysts, bankers and creditors as a financial predictive tool, to determine possibility of bankruptcy.
- Business owners can use to devise a plan of action to bring about a successful turnaround.

Altman Z Score Cont.

Formula

$$\begin{aligned} Z = & 1.2 \times \text{Working Capital} / \text{Total Assets} \\ & +1.4 \times \text{Retained Earnings} / \text{Total Assets} \\ & +0.6 \times \text{Market Value of Equity} / \text{Book Value of Debt} \\ & +0.999 \times \text{Sales} / \text{Total Assets} \\ & +3.3 \times \text{EBIT} / \text{Total Assets} \end{aligned}$$

Altman Z Score Cont.

Z-Score

Less than 1.8

Greater than 1.81 but less than 2.99*

Greater than 3.0

Probability of Failure

Very High

Unsure / Grey Area

Unlikely

* Privately held companies grey area is lower, generally 1.23 to 2.90.

Strategic Benchmarking

- Observing the manner in which others compete who are in different industries.
- How are taxis, small package delivery, trucking companies doing...

Best-In-Class Benchmarking

- Studying the leader in the area you wish to improve and utilizing their process

Why Benchmarking Fails

DeToro 1995

- Lack of 'buy-in' by management or research team involved
 - Don't understand value or relevance. Extra work...
- Wrong People Involved in Process
 - Should consist of those already involved with process who know it best
- Analyze results and come up with wrong cause or area for procedural change
- Results not used
 - Lack of follow through by management to institute new procedures/policies supported by results of benchmarking activities.
- Project too large in scope
 - Take on projects that are so large, process of measurement is overwhelming in scope. Results in team breakdown. Need to first do a functional flowchart (breaking process into smaller more focused set of activities and then select one of these).

Service Failure Analysis

Failure Type	Rob	Diane	Steve	Bob	Mike	Jeff	Tim	Tony	Sue	Joe	Totals
Late for Pickup	1		1			2			2	1	7
Car exterior dirty	1	1	2	1	2	2	2	1		2	14
Did not know destination	2									1	3
Waiting in wrong location						1					1
Did not swipe credit card									1		1
Car broke on the way, took taxi				1			1				2
Not properly dressed	2					1					3
Talked too much	2		1							1	4
Cigarette in ashtray					1	1	1				3
No water in vehicle	1		1								2
No newspaper in vehicle											0
Chauffeur rude						2					2
Driving too fast											0
Did not follow client's directions	2										2
Did not have change for payment	1										1
Dropped client at wrong location			2								2
Not type of vehicle ordered											0
Trunk dirty	1		1	2	1	2	2	2	1	2	14
Charged the wrong amount	2										2
Took the long route			2								2
Made personal calls while driving	1					2					3
Air conditioning/heat not working				2							2
Did not offer receipt											0
Totals:	16	1	10	6	4	13	6	3	4	7	

Why Benchmarking Fails - Cont

- Lack of long term management commitment
 - Underestimate the time, energy and costs associated with project
- Focus on the measuring, not the process
 - Management may have a performance level in mind, but it is the process that creates this performance that is important
- Failure to monitor progress after changes are implemented
 - Process has been 'fixed' and management forgets about it. Lack of follow up and support often results in a return to old procedures.
- Changes are not in line with organization's larger strategy/mission or vision
 - No support by upper management may mean lack of assessed importance. Project must dovetail with company's overall desire for process re-engineering, drive to cut costs or mandate to improve quality of services/products

Advantages of Benchmarking

- Culture change within organization
 - Accountability to customers, regulatory agencies, vendors increases
 - Sensitivity to the value of planning increases
 - Overall operational efficiencies improve
 - Continuous performance evaluations supports individual growth
 - Organization develops competitive advantage over competitors
 - All within company value and support the activity of continuous improvement
- Enhances creative thinking among staff and managers
- Increases awareness of processes
- Becomes an environment of urgency rather than complacency
- Learn to prioritize among differing areas needing improvement

Dangers of Benchmarking

- Over dependence on learning from others
- Propensity to stop after moderate success thus NOT leading to sustainable competitive advantage
- Is only a tool in the toolbox of overall quality improvement
- Always following a better competitor and thus at best always second. Not the 'trailblazer'.



Q & A

Thank You!!!