




Organizational Quality Models

(Implementation Models)

- Motorola Six Sigma
- Malcolm Baldrige National Quality Award
- Moen-Nolan Model
- Semester Project Steps
- Seven Steps to Building Knowledge

Prepared by Jim Grayson, Ph.D.

1



“More and more, the language of GE is the language of Six Sigma, the quality initiative begun in late 1995. It has become central to GE’s ability to operate as a global whole. ‘Six Sigma’ refers to a standard of excellence defined as having no more than 3.4 defects per million - in anything, whether it’s manufacturing, billing or loan processing. GE says it will spend \$500 million on Six Sigma projects this year and will get more than \$2 billion in benefits.”

“See Jack. See Jack run.” Thomas Stewart. Fortune, September 27, 1999, p. 132.

“Jack Welch tells his young management charges to master the Six Sigma discipline that leads to black belts if they want to move up at General Electric.”

“This Kind of Black Belt Can Help You Score Some Points at Work.” Hal Lancaster. Wall Street Journal, Tuesday, September 14, 1999, p. B1.

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2



What Makes Six Sigma Different?

1. Integrating the human and process elements of improvement.
2. Focusing on the bottom line.
3. Linking improvement tools in an overall approach. (**M**easure - **A**nalyze - **I**mprove - **C**ontrol)

Human Issues

- Bottom line
- Management leadership
- Sense of urgency
- Customer focus
- Project teams
- Culture change

Process Issues

- Process improvement
- Analysis of variance
- Disciplined approach
- Quantitative measures
- Statistical methods
- Process management

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Ronald Snee, Why Should Statisticians Pay Attention to Six Sigma, Quality Progress, September 1999, pp. 100-3.

3



Why Six Sigma Works

- Bottom line results created.
- Senior management leadership is active.
- A disciplined approach (MAIC) is used.
- Rapid project completion (3-6 months).
- Clearly defines success.
- Infrastructure (MBB, BB, GB) established.
- Customers and processes are the focus.
- A sound statistical approach is used.

Ronald Snee, Why Should Statisticians Pay Attention to Six Sigma, Quality Progress, September 1999, pp. 100-3.

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4

Six Steps to Six Sigma

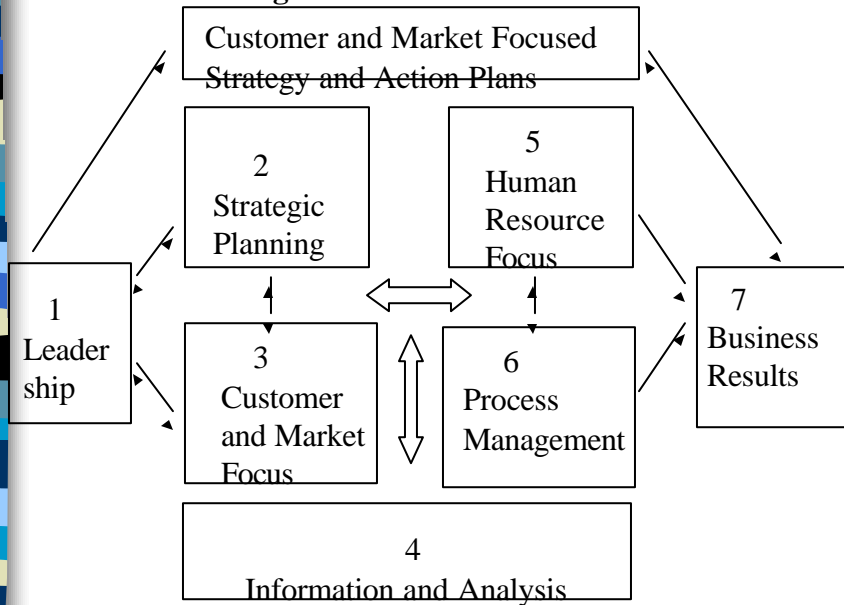
note: adapted from Motorola six step process

1. Define your product or service
2. Identify customers and their needs.
3. Determine how to satisfy the customer.
4. Identify the process for creating your product.
5. Eliminate waste and defects from the process.
6. Measure your results for continuous improvement.

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5

Baldrige Criteria Framework



Source: Award Criteria, p. 43.
See www.nist.gov

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6

