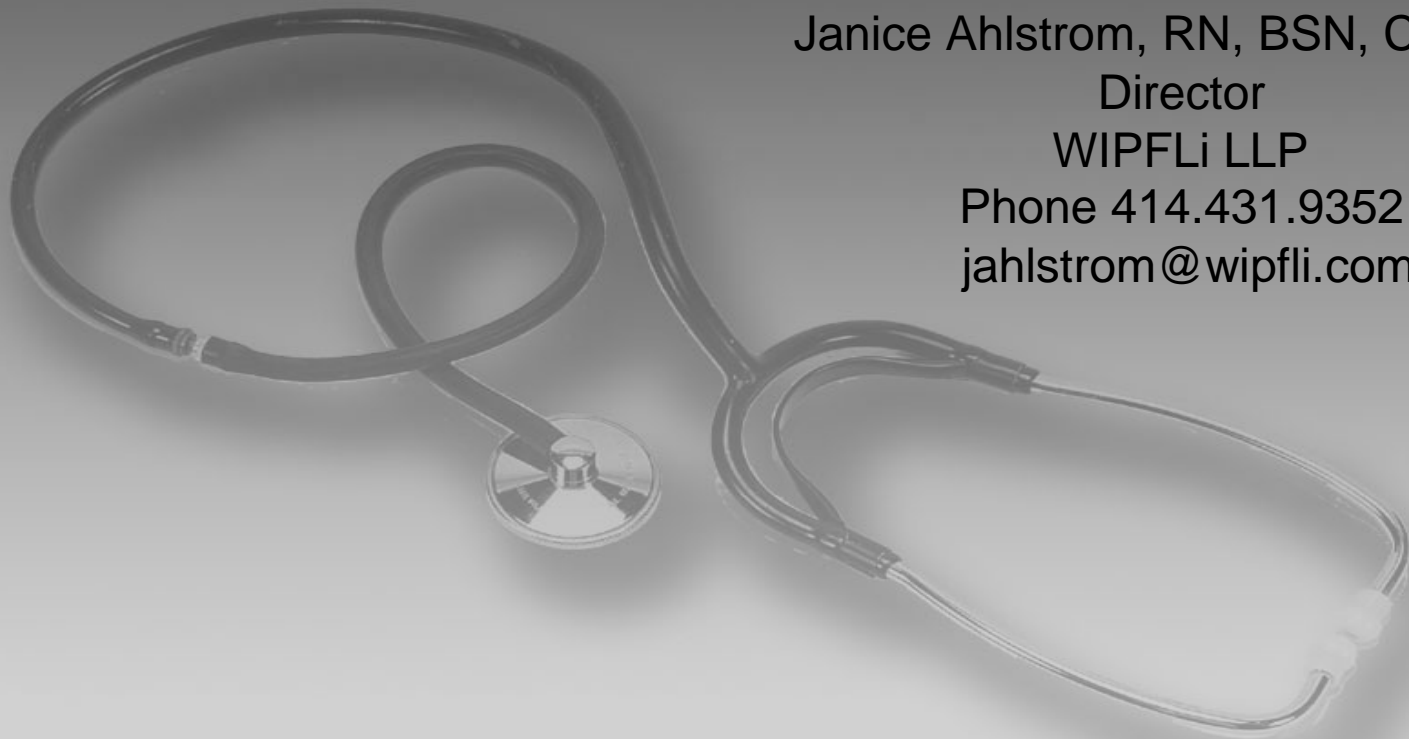


Performance Measurement and HIT



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Metrics and Benchmarking

- **Metrics**
- **Using metrics**
- **Benchmarking yourself**
- **Resources**

Definitions

Metric – a standard of measurement

Benchmark – a standard by which something can be measured or judged

Why do we measure?

We cannot **improve** without knowing the **baseline**



- What are you trying to measure?
 - Productivity
 - Quality
 - Return
 - Cost
 - Satisfaction
- Is it quantitative or qualitative?
 - Cost or Value?
 - Transaction or Relationship?
- Is this related to a project or to an asset life cycle?
- What type of statistical attributes serve best?
 - Comparison – means, medians
 - Ratios – cost, staffing or effort per some unit of measure
 - Time – static, rolling



- Sample commonly used metrics
 - Productivity
 - Network uptime / downtime
 - Application availability
 - Average system response time
 - Trouble ticket response times
 - Average duration of outages
 - Mean time between failures
 - Print operators per 100,000 pages
 - Lines of code developed per programmer
 - Lines of code tested per QA resource
 - Time to delivery
 - Project conception to deployment cycle time



- Sample commonly used metrics
 - Quality
 - On budget / on time
 - Defects per lines of code
 - Number of certified staff as a percent of total
 - Number of documentation errors
 - Number of changes after the program is coded
 - Number of error-related help desk tickets



- Sample commonly used metrics
 - Return
 - ROI – Return on Investment
 - ROA – Return on Assets
 - ROE – Return on Equity
 - EVA – Economic Value Add
 - KVA – Knowledge Value Added
 - Cost
 - TCO – Total Cost of Ownership
 - TCOGS – Total Cost of Goods and Services
 - IT budget as a percent of total
 - IT expenditures as a percent of revenue
 - IT staff as a percent of total



- Sample commonly used metrics
 - Satisfaction
 - Usage rates
 - Adoption rates
 - Satisfaction rating
 - Number of change requests submitted
 - Percent of change requests completed
 - Trouble ticket resolution time
 - First call resolution



- What metrics are you using today?
- To whom are they reported?
- What actions or behaviors are driven by the metrics?



The primary purpose of metrics is...

... to identify the baseline upon which to improve



Metrics must be:

- Aligned with the business strategy and the relevant business metrics
- The basis for which continuous improvement programs are defined and prioritized
- A key component into defining performance reviews and variable compensation

“You are what you measure”

Alignment with business strategy...

- **Balanced scorecard**
 - Financial perspective
 - Customer perspective
 - Operational perspective
 - Learning and growth perspective
 - Human capital perspective
- **Market differentiation**
 - Operational excellence
 - Product innovation
 - Customer intimacy

Basis for continuous improvement...

- When our metrics aren't meeting our benchmark requirements, dig into components that impact the metric
- Assess and look for opportunities around
 - People
 - Knowledge, skills, attitude
 - Process
 - Value stream or process mapping, kaizen events
 - Technology
 - Hardware / software deployment or replacement

Key component of reviews and comp...

- Performance evaluations
 - Objective portion of performance evaluation
- Team / Individual incentives
 - Flexible incentives based on metric value
 - Fixed incentives based on outcome achievement



- Identify the metric
 - Validate alignment, relevancy and feasibility
- Define the metric
 - Formula
 - Timeframe
 - Aggregation points
- Identify comparison group(s)
 - Industry, process, role, technology, size, competition
 - Validate relevancy (strategy, position, uniqueness, etc.)
- Measure baseline
 - Methods and tools for data collection
 - Validity sampling
- Perform ongoing measurement

Final Thoughts

- If you want to be perceived as a contributor to the business, the most objective way to demonstrate this is through metrics that show **direct contribution to the business strategy**.
- Choose your comparison benchmarks carefully – you might ultimately end up defending yourself against the very metric you selected.
- Remember – there are lies, damned lies, and statistics. Information can be manipulated. Understand all of the variables that make up a metric.

- Gartner Group
 - “Total Cost of Ownership” - TCO
 - Services
 - Technology evaluation / vendor analysis – Gartner
 - IT operations and management - Gartner
 - Human Capital research – people3
 - IT Market analysis – Dataquest
 - Technology Industry analysis – GartnerG2
 - Web sites
 - www.gartner.com
 - www.people3.com
 - www.dataquest.com
 - www.gartnerG2.com

- **Meta Group**
 - “Total Cost of Goods Sold” - TCOGS
 - **Services**
 - Technology evaluation / vendor analysis
 - IT operations and management
 - **Web sites**
 - www.metagroup.com
 - www.metricnet.com

- Forrester Research
 - “Total Economic Impact” - TEI
 - Services
 - Wholeview research
 - TechStrategy
 - Technographics
 - TechRankings
 - Web sites
 - www.forrester.com
 - www.gigaweb.com

- Others
 - **ROI analysis**
 - Nucleus Research – www.nucleusresearch.com
 - Focus on defining ROI for technology projects
 - Occasional free research available on specific platforms
 - Consulting-oriented to perform or mentor ROI analysis
 - The Deciding Factor – www.decidingfactor.com
 - Focus on defining ROI for any type of investment
 - More publication-oriented but offer workshops and consulting
 - **Process benchmarking**
 - American Productivity and Quality Center – www.apqc.org
 - Focus on benchmarking shared services
 - Accounting, Human Resources, IT, Facilities Management
 - Consulting fees or membership dues to access research
 - Hackett Group – www.hacketthighway.com
 - Focus on benchmarking business processes and collaborative learning
 - Accounting, Human Resources, IT, Procurement, SG&A
 - Consultancy-based organization that is part of Answerthink

- Others (continued)
 - **Software development**
 - International Software Benchmarking Standards Group – www.isbsg.org
 - Focuses on software development and enhancement as well as software maintenance and support
 - Defines international standards for process and measurement
 - Membership is limited to various country-specific organizations
 - Cutter Consortium – www.cutter.com
 - Generally known for software project expertise for both development and project management
 - Publication-based with additional consulting available
 - Does offer ISBSG research results

- Others (continued)
 - **Labor**
 - Information Technology Association of America – www.itaa.org
 - Membership-based trade association for technology firms
 - Part of World Information Technology and Services Alliance
 - Provide research and analysis for both members and non-members
 - Annual ITAA Compensation survey
 - Help Desk Institute – www.thinkhdi.com
 - Membership-based organization for help desk professionals
 - Provide annual salary surveys
 - Data Warehouse Institute – www.dw-institute.com
 - Membership-based organization for data warehousing professionals
 - Provide annual salary surveys

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