Keys for Justifying Staffing Levels to Senior Management

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PRESENTATION WILL COVER:

- How did we get to where we are today?
- Why do you need to justify staffing levels?
- How to measure your staffing levels?
- What metrics are best used to identify staffing concerns?
- How do you sell your proposal to senior management?
HOW DID WE GET TO WHERE WE ARE TODAY?

- The economy!
  - Down sizing
  - Outsourcing or privatization
  - Craft based or specialty contractors
  - Justify your budget
  - Justify your staffing levels
  - Justify replacing retiree’s
  - Reduced overtime
  - Nothing is automatic anymore!
WHAT PROBLEMS DOES IT CAUSE FOR THE FUTURE?

- Building quality and performance
- Employee morale
- Customer satisfaction
- Green and LEED certifications
- Ability to hire qualified replacement employees
Why do you need to justify staffing levels?

- Justifying staffing is the new normal!
  - New employees
  - Replacement employees
  - Existing employees

- Contractor staffing and costs
  - Scope of work justification
  - Response times for trouble calls
  - Magnitude of service contracts and yearly maintenance
HOW TO MEASURE YOUR STAFFING LEVELS?

- Benchmarking and unit costing
  - Benchmarking companies
  - Professional organizations

- Contractor fishing and fake RFP’s
  - Requests for quotation to compare your costs

- Internal performance measures
  - Understand and justify your own culture
  - Gather and compare your own data
  - Develop leading class principles and processes
HOW TO MEASURE YOUR STAFFING LEVELS?

- Benchmarking and unit costing
  - Benchmarking companies
    - Contribute your information to the data base
    - Pay for summaries of the numbers
    - Subscribe for periodic updates
  - Professional organizations
    - Receive summaries as part of membership
    - Purchase detailed back data
    - Contribute your performance data
HOW TO MEASURE YOUR STAFFING LEVELS?

- Benchmarking and unit costing - Caution!!
  - Enter into these programs with your eyes open
  - Watch carefully for Apple and Orange comparisons
  - Dig deeply into backup data
  - Understand your own benchmarking completely before comparing to others!
HOW TO MEASURE YOUR STAFFING LEVELS?

 Contractor fishing and fake RFP’s

 - Property owner uses fake RFP’s and RFQ’s
   - Compare bid prices to existing operational costs
   - Owner is fishing for lower costs
   - Causes in-house organizations to make cuts based on the contractor bid amounts

 - Difficult to accurately compare costs
   - Contractor may under or over bid depending on current economy
   - Most owners do not understand their own current scope or statement of work prior to developing RFP/Q’s
What metrics are best used to identify staffing concerns?

Using internal performance measures

Areas of measurement and focus

- Efficient work practices
- Asset history and performance
- Work request management practices
- Preventive and predictive maintenance programs
WHAT METRICS ARE BEST USED TO IDENTIFY STAFFING CONCERNS?

- Efficient work practices
  - Work planning quality
  - Work scheduling compliance
  - Completed work audits
  - Daily management involvement in the field
  - Customer satisfaction
WHAT METRICS ARE BEST USED TO IDENTIFY STAFFING CONCERNS?

- **Asset history and performance**
  - Cost of yearly maintenance
  - Mean time between failures
  - Percent reactive work compared to other assets
  - Percent uptime or downtime
WHAT METRICS ARE BEST USED TO IDENTIFY STAFFING CONCERNS?

- **Work request management practices**
  - Work request backlog
  - Quality of completed work requests
  - Backlog aging report
  - Percent planned work requests
  - Percent scheduled work requests
  - Schedule compliance
  - Planned vs. actual work hours
  - Ratio of planned vs. reactive work hours
  - Percent technician overtime
What metrics are best used to identify staffing concerns?

- Preventive and predictive maintenance performance
  - Quality of the program
    - All assets included in program
    - Program audited on a continual basis
  - Percent of total hours spent on preventive/predictive practices
  - Percent of late of canceled preventive/predictive tasks
How do you develop accurate internal metrics?

- Management discipline and accountability
  - Accurate performance metrics must be top supported and bottom driven
- Accurate work order documentation
  - Must have details
  - Work orders must be accurate
  - Work order details must be audited
- Leading class supervision to craftsman ratios
  - Management must have ample time to be in the field with technicians to ensure work efficiency and work quality
HOW DO YOU DEVELOP ACCURATE INTERNAL METRICS?

- **Work planning and scheduling**
  - 70-80% of all work must be properly planned and scheduled
  - Only method to ensure high work efficiency

- **Preventive and predictive maintenance programs**
  - This is the only process to lower your reactive and emergency work
  - Reactive work is 4-6 times the cost of planned and scheduled.
  - Most of this is labor, so is the only technique to control staffing levels

- **Complete set of internal maintenance performance measures**
  - Develop a meaningful list of metrics, not just pretty graphs
# Maintenance Scorecard

## Summary

<table>
<thead>
<tr>
<th>Measurement</th>
<th>Goal</th>
<th>Actual</th>
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</thead>
<tbody>
<tr>
<td>Backlog of Differed Work</td>
<td>4-6 Weeks</td>
<td>7 Weeks</td>
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<tr>
<td>Response Time</td>
<td>2 Hours</td>
<td>2.85 Hours</td>
</tr>
<tr>
<td>Downtime or Unavailability</td>
<td>&lt;5%</td>
<td>4.3%</td>
</tr>
<tr>
<td>Preventive Maintenance Jobs</td>
<td>&gt;40%</td>
<td>45.6%</td>
</tr>
<tr>
<td>Late Preventive Maintenance</td>
<td>&lt;1%</td>
<td>0.5%</td>
</tr>
<tr>
<td>Scheduled and Planned Work</td>
<td>&gt;55%</td>
<td>58%</td>
</tr>
<tr>
<td>On Time Completion</td>
<td>&gt;95%</td>
<td>88%</td>
</tr>
<tr>
<td>Return Visits-Same Problem</td>
<td>&lt;2%</td>
<td>86%</td>
</tr>
<tr>
<td>Reactive Work Requests</td>
<td>&lt;20%</td>
<td>28.0%</td>
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</tbody>
</table>
BACKLOG WEEKS

Backlog Weeks

Week 1 Week 2 Week 3 Week 4 Week 5 Week 6

Millwright
Electrical
Combined
Interrupts – Emergencies - Breakdowns

- Listed by Department, Machine, Craft
- By Priority E-1-2-3-4
- Tracked in Work Order Man-Hours

Emergency Man-hours

<table>
<thead>
<tr>
<th>Year</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
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<tr>
<td>Man-hours</td>
<td>37%</td>
<td>37%</td>
<td>25%</td>
<td>15%</td>
<td>10%</td>
<td>10%</td>
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</tbody>
</table>
Preventive Maintenance -

- PM - Inspections and Lubrication
- PdM - Infrared - Ultrasonic – Vibration Analysis
- Listed in % of Total Maintenance Man-Hours Available

Graph showing the percentage increase over years from 7% in 2006 to 29% in 2011.
Total Cost of Maintenance

- Total Cost of Work Order
- Tracked by Machine, Department, Production Line, or Area
- Supplies and Labor
- Contractor Costs
HOW DO YOU SELL YOUR PROPOSAL TO SENIOR MANAGEMENT?

➤ How do you manage upper management?

▪ To be successful you must

✓ Be better prepared than management
✓ Understand the topic with more detail
✓ Be totally prepared to explain all aspects of your proposal
✓ Have total faith in your data
✓ Demonstrate consequences if your proposal is not accepted
COMMUNICATION BASICS

Making Presentations

- Keys to success
  - Know your topic
  - Control your audience
  - Anticipate all possible questions!

- Tell them what you are going to tell them
- Tell them
- And then - Tell them what you told them
WHAT IS THE BOTTOM LINE?

Most of you are currently over staffed!

Why?
High Downtime & Low Quality
Higher Cost
Over Staffed

100% Reactive

Chaos

Low Downtime & High Quality
Lower Cost
Properly Staffed

80-90% Proactive

HPM

Where is Your Organization?
**WHAT IS THE BOTTOM LINE?**

Most of you are currently over staffed!

Why?

- High levels of reactive work
- Little or no discipline for the process
- Little or no accountability
- No organized approach for managing asset performance and reliability
Management is efficiency in climbing the ladder of success; leadership determines whether the ladder is leaning against the right wall.

Stephen Covey
QUESTIONS?

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