THE POWER OF CRITICAL OBSERVATIONS...FROM THE FIELD TO THE BOARDROOM

DOMINIC DIBARI

MANAGING DIRECTOR
MANAGEMENT CONSULTING
BLACK & VEATCH
The Global leader in building Critical Human Infrastructure™

- Founded in 1915
- Global workforce of more than 10,000
- Employee-owned
- $3.6 billion in annual revenues (2013)
- More than 110 offices worldwide
- Three Infrastructure Groups
  - Energy
  - Water
  - Telecom
- One Management Consulting Group
  - Finance & Markets
  - Technology

Completed projects in more than 100 countries on six continent...
DIFFERENTIATING VALUE PROPOSITION

Management consulting expertise backed by deep technical and engineering experience
### B&V: MANAGEMENT CONSULTING

<table>
<thead>
<tr>
<th>SOLUTION AREAS</th>
<th>FINANCE AND MARKETS</th>
<th>ASSET MANAGEMENT</th>
<th>SECURITY AND COMPLIANCE</th>
<th>OPERATIONAL TECHNOLOGIES</th>
<th>CUSTOMER OPERATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>VISION/PURPOSE</td>
<td>CONNECTING CAPITAL TO PROJECTS TO HELP OUR CLIENTS ACHIEVE THEIR TARGET RETURN ON INVESTMENT</td>
<td>MAXIMIZING ASSET VALUE ACROSS THE FULL LIFE-CYCLE</td>
<td>HELPING CLIENTS UNDERSTAND INDUSTRY BEST PRACTICES AND COMPLIANCE TRENDS SUPPORTING REGULATIONS</td>
<td>USING TECHNOLOGY TO IMPROVE OPERATIONS FOR OUR CLIENTS’ ASSETS AND WORKFORCE</td>
<td>IMPROVING OUR CLIENTS’ INTERACTIONS WITH THEIR CUSTOMERS, HELPING THEM OPERATE MORE EFFECTIVELY</td>
</tr>
</tbody>
</table>
| CORE SERVICES  | • STRATEGIC CONSULTING SERVICES  
• INDEPENDENT ENGINEERING AND TRANSACTION ADVICE  
• WATER CONSULTING  
• GAS AND ELECTRIC RESOURCE PLANNING  
• ENERGY MARKET PERSPECTIVE (EMP)  
• RATES AND REGULATORY | • OPERATIONAL EXCELLENCE  
• ASSESSMENT AND BEST PRACTICE IMPLEMENTATION  
• ROADMAP DEVELOPMENT AND GOVERNANCE  
• BUDGET OPTIMIZATION  
• SOLUTION DESIGN, ARCHITECTURE, IMPLEMENTATION AND OPERATION | • INFORMATION AND OPERATIONAL SECURITY PROGRAM MANAGEMENT  
• OT / IT COMPLIANCE AND RISK MANAGEMENT  
• INFRASTRUCTURE, APPLICATION AND DATA PROTECTION  
• REGULATORY ADVISORY GUIDANCE AND SUPPORT | • SOLUTION DESIGN AND ARCHITECTURE  
• TECHNOLOGY VENDOR SELECTION  
• PROGRAM MANAGEMENT  
• IMPLEMENTATION AND OPERATION  
• SYSTEM OPTIMIZATION AND UPGRADE | • SYSTEMS DESIGN AND ARCHITECTURE  
• CUSTOMER OPERATIONS PROCESS DESIGN  
• SYSTEMS DESIGN AND IMPLEMENTATION  
• CUSTOMER SEGMENTATION PROGRAM DESIGN  
• DIGITAL STRATEGY FOR CUSTOMER ENGAGEMENT, RETENTION AND SERVICES |

### BROAD RANGE OF SERVICES....
## BLACK & VEATCH’S 2014 STRATEGIC DIRECTIONS SURVEY RESULTS

### TOP 10 INDUSTRY ISSUES BY SECTOR

<table>
<thead>
<tr>
<th>ELECTRIC</th>
<th>NATURAL GAS</th>
<th>WATER</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Reliability</td>
<td>1. Safety</td>
<td>1. Aging infrastructure</td>
</tr>
<tr>
<td>2. Environmental regulation</td>
<td>2. Gas supply, reliability</td>
<td>2. Availability of capital</td>
</tr>
<tr>
<td>5. Natural gas prices</td>
<td>5. Rate &amp; regulatory certainty</td>
<td>5. Managing operational costs</td>
</tr>
</tbody>
</table>

What is the commonality?... CHANGE!
CHANGE; THE STAKES ....

• Only 41% of all major change initiatives fully meet their objectives*

• Most fail for one of seven very predictable reasons:
  • People leading change think announcing change is the same as implementing it
  • Those asked to change are not involved in planning it
  • No urgent or compelling reason to change
  • Systems and other initiatives aren’t aligned with the change
  • Progress is not measured
  • People are not held accountable for implementing the change
  • People leading the change fail to respect the power of culture to kill the change

*IBM Making Change Work, 2008

Engaged leadership is required ...
“People do not so much resist change as they resist being changed.” - Anonymous
“PEOPLE’S MINDS ARE CHANGED THROUGH OBSERVATION AND NOT THROUGH ARGUMENT”

Observe for:
- Engagement
- Alignment
- Obstacles
- Why? x5

Operational Excellence: Getting the most out of your existing assets...
OBSERVATIONS ALLOW YOU TO KNOW ...

- People are operating safely
- Standards are being followed
- Challenges affecting implementation
- How work really gets done
- Where the gaps are
- What is understood... or not
- What your people need
- What your people are thinking

Questions your boss will ask .... quality responses rooted in effective field observations
EFFECTIVE OBSERVATION PROGRAM

• Database
• Measure and trend
  • Participation
  • Gaps
  • Criticality
• Analyze gaps; understand value
• Engage for solutions
• Implement corrective actions / Coach
• Observe again

However, don’t fall in love with tools...
WHAT DOES IT LOOK LIKE?

- Dedicated time in the field... contact sport
  - Not like football... more like golf
  - Frequent, substantial

- Training

- Prepared
  - know the standard
  - know the “why”

- Seek to understand

- Provide frank feedback; be positive, have fun

- Documentation

Easy... right? More Specifics....
PHASE I: SET A NEW COURSE - TRAINING

• Behavioral Change:
  • Conducting and documenting observations
  • Transparency

• Typical Comments
  • “No time for this…” “I do this already…”
  • Rejection/resistance by many

• Results
  • Increase in observation numbers... just data
  • But, **effective** corrective actions limited

Still suffering consequences of failure ...
PHASE II – STAY THE COURSE ... COACHING

• Behavioral Change:
  • Increase criticality; action-impact statements
  • More near-miss/hit reporting

• Typical Comments
  • “I need to find something wrong”
  • “They are requiring me to mark you poorly”

• Results
  • Data turns into information... understanding what stands in the way.
  • Some effective corrective actions

Start seeing some improvement ....
PHASE III – SEE THE BENEFITS ... COACHING

• Behavioral Change:
  • Assumption of “Noble Intent”
  • Collaborative, engaging environment

• Typical Comments
  • “What are my gaps?”
  • “Thank you!”

• Results
  • Information turns into wisdom
  • *Effective corrective actions prior to event*

Avoiding consequence of failure....
Building a world of difference.

Together

Dominic DiBari, Managing Director
Management Consulting
DiBariD@BV.com
724.333.0426

BLACK & VEATCH