BUILDING A WORLD OF DIFFERENCE

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

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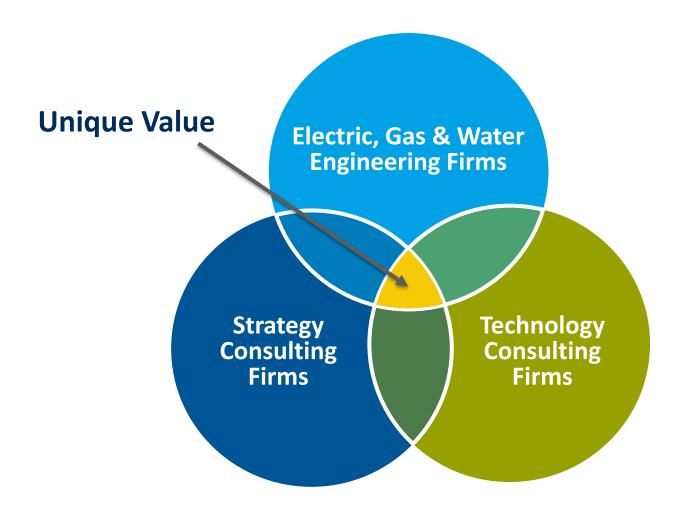
BLACK & VEATCH The Global leader in building Critical Human Infrastructure **

- 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

SOLUTION AREAS	FINANCE AND MARKETS	ASSET MANAGEMENT	SECURITY AND COMPLIANCE	OPERATIONAL TECHNOLOGIES	CUSTOMER OPERATIONS
VISION/PURPOSE	CONNECTING CAPITAL TO PROJECTS TO HELP OUR CLIENTS ACHIEVE THEIR TARGET RETURN ON INVESTMENT	MAXIMIZING ASSET VALUE ACROSS THE FULL LIFE-CYCLE	HELPING CLIENTS UNDERSTAND INDUSTRY BEST PRACTICES AND COMPLIANCE TRENDS SUPPORTING REGULATIONS	USING TECHNOLOGY TO IMPROVE OPERATIONS FOR OUR CLIENTS' ASSETS AND WORKFORCE	IMPROVING OUR CLIENTS' INTERACTIONS WITH THEIR CUSTOMERS, HELPING THEM OPERATE MORE EFFECTIVELY
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

ELECTRIC

- 1. Reliability
- 2. Environmental regulation
- 3. Economic regulation
- 4. Cybersecurity
- 5. Natural gas prices
- 6. Long-term investment
- **7.** Aging infrastructure
- 8. Physical security
- 9. Gas supply reliability
- **10.** Fuel policy

NATURAL GAS

- 1. Safety
- 2. Gas supply, reliability
- 3. Economic growth
- 4. Environmental regulation
- 5. Rate & regulatory certainty
- **6.** Aging Infrastructure
- 7. Capital access and cost
- 8. Physical security
- 9. Gas price stability
- **10.** Cybersecurity

WATER

- 1. Aging infrastructure
- 2. Availability of capital
- 3. Managing capital costs
- 4. Capital improvements vs. rate requirements
- 5. Managing operational costs
- 6. Increasing regulation
- 7. Aging workforce
- 8. Information technology
- 9. Treatment technology
- **10.** Recruiting specialized workforce



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

CHANGE MANAGEMENT

Introduction of change

Emotional Reaction

Denial of Changes

Placing Blame for Changes

Seeking Justice to Reverse Change

Tired of Resisting, Give in to Change

Consider Change Thoughtfully

Gain Knowledge and Awareness

•Introduce the Changes

- Encourage Discussion
- Communicate Information
- Check for Acceptance
- Summarize and Query

Acceptance of change

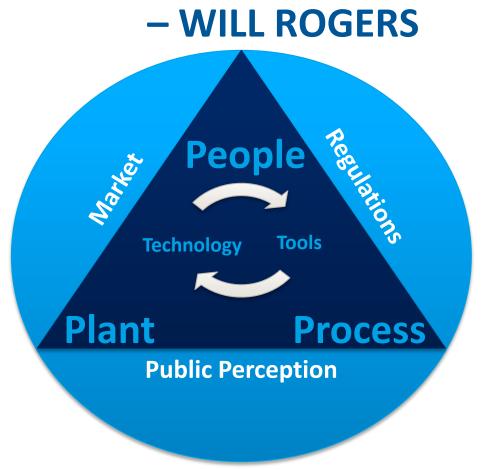
"People do not so much resist change as they resist being changed." -Anonymous



"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



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



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

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

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

Building a world of difference. Together

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