Closing the “Skills Gap:”

Innovative Talent Management Solutions For a Changing Workforce

by Dr. David DeLong

The MFG Meeting 2014
Arizona Biltmore
Phoenix, AZ
March 7, 2014

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Agenda

• How the Skills Gap Creates a “Profits Gap”
• Global Forces Shaping Your Talent Pool
• Four Tools For Tackling Today’s Toughest Talent Problems
• Five Keys to Turning the Skills Gap into a Competitive Advantage
Characteristics of MFG 2014 Participants

- Production runners, tool makers, & those who build, sell & service machines used in precision manufacturing.
- Many have been addressing “skills gap” over a decade.
- Do you think you’ve “got skills gap licked,” or that “it’s already too late,” and you’d much rather be...
- Some trying to address it alone & others in sector partnerships.
- Geographic location matters a lot in terms of options.
- What differentiates you from foreign competition is your employees’ skill sets.

Six Drivers Shaping the Skills Gap

- Lack of Pipeline to Train New Workers
- Cherry Picking Talent
- Increased Skill Levels to Work With New Technology
- An Aging Workforce
- Lack of Young Talent Interest
- Millennials Learn Differently
Other Industries Also Worry About Critical Skills Shortages


Changing Composition of the U.S. Workforce: 2008-2018

Source: U.S. Bureau of Labor Statistics
Potential Strategic Impacts of **Changing Workforce**

- Workforce Changes
  - Retirements
  - Mid-career turnover
  - Skill shortages, etc.

**Capability Loss**
- Ability to Innovate Threatened
- Less Capacity for Growth
- Less Efficiency/Increased Costs
- Increased Risk of Errors/Accidents

**Performance Goals**

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**How Does Skills Gap Hurt Profits?**

- TI Radar Equipment Line Shut Down
- “Go-To” Die Maker Passes Away Suddenly
- Manufacturing Software Engineer
- Press Operator Metal Fab Shop, 69, $500K in Parts
- What’s Your Story?
Integrating the 3Rs
Need Integrated Solution

Retirements

future Workforce & Leadership Capabilities

Retaining Development of Mid-Career Employees

Recruiting Talent

Is Your Organization Pursuing an Integrated Approach to Workforce Planning & Closing the Skills Gap?

Four Practical Tools
For Attacking Today’s Toughest Talent Problems
Talent Management “Lifecycle”

#1: Identify Talent-Related Risks
8 Talent Problems: That Can Kill Your Profits

• NO Hires
• Bad Hires
• Unproductive New Hires – Poor Onboarding
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- Unwanted Turnover

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- Poor Performance Management
- Lack of Leadership Development
- Loss of Critical Knowledge

Diagnosing Gaps: Talent Problems vs. Progress

<table>
<thead>
<tr>
<th>Talent Problem</th>
<th>How Important is This Problem to Our Organization Today? 1-No Problem, 7 Critical to Success</th>
<th>How Well Are We Doing On Addressing This Threat? 1-Very Poorly, 7-Well Under Control</th>
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<tbody>
<tr>
<td>1. Bad Hires</td>
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<td>2. Unproductive New Hires–Poor Onboarding</td>
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<td>5. Poor Performance Management</td>
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<td>7. Loss of Critical Knowledge</td>
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Exercise

1. How would you evaluate seriousness of these 7 problem areas in your organization? (On a scale of 1- no problem to 7-very serious problem)

2. Compare & discuss results with rest of your team. What are the similarities & differences?

3. Identify top 3 areas where the most work is needed?

#2: Prioritize Specific Capabilities at Risk
Knowledge Silo Matrix

Silos are areas of expertise such as:
- Tools
- Platforms
- Products
- Customers
- Processes
- Regulations
- History
- Physical Locs.
- Job Functions

Reduce the Cost of Bad Hires

- **Focus on Hard Skills:**
  Scientific Timing Model
  Assesses Candidate’s Hands-On Capabilities
  For Jobs Requiring Mechanical, Electrical
  PLC, & CNC Skills

- **Focus on Soft Skills:**
  Teamability Instrument – Evaluate Candidate’s Ability as “Team Player”
#3. Selection-Evaluation Tools to Assess “Hard” Manufacturing Skills

- Standard Timing Model – Assesses Mechanical Orientation for Machine Operators, Mechanics, Technicians
- Electrical Testing Device – Screens for Industrial Electrician Positions
- PLC Testing Device for Maintenance Personnel & Technicians Working on Automated Manufacturing Equipment

Packaging Firm Avoids Costly Bad Hires

- Packaging Plant, 400 employees; 50% retiring in 5 years
- Replacing More Than Half Operators – Hire right!
- Uses Scientific Mgt Timing Model to Test Candidates
- Tests Hand Eye Coordination, Spatial Perception, Problem Solving Skills, Deductive Reasoning & Mechanical Skills
- Evaluation Rejects 22% of Candidates Who Would Be Hired
- Estimate ROI on Mechanical Assessment Tool in Eliminating Bad Hires is $300K Annually.
#4. Good Hires/Good Team Players

- Gabriel Institute Online Tool Assesses How Candidates Will Perform on Team
- **Multinational Manufacturer, Repeated Failed Hires in Sr Sales Mgt Role**
- In Broader Performance Improvement Program, Managers Used Teamability Instrument
- **Used Teamability Reports to Identify Best Internal Candidate**
- Woman in Mid-Mgt Purchasing Job, Little Sales Experience
- **Sales Output & Efficiency Soared; Promoted to COO**
- Now Use **Teamability for All Hiring & Promotion Decisions**

More info at: [https://www.thegabrielinstitute.com/](https://www.thegabrielinstitute.com/)

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**5 Keys to Turning the Skills Gap Into a Competitive Advantage**
#1: View Workforce Development as a Strategic Driver

- Solving the skills gap is a matter of survival
- 3 types of knowledge: critical experience, applying new technologies, “adaptive” knowledge
- Choose right training approach: NIMS vs NTMA
- Training not just for plant operations; need leadership & business development skills
- Continually evaluate current vs future skills needed

#2: Rebuilding Labor Pipeline is a Journey With Multiple Paths

- Maine & Indiana high school apprentice programs
- M-Powered, power of co-optition
- Rebuilding pipeline is a fluid process, new CC president, new technologies change skills needs
Got Milk? Beware of Faulty Solutions

• “Got Milk” Campaign, 18 yrs, daily consumption drops 38%, many variables: more options, price higher, related products decline in use

• Make sure your workforce investments are producing viable recruits

…Still got no interest in precision manufacturing

#3: Closing the Skills Gap Means Learning Faster Than Competition

• To accelerate knowledge transfer, bound the problem.

• Maximize value of older workers: Retiring 67-year-old focuses on teaching

• Recognize different types of mentoring needed, e.g., high school, college students, employees

• Invest in mentoring skills: 
  Teach What You Know: A Practical Leader’s Guide to Knowledge Transfer by Steve Trautman

• What does good mentoring look like in your company?
#4: Make Generational Differences Part of the Solution!

- Don’t make this World War 3!!
- SolidWorks story
- Look for “bright spots” in cross-generational training
- Use technology to build bridges between generations

Managing Generational Differences Can Improve Retention

- Differentiate between developmental behaviors and generation’s unique traits
- Don’t confuse different learning styles for gen gap
- What Gen-Ys care about:
  - “Am I learning a lot?”
  - “Does my boss really appreciate me?”
  - “Is this place a good social & cultural fit for me?”
- Help employees build strong personal relationships
#5: Create & Sustain Sense of Urgency

- Skills Gap is a change management problem
- Continually focus company on costs of lost & underdeveloped capabilities. Link to your strategy!
- Demographics are NOT in your favor.
- No one will fix the Skills Gap for you.
- Beware of early successes: overconfidence can kill your business!
- Question: Where were you July 20, 1969?

Conclusion: Making Skills Gap Solutions Pay Off

- Keep Macro Talent Picture in Mind – Changing Demographics, New Skills, Critical Shortages
- Make It Clear Who “Owns” the Problem
- Clearly Link Skill Development Initiatives to Business Strategy
- Look for Opportunities to Collaborate. Don’t Go It Alone.
- Explore Tools For Reducing Bad Hires
- Identify “Bright Spots” in Knowledge Transfer