Building on Wisdom

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Points to Ponder

• “The only true wisdom is in knowing you know nothing.” Socrates
• “Every man is a damn fool for at least 5 minutes every day. Wisdom consists in not exceeding the limit.” Elbert Hubbard
• Are we losing wisdom in the baking industry?

Summary of Presentation

• Impact of experience/wisdom on business results
• Strategies to capture experience/wisdom within the organization
• Ideas to convert this knowledge into cost-effective training programs
ABA/ASB Survey: 2015 to 2025

High or severe shortage of skilled employees:
- Maintenance/Engineering 78%- 78%
- Machine operators 40%- 61%
- Production workers 18%- 37%
- Salaried Maint/Eng. 59%- 62%
- Salaried Production 22%- 32%
- Scientists (QA/R&D) 21%- 38%
- Workforce issues number 3 on ABA list-2016

Impact on Business Results

- Costs of turnover
- Costs of overtime
- Increasing concerns of “bus factor”
- Focus limited to “urgent”, neglect “important”
- Concerns with asset care
- Increased risks
- Need to set up metrics and benchmark
Cathay Pacific Decision Matrix

<table>
<thead>
<tr>
<th>Benefit Criteria</th>
<th>Cost Criteria</th>
<th>Other criteria</th>
</tr>
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<tbody>
<tr>
<td>Increased revenues</td>
<td>Hard dollar costs</td>
<td>Risk</td>
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<td>Staff relations</td>
<td>Resource consumption</td>
<td>Complexity</td>
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<td>Productivity</td>
<td>Management time</td>
<td>Political factors</td>
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<td>Cost savings</td>
<td>Business readiness</td>
<td>Time in queue</td>
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<td>Crisis management</td>
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<td>Service support</td>
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Case Study- VW Diesel engines

- “Defeat devices” installed to thwart emissions tests
- Affected 550,000 vehicles sold in US (2009-2016)
- Problem discovered by 3rd party- ICCT
- Results reported to EPA and CARB July 2015
- VW admits wrongdoing September 2015
- Value of company drops over 20%
- Cost of settlement $ 14.7 billion
Methods of Learning Wisdom - Confucius

- By reflection
- By imitation
- By experience

Which is most noble?
Which is most bitter?

Strategies to Capture Experience/Wisdom

- Understand/manage barriers
- Consider company culture/subculture
- Invest in KM/IM systems
- Recognition and retention
- Forums for sharing/collaboration
- Create incentives
Barriers to Learning

• Dunning/Kruger effect: Unskilled persons over-estimate their competence. Highly skilled persons tend to under-estimate their competence
• Study inspired by case of bank robber with lemon juice “disguise”
• Lack of skill only recognized AFTER exposure to training

Barriers to Effective Knowledge-sharing

• Ignorance- Who has the knowledge?
• Lack of relationships- input is not sought nor offered
• Slow dissemination rate (average 27 months)*
• Ability to absorb and adopt/ratify

*Wall Street Journal
Company Culture

• Defined as “Values and behaviors that are reinforced by repetition.”
• 4 types of culture (Cameron/Quinn 1999):
  1. Clan (friendly/family)- internal focus
  2. Adhocracy (flexibility)- external focus
  3. Market (leader drives)- external focus
  4. Hierarchy (leader coordinates)- internal focus

Healthy Culture

• Appreciation for diversity
• Respect and fair treatment for all
• Pride and enthusiasm in work
• Strong communications (both up and down org.)
• Strong sense of direction and purpose
• Low turnover
• Investment in learning and knowledge
Knowledge Management (KM) and Ignorance Management (IM)
systems

- Bayh-Dole Act (1978): Management of inventions by non-profit orgs from federally funded research
- Identify where knowledge resides- people, tools, tasks, subnetworks
- Motivation/incentive to share
- Design sharing mechanism to facilitate transfer
- Execute and evaluate transfer plan
- Practices include mentorship, guided experience, simulation, experimentation, work shadowing, communities of practice, etc.

ROI for KM/IM systems

- ID business goals- reduction of pain, lowering cost, improving quality, etc.
- Find business opportunities- recycle, republish, relocate, assure relevance
- ID specific applications- what/how/when/who/why of access
- Measure savings from applications
- Calculate ROI from estimated costs
- Influenced by degree of buy-in from leaders
Conversion to Training Programs

• Identify needed areas of knowledge and skill by audience- use this to develop topic/theme list (course syllabus)
• Identify contexts of knowledge/skill applications- use this to develop learning activities
• Use experienced and skilled trainer: tight design, build in social interactions, evaluation of learning
• Build in follow-up loops and refresher training

Example- Bread Production K&S

• Specific measures of quality
• Production standards- fixed and flexible
• Handling of raw materials
• Production rate
• How to operate machinery
• How to clean machinery
• How to observe GMPs and safe work practices
Example- Bread Production

• Types of quality problems/possible root causes
• How/why authorized persons adjust flexible standards
• Important raw material specifications- why they could change
• Why might the production rate be changed?
• What types of temporary repairs might we make? Under what conditions are there injury risks?
• What specific tools and practices are needed to work safely and according to GMPs?

Training Program Design

• Where to build in automaticity?
• Application of Instructional Theory
• Proper balance of lecture, discussion, guided practice, coaching, evaluation
• Focused on goals
• Remedial options
• Participant involvement and application
• Process, not just an event!
What did you learn?

• There is great financial risk and urgency in the industry from the loss of talent
• Strategies to capture knowledge before it leaves the company
• How to convert knowledge gathering into training programs

Thanks!
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