Team Learning Strategies for Enterprise Transformation: The Case of Vicarious Learning

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3 Team Learning Strategies

- Learning by doing
  - Based on the process of trial and error

- “Learning before doing”
  - Applying past experiences to the task at hand

- Vicarious learning
  - Applying the past experiences of others to the task at hand
Vicarious Team Learning

- **Background: findings from pharmaceuticals**
  - Vicarious learning is a distinct team level process
  - Vicarious learning is positively associated with performance
  - Management can help teams to learn vicariously

- **Research questions**
  1. Is vicarious learning a relevant concept in LAI firms?
  2. What are the performance effects of vicarious learning?
  3. How can LAI firms enable vicarious learning in teams?
Data

- 8 aerospace firms
- 14 interviews
- 16 team member questionnaires
Question 1: Is Vicarious Learning a Relevant Concept in LAI Firms?

• Yes…
  • Factor analysis of questionnaire responses (N=16) confirm discriminant validity among learning strategies

• …but different compared to pharmaceuticals
  • Vicarious learning in LAI firms is less about technical knowledge, more about process knowledge
  • Reason for not learning vicariously: a question of motivation and ability, not only ability
    • Motivation both positive (no need, leading edge) and negative (Not-Invented-Here)
  • Two kinds of vicarious learning:
    • Radical (“We don’t even know where to start!”)
    • Incremental (“How can we save some time?”)
Question 1 (Cont.): Is Vicarious Learning a Relevant Concept in LAI Firms?

• Examples
  • Checklists and templates
    • Questions to ask
    • “How to”
    • Things to keep in mind
  • Expert finders
    • Proprietary software and outsourced, simple and complex
  • Designated experts
    • “Wise men”, “black belts” (six sigma), “fresh eyes”, matched pairs, “master expert”
• Systems
  • Communities of practice
  • “Book of knowledge”
  • Pilot display, “metrics cockpit”
  • Mentor programs to transfer experiences to new members
  • Failure analysis, post-mortem
Question 2: What Are The Performance Effects?

- Why might vicarious learning activities have positive performance effects?
  - Expand learning opportunities to detect and correct errors
  - Help avoid repetition of mistakes—small and large
  - Save time
  - Lead to new ideas and innovation!
Question 3: How Can LAI Firms Enable Vicarious Learning In Teams

- **Challenges**
  - Knowing what to look for
  - Knowing who to turn to
  - Finding the time to venture outside the team
  - “Not-Invented-Here”
  - Lack of the “absorptive capacity” needed to find useful analogies
  - Deciding what to standardize and what not to standardize
    - Innovation vs. continuous improvement
    - “Invent only what must be invented—reuse and improve the rest” easier said than done
  - Unwillingness to standardize (“this is an art”)
  - “Rules-in-use” are difficult to copy
Question 3 (Cont.): How Can LAI Firms Enable Vicarious Learning In Teams

- **Areas where management can be helpful**
  - **Processes**
    - Build norms encouraging external help-seeking
  - **Structures**
    - Use multi-tier team structures
    - Are reporting structures aligned with taking advantage of vicarious learning?
    - Are incentives aligned with vicarious learning?
  - **Information systems**
    - Invest in expert finding, know-how databases with templates, checklists, etc.
  - **Culture!**
    - Look for telltale signs of Not-Invented-Here, and fight it
    - Recognize entrepreneurial efforts to find external learning opportunities
    - Highlight success stories
Conclusions: Vicarious Learning In The LAI Context...

• ...is relevant

• ...can improve quality and efficiency

• ...is difficult

• ...can be encouraged by proactive management