**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