The Problem

- The productivity of highly skilled people is key to both surviving and building competitive advantage.
- As skills become more globalized – how you use your experts will become just as important as the expertise itself.
- Knowledge work has proven remarkably resistant to process improvement.
- So what can you do?
Why lean in knowledge work?

- **Lean production**
  - Perhaps the most important invention in operations since the Model T began rolling off the production line

- **But, success with the implementation of lean has come in contexts of repetitive work**
  - When success comes at all

- **Knowledge work isn’t like that.**
  - It involves the manipulation of information
  - It requires creativity, customization and deep intelligence
  - It is uncertain and dynamic, with invisible processes

- **Nevertheless, perhaps lean principles can offer a way forward…**
  - Have been conducting a multi-year study of lean in IT, financial, engineering, and legal services
What is lean?

- A sophisticated approach to builds a platform for ongoing improvement
  - Rather than periodic quality campaigns or episodic slashing of costs.

- Characteristics of a lean approach:
  - An ongoing journey that can improve performance on multiple dimensions, not just cost.
  - Not a step change: day-by-day it builds a stronger, more competitive organization.
  - Not just a set of tools: the traditional ‘bag-of-tricks’ (such as kanban cards and andon cords) don’t really give us the solution.
  - It is the underlying principles that matter, and it is from these principles that we can bring compelling advantages to knowledge work.
1. Continually Root Out All Waste

Knowledge workers tend to grossly underestimate the amount of inefficiency that could be eradicated from their jobs

- Teach everyone to ask “the five whys”
  - Learn how to see waste
- Encourage everyone to look for small forms of waste, not just big ones
  - When the low hanging fruit is gone will you keep striving to improve?
- Periodically review the structure and content of every job
  - Work is changing, are you changing in response?
2. Strive to Make Tacit Knowledge Explicit

- Look for repeatable parts of the process and codify them
  - Almost all processes have more commonality than meets the eye
- Don’t try to specify everything initially, if ever
  - It is okay to leave some things for later
- Use data to get buy-in
  - Show individuals what works (and what doesn’t)
- Keep studying the work that has been designated as tacit
  - Situations change as do understandings
3. Specify How Workers Should Communicate

- Define who should be communicating, how often, and what
  - Knowledge workers need to understand who will use their output

- Use the specified approach for communication to generate a shared understanding
  - Without a shared understanding even basic facts will get garbled

- Resolve disagreements with facts, not opinions
  - Emotions and irrationality will distort the decision-making process, facts help overcome this problem
4. Use the Scientific Method to Solve Problems Quickly

- If a problem arises, the person who created it should ideally fix it
  - She likely knows the most about it and clearly needs the opportunity to learn more

- Problems should be solved where they occur
  - Location provides valuable contextual information

- Solve problems as soon as possible after they emerge
  - The fresher the information about a problem, the less subject it is to distortion, and so it is easier to solve
5. Recognize That a Lean System is a Work in Progress

- Start small
  - Toyota wasn’t built in a day
- Codify the lessons learned
  - Don’t keep reinventing the wheel
- Keep looking for new ways to work
  - Don’t declare, “Mission Accomplished”
- Remember that the lean approach is not useful everywhere
  - Some inefficiency may be a good thing
6. Have Leaders Blaze the Trail

- Project managers and other mid-level leaders must train and motivate their teams to adopt lean practices
  - Lean systems don’t create themselves
- Senior leaders must be long-term champions
  - Many organizations suffer from process improvementitis
  - “If I have ever made any valuable discoveries, it has been owing to patience rather than to any other talent.”
    - Sir Isaac Newton