

# Planning Your Agile Initiative

Rick Brenner  
Chaco Canyon Consulting  
[www.ChacoCanyon.com](http://www.ChacoCanyon.com)  
[rbrenner@ChacoCanyon.com](mailto:rbrenner@ChacoCanyon.com)

Nancy Van Schooenderwoert  
Lean-Agile Partners  
[www.LeanAgilePartners.com](http://www.LeanAgilePartners.com)  
[NancyV@LeanAgilePartners.com](mailto:NancyV@LeanAgilePartners.com)

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# About Rick Brenner



Rick Brenner is principal of Chaco Canyon Consulting. He works with people in dynamic problem-solving organizations who make complex products or deliver sophisticated services that need state-of-the-art teamwork, and with organizations that achieve high performance by building stronger relationships among their people. In his 20 years as a software developer, software development manager, entrepreneur, consultant and coach he has developed valuable insights into the interactions between people in a problem-solving environment, and between people and the media in which they work. He coaches managers at all levels, emphasizing development of interpersonal skills, especially in fluid, high-stress

contexts. Mr. Brenner has held positions at Symbolics, Inc., and at Draper Laboratory, both of Cambridge, Massachusetts. At Symbolics, he was responsible for development of all products based on Macsyma, a large and very sophisticated computer algebra program. At Draper Laboratory, he was a principal investigator in a DARPA program, the Evolutionary Design of Complex Software, where he conducted research into advanced concepts for real-time software development environments based on dynamic object-oriented programming languages. Since 1993, he has taught a course in business modeling at the Harvard University Extension School. Mr. Brenner holds a Masters Degree in Electrical Engineering from MIT. He trained in Satir methods under Gerald M. Weinberg and Jean McLendon, attending and staffing many of their workshops over a period of seven years. His interests focus on improving personal and organizational effectiveness, especially in abnormal situations, as in the case of continuous change, in technical emergencies, and high-pressure project situations. He writes and edits a free email newsletter, Point Lookout, and has written a number of essays on these subjects, available at his Web site, <http://www.ChacoCanyon.com/>.

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## About Nancy Van Schooenderwoert

Nancy Van Schooenderwoert is principal at Lean-Agile Partners. Her expertise is in Agile Enterprise coaching – everything from launching new agile teams to advising executives on how to take Agile and Lean principles far beyond software development in their drive to deliver more customer value faster. Nancy pioneered agile practices for embedded software development beginning in 1998. Her background in electronics and software development for avionics, factory automation, medical, and defense systems brings a unique perspective to her coaching practice. She has led agile change in life-critical, highly regulated applications and industries (aerospace, medical, banking, and financial services), and successfully coached others in the art of agile leadership, in both the technical and management spheres.



Lean-Agile Partners demonstrates ways for their customers to adopt agile practices in their organizations. They “teach their customers to fish” by training customer staff to coach agile teams. This is the strongest and most cost-effective way to scale lean-agile change in an organization. Working with both their customers’ management and technical teams, Lean-Agile Partners helps companies design, plan, and implement their Agile adoption programs. Customers get the benefit of Lean-Agile Partners’ experience while staying in control of their Agile transformation.

She has published a number of articles and papers on these topics, available free of charge at <http://www.leanagilepartners.com/publications.html>

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# Core message

- Results of adoption of agile methods are mixed
  - The “Pilot/Scale-Up” approach doesn’t work very well
  - Adoption is fundamentally a change management problem
  - Agile Adoption can fail even though teams are successful
- Distinguish development projects (DPs) from the adoption project (AP)
- Use project management methods for both the DPs and the AP
- Relationships are corporate assets
- Agile methods came from software, but the problem is bigger than that

To adopt agile methods successfully, think “system”

# Roadmap

## > The Issues

- Managing the Adoption Project
- Selecting and Managing Development Projects
- Risk Management for the Adoption Project
- The Long View

# The issues

- Unsatisfying success rate for agile adoption efforts
- Difficulty fitting agile teams into non-agile organizations
- Senior managers are learning false ‘lessons’ from agile adoption failures:
  - Agile adoption success can’t be reliably repeated
  - Autonomy of agile teams makes them unmanageable
  - Planning beyond this iteration is impossible
  - Agile teams just move incomplete work to next iteration

# The Mistake Museum: Frequently made mistakes (1)

- Failing to appreciate the importance of politics
  - Senior management advocates not senior enough
  - Starting the AP before gaining senior management advocates
  - Continuing the AP after losing support of senior management
- Using agile methods to run the Adoption Project
- Installing internal credentialing

# The Mistake Museum: Frequently made mistakes (2)

- Mass adoption after a few successful pilots
- Adoption Project not run consciously as a project
- No selection criteria for DPs
- Choosing a DP with hostile team members
- Willfully violating or waiving DP selection criteria
- Not revising DP selection criteria based on lessons learned
- Failing to recognize the team as smallest schedulable unit

# Conventional non-wisdom

- Standard deviation of budget or schedule should be zero
- Projects can adopt agile methods without changing the organization
- Agile methods unsuitable for safety-critical projects
- Agile methods unsuitable for hard-deadline projects
- The “sheep dip” method of training works fine
- Agile teams can routinely proceed with some stories incomplete
- Certification training makes teams agile
- Agile process makes incompetent people competent
- Teams are agile if they say they are

It ain't what we don't know that gives us trouble,  
it's what we know that ain't so – Josh Billings

# Roadmap

- The Issues
- > **Managing the Adoption Project**
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# General guidelines For the Adoption Project

- Recognize that
  - The entire organization will have to make some changes
  - Not much will be left untouched
  - Job descriptions will have to be revised
- Senior management commitment is essential
  - Don't leave home without it
  - When you lose it, fold your tent
- Exploit what is already known about:
  - Change management
  - Project management
- Use project management to manage the Adoption Project
- Use either:
  - External credentialing
  - Informal credentialing

Handle organizational change in the AP, not the DPs

# Manage agile adoption as a project

- Mission: Incrementally change the organization to make it a fit habitat for agile projects
- AP is a project in its own right
  - It is actually a change management project
  - It is the customer of the DPs
- It needs everything a project needs:
  - Sponsor, champion
  - Pan-organizational team members
  - Budget, schedule
  - Project plan: WBS, risk management, DP selection criteria ...
- AP is also the customer of
  - Modifications to the facility, policies and procedures
  - Special equipment acquisition

# Typical milestones in the Adoption Project plan

- AP team members trained
- All necessary training is in place for the next DP
  - Sponsor, DP team, their managers
  - People in any functions they touch
- Prior to selecting next DP, we have reviewed DP selection process
- Completed first DP
- Completed first simultaneous DPs
- Completed first DPs with multi-team structure (Agile-ese for subteams)

# Typical budget items of the Adoption Project

- Training
  - The AP team
  - DP teams
  - Functional elements that touch DPs
- Coaching: AP, DPs, functional elements
- Equipment, software, facilities
- Collection and analysis of metrics
- Lessons Learned sessions and process
- Process and procedure changes in functional elements (HR, purchasing, ...)

# Testing patterns will change

- In conventional software development:
  - Deliverables arrive for testing less frequently
  - Deliverables have larger untested components
  - Little testing is performed during development
- In agile development processes:
  - Developers do more testing as they go
  - Delivery frequency is high
  - Untested components tend to be smaller
- Consequences:
  - Test facility must adapt its process
  - Test facility probably needs to change its hardware
  - Testing staff might be more integrated into DPs

# Retrospectives are essential

- Retrospectives are organizational learning assets
- Effective means of surfacing Truth
- Develop internal retrospective capability
  - Not specific to AP
  - Useful organization-wide
- When to conduct retrospectives
  - As part of each DP
  - After resolution of any crisis in AP or any DP
  - Upon completion of each AP task
  - Upon AP completion

As scarce as truth is, the supply has always been in excess of the demand. – Josh Billings

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# Overview of criteria for selecting Development Projects

- Selection criteria depend on:
  - Where you are in the adoption project
  - What speed bumps you've hit so far
  - What you want to learn from the next DP
- Examples:
  - First DP: no subteams
  - Early DPs
    - No interaction with other development
    - No outside vendors
  - Later: choose DPs that must interact to learn how to run them

# General selection criteria for Development Projects

- A willing, paying customer
- A willing business sponsor
- Dedicated, co-located team
- Team can fully test deliverables
- Customer willing and able to accept frequent releases
- Sequence of deliverables negotiable

# Special selection criteria For early Development Projects

- Early DPs are laboratories for the AP
  - Exercise the organization's ability to change
  - Learn how the new roles work
  - Find bottlenecks in workflow
  - Get customers used to interaction
  - Discover problems while they are small
- Impose new demands on only a few organizational functions
- Those functions cooperate: training, reporting
- Minimal external dependencies
- Stand-alone: no interaction with other projects

# Managing Development Projects Within the Adoption Project

- The AP is a *customer* of the DP
  - You can't run DPs as if they were embedded in the agile organization, because they aren't yet
  - DPs must be instrumented to collect data for the AP
  - Instrumentation needs budgetary support
  - Such support is a non-recurring expense charged to the AP
- Performance standards for DPs
  - Budget, schedule
  - Customer satisfaction (including the AP)
- DP not a success unless the AP learns something

# Metrics for Development Projects

- Defect severity, rates and aging
- Production rate (Agile-ese “Velocity”)
- Budget performance
- Successful staff raids
- Unsuccessful staff raids
- Process
  - Issues identified in retrospectives
  - Issues identified elsewhere
  - Issue aging before resolution

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# Adoption Project risk management

- All the usual risks of any change management project
  - Changing too fast
  - Aiming at a moving target
  - Overlooking institutionalized resistance generators
  - Underinvesting in motivation
- Terminology risk
  - Use of terms that create risk
  - Examples: “Pilot project”, “Multi-team project”, “Post mortem”
- Staff raids
- Negative stakeholders
- Politics

# Adoption Project risks: Agile methods are still evolving

- Refrain from aiming at a moving target
- Changing the target during organizational change is risky
- During the AP:
  - Settle on some definition of the agile process
  - Hold fast
- After the AP completes:
  - Establish a new effort for incorporating latest knowledge
  - Manage that as a project too
  - Hold its targets fixed while you work to adopt them

# Adoption Project risks:

## Staff raids

- A staff raid is the re-assignment of the staff of one project to another
- Staff raids are common in conventional organizations
- Raids are toxic to the agile organization
  - Agile teams depend on cohesion for effectiveness
  - Relationships are corporate assets
  - Raiding erodes the value of the assets
- DPs are often lower priority and therefore subject to raids
- Secure political protection for DPs until AP succeeds

# Adoption Project risks: Negative stakeholders

- Negative stakeholders:
  - Differ from mere skeptics
  - See AP success as threat
- They rarely watch passively; they can:
  - Raise questions and doubts
  - Attempt to limit resources
  - Set the “success bar” as high as they can
- To deal with them:
  - Do not allow them membership in the AP team
  - Seek powerful allies in senior management
  - Avoid early DPs that threaten them directly

# Adoption Project risks: Politics

- Examples:
  - AP resources reduced for whatever reason
  - A DP cannot succeed due to non-process reasons
  - Senior management support for AP diminishes
  - AP champion or sponsor leaves
  - Must use internal training resources but they're agile-naive
- Mitigating these risks requires overwhelming political clout
  - If you don't have the clout, enlist someone with clout
  - If you can't enlist someone with clout, *game over*

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# The long view

- Don't try to run the AP team alone
  - AP team should network with other AP teams
  - Attend conference sessions about AP and Change management
  - Get an AP consultant/coach
- External certification for agile roles isn't ready
- Get ongoing training and coaching
  - For AP team and DP team
  - For testers
  - For internal customers
  - For external customers (IEEE 1648)
  - For sponsors

# Resources

- Lean-Agile Partners website's new section: “Managing Lean-Agile Transformation”
  - Training courses
  - Mentoring services
  - [www.LeanAgilePartners.com](http://www.LeanAgilePartners.com)
- Chaco Canyon Consulting
  - Links collection:  
<http://www.ChacoCanyon.com/resources/peopleatwork/shtml>
  - Newsletter:  
<http://www.ChacoCanyon.com/pointlookout>
  - Workshops:  
<http://www.ChacoCanyon.com/workshopsseminars>