Did We Buy or Just Lease the Agile Car?

Matt Anderson, PMP, PMI-ACP, ICP

Director, Program Management
Cerner Corporation Profile

- The leading global supplier of healthcare solutions and related services
  - Started in 1979, based in Kansas City, MO
  - Clients in 25 countries serving more than 9000 unique facilities
    - Hospitals
    - Physician Practices
    - Retail Pharmacies
  - NASDAQ – CERN
    - $3.4B revenue in 2014

- 21,000+ associates
  - ~4000 associates on development teams
    - Majority of development in Kansas City, MO, Malvern, PA and Bangalore, India
  - Feb 2015 acquisition of Siemens HS added 6,000 associates with 1,000+ developers

- Development portfolio
  - 75+ solutions (products)
  - $450M investment in 2014
  - ~300 Agile development teams prior to acquisition

- Selected last week to partner with DoD to modernize the Electronic Medical Records (EMR) for the military and their families
The Agile Promise
Cerner’s Agile Story

**September 2008**
- Several teams voice frustration with current development processes and the idea to look at Agile was raised

**January 2009**
- 5 teams kick-off pilots with minimal support

**July 2009**
- CEO states intention to “blow up the waterfall” based on results
- Additional pilots started with full support

**April – Sept 2010**
- Mass education and adoption (2000 associates trained)

**2012**
- Expanded Agile/Lean to non-development functions

**2014**
- Expanded Agile/Lean to client-side implementation projects
Cerner’s Initial Drivers for Agile

**Business**

- **Speed to Market**
  - *Major innovations took an average of 30 months from concept to client adoption*
  - *Retain market leadership*
- **Return on Investment**
  - *Too many projects adopted at only a small subset of client base – “Shelfware”*
- **Improve Quality**
  - *Develop the Right Solution*
  - *Develop the Solution Right*
- **Support “Edge” teams**
  - *Core solutions released together, but “edge” teams unnecessarily held up by inflexible methodology*
    - Analogous to core web browser versus plug-in for browser
## 2011 Results

### Business
- Average client adoption time reduced from 30 -> 10 months
- Return on Investment – virtually eliminated “shelfware”
  - *Direct increased by 429%*
  - *Indirect increased by 1000%*
- Improved productivity by 24%
- Development costs reduced by 14%
- Quality improved by 6%
- Independent process and release for “edge” teams enabled by Agile principles

### Culture
- “Agile” and “Lean” used in everyday vernacular (most of the time correctly)
- Leaders challenge each other to be more servant leaders in executive sessions
  - Some “command and control” tendencies surface from time to time, but other leaders are the check and balance
- Associate attrition for satisfaction issues reduced by 80%
- 95%+ adoption by development teams
How did this get on our road?
Challenges with Sustained Enterprise Agile Adoption

1. Organizational culture and change fatigue

2. Organizational gravity – the Black Hole

3. Staffing & team changes

4. Agile fatigue

5. Business, IT and PMO balance – “power struggles”

6. Mergers and acquisitions
Challenge #1
Sustaining Change in Large Organizations

- Cultural reversion
  - Common organizational behaviors
    - “Bright, shiny object” syndrome
    - “Aren’t we done with that?”
    - “That is so 2014”
    - “But that is not how I did it”

- Change management and fatigue
  - Individual and organizational tolerance
  - Kaikaku vs Kaizen
    - Most Sr. Execs do Kaikaku well, but lack attention span for Kaizen
    - Expect Kaikaku every 3-4 years
Sustain the Change

Change the Culture

- Must implement Agile behavior into regular business functions
  - Finance, HR, Sales/Marketing
  - Decision making is done using Agile/Lean principles
- C-Suite engagement
  - Business-driven agility

Cerner’s Enterprise, Organizational Change Model

- Start with Why
- Understand Change and Adoption
- People, Process and Tools/Technology together
- Principles over Process
- Adapt the message (Influencer model)
- Empower
- Pragmatic Adoption
  - Teach the rule then deal with any exceptions
Kaizen and Kaikaku Done Right

- **State 1 KAIZEN** (Incremental Improvements)
- **KAIKAKU** (Radical Improvement) Boosts from State 1 to 2
- **State 2 KAIZEN** (Incremental Improvements)
- **State 3 KAIZEN** (Incremental Improvements)
Challenge #2
Organizational Black Holes

**Gravity**

- When the going gets tough ...
  - *The tough revert back to initial learned behavior*
    - Leaders say the right Agile words, but don’t follow up with Agile leadership
    - Middle management tier is the chief offender

- Agile is good until ...
  - *Annual Financial Planning*
  - *Annual HR Performance review*
Defeating Black Hole Gravity

**Centralized, decentralization of portfolio**

- Centralize rules and generate corporate alignment
  - *Unified top level priorities/imperatives with shared KPIs across organizations*
  - *Imperatives span organizations but have a single Sr. Executive owner*
- “Divide the pie” and allow business leaders to manage their piece within the rules
- Quarterly alignment reporting
- Leverage Lean and Agile values to drive decision making
- Establish governance models
  - *More on this later...*
Defeating Black Hole Gravity

**Executive Agile Champion**

- Agile maven and organizational connector
  - *Business and Agile credibility*
  - *Pragmatic and prescriptive*
- Tailor the message to the audience
- Must be able and willing to “call out” bad behavior effectively
- Break down the Finance and HR walls
- Owns the business plan for Agile success
  - *Includes continuous investment strategies*
  - *Focus on solving key business problems, not just trying to be “Agile”*
Executive Agile Champion
Executive Agile Champion

Influencer Model

The Golden Circle

The Five Dysfunctions of a Team

© 2011 Cerner Corporation. All rights reserved. This document contains Cerner confidential and/or proprietary information which may not be reproduced or transmitted without the express written consent of Cerner.
Executive Agile Champion
Challenge #3 
Large Staffing/Team Changes

■ Rapid Growth or Consolidation
  • Teams heavy in new associates cannot “self-organize”
  • Training becomes individual based if joining an existing team
  • Associate morale on consolidation

■ Change in Business Focus
  • Teams revert to previous behavior when large member changes occur
  • Loudest voice often wins, not what is best practice

■ Integrating 3rd Party Contractors and Vendors
  • Development consultants want to tell you how to do it “better”, but have no context of the organization
  • Agile consultants have no ownership in long-term business success, so primary focus is on short-term results
  • Vendors push for “best practice” based on their offerings

■ Now we really find out if we bought or leased the Agile car…

© 2011 Cerner Corporation. All rights reserved. This document contains Cerner confidential and/or proprietary information which may not be reproduced or transmitted without the express written consent of Cerner.
Lease – Used Up – “Fully Amortized”
Buy – Well Maintained – Appreciating Capital Asset
Team Development and Change

The “J-curve” effect repeats each time teams are changed at both the team and the individual level.

Tuckman's Team & Group Development Model

Forming

Storming

Norming

Performing

Effectiveness of Team

Performance of Team

The Kübler-Ross change curve

- Denial: Disbelief; looking for evidence that it isn’t true
- Frustration: Recognition that things are different; sometimes angry
- Depression: Low mood; lacking in energy
- Experiment: Initial engagement with the new situation
- Decision: Learning how to work in the new situation; feeling more positive
- Integration: Changes integrated; a renewed individual

Shock: Surprise or shock at the event

Time

Moral and competence

© 2011 Cerner Corporation. All rights reserved. This document contains Cerner confidential and/or proprietary information which may not be reproduced or transmitted without the express written consent of Cerner.
Challenge #4
Agile Fatigue – The Cargo Cult

- Going through the motions, but no longer seeing the results
Resolving Staffing and Agile Fatigue Challenges

- **Adapt training and coaching models**
  - Roll-out versus sustain are very different
    - Unskilled → Proficient → Mastery

- **Centralize Agile expertise**
  - Community over organization
    - Recruit from within – need the credibility of those actually doing the work
  - Expand influence outside of organization and company
    - External exposure promotes internal best practice
    - Allow site visits from external companies

- **Training/Coaching**
  - Introduce different methodologies and techniques
    - Lean/Kanban, XP, TDD, etc.
  - Engineering communities to teach excellence
    - Meet-ups, Hack nights
  - Team refresher classes – “Agile 201”
  - Opportunity for individuals to “Level Up” – ICAgile model
  - Agile Champion coaching
  - “Trade” Scrum Masters
Challenge #5
IT, PMO and Business Balance (not Tug-of-War)

- Ownership and power
  - Politics and span of control concerns will kill profitability

- Prioritizing the work
  - Avoid the squeaky wheel
  - Client feedback and adoption
Agile Organizational Structure

- Model from Spotify
  - Scale idea to fit

- Operational model can differ from actual reporting structure
  - Helps overcome power/span concerns
  - Can grow incrementally and organically
  - Centers of Excellence to feed governance
Defining the Field of Play: “Centralized, Decentralization”

- **Governance**
  - Manage the structure, not the decisions
  - Decision makers from the appropriate business areas
  - Manage execution on the decisions
  - Sets guiding principles
  - Approves exceptions

- **Centers of Excellence (CoE)**
  - Independent
  - Servant Leaders
  - End-to-End view
  - Operationalize board decisions
  - Promote collaboration
  - Provide guidance and support for area of expertise (best practices, templates, tools, approaches, etc.)
Each Governance structure is fed by multiple CoEs
Each CoE may feed one or more Governance bodies
CoE Organizational Model

Organization A

Leadership Team

Client Team(s)

Ops Team(s)

Development Teams

Other Teams

Role Community

Organization X

Leadership Team

Client Team(s)

Ops Team(s)

Development Teams

Other Teams

Role Community

Center of Excellence
Finding the Balance

- **Innovative, business-driven decisions**
  - “Speed is not the objective, it is a means to an end; the objective is making money” – Don Reinertsen
  - “If I had asked my customers what they wanted, they would have said a faster horse” – Henry Ford (apocryphal)

- **PMO as an impartial source of truth**
  - Data driven decisions
  - Focus on the entire value stream, not on individual or team performance

![Diagram showing process levels with percentages: Client Found Defect - 97%, Level 2 Support - 98%, Level 3 Support - 99%, Dev - 99%, Fix Installed and Issue Resolved]
Project/Program/Portfolio Triumvirate – “3 in a box”

- **Project Management**: Plan, Monitor & Control
- **Business**: What, Why
- **Engineering**: How, Feasibility
- **Who, When, Execute**: Intersecting elements

© 2011 Cerner Corporation. All rights reserved. This document contains Cerner confidential and/or proprietary information which may not be reproduced or transmitted without the express written consent of Cerner.
Broad Adoption Model

Why “Partner” with Cerner

Industry Leader
- Create Best Practice
- Case Studies
- Conferences
- Publications

Major Player
- Expansion Minded
- Pilot and Roll-out

Why “Purchase” Cerner

Well Respected
- Skeptical of “New”
- Want solid proof

Organizational/Departmental Change Tolerance

- Development partner
- Willing to find mistakes

- Proven
- Few mistakes

- Commodity
- Works out of the box

Primary Business Position

Scarcity

25%

Social

The Tipping Point

The Chasm

Innovators
Early Adopters
Early Majority

2.5%
16%
Challenge #6
Mergers and Acquisitions
1 + 1 = 1

- Size matters, but culture matters more
  - Focus on cultural alignment

- Objective SWOT Analysis
  - Education/Training
  - Tooling
  - Best practice
  - Location challenges

- Share and Learn
  - Avoid “Dictatorial” approach just because one party is in a position of power

- Create/expand an Agile Center of Excellence
  - Budget for the alignment
  - Establish a vibrant and welcoming community
Cerner/Siemens HS Example

- **Siemens HS**
  - Started Agile journey in 2007
  - Kanban
  - VersionOne
  - Fixed process, but very predictable
  - Agile driven from top down

- **Cerner**
  - Started Agile journey in 2009
  - 75% Scrum / 25% Kanban; XP practices
  - VersionOne, JIRA
  - Flexible process
  - Agile part of culture at team and leader levels

- **Goal**
  - Integrate HS best-practice predictability with Cerner Agile culture to create a “flexible agile model” that any Cerner team can use
Q & A

Thank you!