Extending the Benefits of Agile Approach to Package Implementation
About Protegra

• 100% Employee owned, based in Winnipeg
• 13 years in business
• 60+ consultants
• Impeccable track record of delivery

• Project Management Institute Project of the Year – 2007 (Parks Reservation System)
  • Resulted in Canadian Information Productivity Award (CIPA) Nominee - 2008
• #1 Employer in Canada – 2008 and 2010
  • As ranked by the Queens School of Business, AON Hewitt and the Globe and Mail
• 2009 #3 Best Workplace (right behind Google), 2010 & 2011 ranked #6
  • As ranked by the Great Place to Work Institute, #1 Employee Respect Category
- Top 100 Solution Provider in Canada 3 years in a row
  • As ranked by CDN (Computer Dealer News)
Protegra is a Business Performance Company….
We help our Clients achieve a Higher Level of Performance, Whether Business or Systems related…..

Vision, Strategy, and *(measurable)* Customer Value

→ Drives key processes (key value streams)

→ Drives Business Systems and Structures

→ Drives People (Org Design), Culture

→ IT Systems

End-to-End or Discrete business performance challenges
Enterprise or Departmental business performance challenges
Protegra / Wadood Ibrahim / An Agile Approach to Package Implementation
Software Development and Evolution Practice
Capabilities and Services

Software Development Services
We design and deliver scalable enterprise-class software that is a custom fit to your business.

Application Management & Evolution Services
Services include application support, break-fix, enhancement and evolution services, based on service level agreements and service quality plans that are fit to each client’s needs.

Our Experts provide Value, Quality, Speed
Consulting and resourcing to help you excel with your software delivery projects.

Our Experts provide Mentoring, Coaching
Mentoring and coaching in agile delivery methods and software engineering approaches, to increase your team’s velocity.
A Case Study in Lean Package Implementation

• The Client: A large regulatory body
• The Challenge: replacing many point solutions and manual workarounds with an integrated enterprise management system
• The Approach: A lean implementation focused on
  - service excellence to their customers,
  - delivered by their staff – engaged and involved in problem solving,
  - with waste eliminated from their processes
  - supported by optimized technology
• The Result: high fit solution, happy staff, high end user satisfaction; reduced manual effort; managed vendor; delivered within budget
What does “Lean” mean?

- Lean is a way of life and requires long-term commitment to a set of values and behaviours, as well as a system of management that encourages these
- Focused on value for the customer and the relentless elimination of waste: a real purpose
- Employee as the main engine of improvements and value delivery through problem solving and P-D-C-A
- Employees never discover a problem and side-step it, or assume that someone else will fix it
Most Important: It’s All About People

Empowerment/ Engagement

• We believe entirely in the power of our client’s people to create the desired changes, involving your people to solve the problems
• Techniques and Tools are good, Attitude is more important (….it’s all about people)
• We coached, mentored, facilitated, and ensure everyone is engaged in the process.
• We work with the client to ensure it was their team’s project / journey
Why did this organization choose lean approach?

- They believed in their people – collaboration and lean philosophy appealed
- There was a pressing need to transform their operation
- They knew other similar organizations who failed to achieve their outcome in their ‘change’ initiatives
- They knew they needed high adoption to achieve their outcomes
- They wanted lower risk to implementation
- They did not have a large capital budget to invest
  - They were ok with the trade-off of ‘renting’ vs ‘building’ (licence costs in perpetuity)
- They believed they had no unique differentiated processes
- They predicted the marketplace would have acceptable solutions with best practices built in – that would meet 90% of their mandatory requirements
Issues with a Typical Package Implementation

- Typically, package implementation is usually a ‘big bang’ approach, risk tends to increase as project continues
- Voluminous Requirements Documentation – no-one reads
- Can easily fall into the trap of not involving stakeholder involvement in discovery phase
- “Stardust” in the eyes of your stakeholders during demos
We suggested instead a Lean Package Implementation to reduce risk and increase alignment and engagement of the customer’s team.
Why do we start with lean business discovery?

- This client approached us with “we need a better system”
- They believed they should begin with requirements
- Working with us, they started with the business strategy and business problem root cause analysis (systems, business processes) to improve both business and systems performance
- Systems thinking - Look at the whole business as a system to design an effective IT system
- We asked “What is the best way to deliver the most effective system to an organization”?

In this case, a much higher level of performance was achieved
Lean Discovery Phase

- The goal was to develop a COMMON UNDERSTANDING of business problem and what needed solving.
- We provided coaching to our client team to encourage them engage in change; develop skills for problem solving and viewing operations holistically.
- We facilitated a process to clearly define business outcomes with all stakeholders.
- Define core delivery of value – value streams - from our client’s customers’ viewpoint.
- Innovate – is there better ways to achieve desired outcomes? Are there processes that do not contribute to your core business? Is there waste in your processes?
User Stories – an excellent Discovery tool

- We found this a realistic way to solicit, document and manage requirements – so that all stakeholders are on board and possess the same understanding.

- A user story of one or more sentences in the everyday or business language of the user that captures what the user wants to achieve.

- They are typically in the following format:
  - "As a <role>, I want <goal/desire> so that <benefit>"

- User Stories are much more concise than Use Cases and provide this extra communication and detail required when dealing with an external and somewhat unknown COTS product.

- These User Stories can then be collected together to define features of the system.
Test Cases – as another excellent Discovery tool

- Traditionally Test Cases are not used for Requirements but rather for the testing process itself.
- Ultimately, there are no better requirements than to list the test cases that will confirm the requirement has been met or not met.
- These Test Cases should be defined during package discovery phase
- With the Test Cases, the User Stories will define the business requirements.
Lean Package Selection

- Use user stories as your foundation – categorize user stories into mandatory vs desirable
- Include Proof of Concept to complete a ‘Hands on’ test of the software
  - Use the Test Cases to drive the proof of concept
  - Dedicate your resources to execute and evaluate the proof-of-concepts
  - Your team is up to speed with outcomes and requirements – minimal ‘stardust’
Lean Package Implementation

• It is highly recommended that Package Implementations be implemented in iterations.
  - Subsequent iterations build on the base installation
  - Each iteration MUST contain all required reporting and data conversion – and be put into production
  - Each iteration is tested and signed off
  - The iteration is concluded by a demo conducted by the business client responsible for the business process. This ensures buy-in and understanding.

• Logistics - Lean recommends having the project team and business co-located, including the vendor – this works!

• Define an operational support model – early as possible
Lean Iteration Schedule

- Agreement on scope and schedule
- Execution of required scope
- Demonstration of iteration scope
  - This is more than a simple project led demonstration
  - The business execute all of the User Stories and Test cases to ensure the expected outcome occur
- Feedback is then solicited for new User Stories or test cases that should be added to future iterations
- Clients are then asked to sign off that iteration
Conclusion

- The principles of Lean/Agile are applicable to all types of projects.
- There are some areas of Package Implementation projects that can reduce risk, and benefit greatly. These are:
  - Requirements discovery
  - Package selection
  - Implementation iterations
  - Logistics
Questions?
End of Presentation
Lean Software Development

• Iteration planning is ‘the’ key planning initiative
  - Iterations need to be planned in conjunction with the client to accomplish the following:
    • Deliver functionality to define the cadence and tempo of the project
    • Deliver functionality to deliver real value to the client
    • Deliver functionality to reduce and minimize risk for the entire project
    • Lessons learned from one iteration must feed into subsequent iterations so that we don’t execute the project in iterations with similar results, but that we execute the project in iterations with better results.
  - We execute better, smarter, and quicker
Lean Software Development Principles

• Eliminate Waste
  - The three biggest wastes in software development are:
  - Extra Features
  - Churn
  - Crossing Boundaries

• Build Quality In
  - If you routinely find defects in your verification process, your process is defective.
  - Mistake-Proof Code with Test-Driven Development
  - Stop Building Legacy Code
  - The Big Bang is Obsolete
Lean Software Development Principles

• Create Knowledge
  - Planning is useful. Learning is essential.
  - *Use the Scientific Method*
  - *Standards Exist to be Challenged and Improved*
  - *Predictable Performance is Driven by Feedback*

• Defer Commitment
  - Abolish the idea that it is a good idea to start development with a complete specification.
  - *Break Dependencies*
  - *Maintain Options*
  - *Schedule Irreversible Decisions at the Last Responsible Moment*
Lean Software Development Principles

• Deliver Fast
  - Lists and queues are buffers between organizations that simply slow things down.
  - *Rapid Delivery, High Quality, and Low Cost are Fully Compatible*
  - *Queuing Theory Applies to Development, not Just Servers*
  - *Limit Work to Capacity*

• Engage People
  - Engaged, thinking people provide the most sustainable competitive advantage.
  - *Teams Thrive on Pride, Commitment, Trust, and Applause*
  - *Provide Effective Leadership*
  - *Respect Partners*

• Optimize the Whole
  - Brilliant products emerge from a unique combination of opportunity and technology.
  - *Focus on the Entire Value Stream*
  - *Deliver a Complete Product*
  - *Measure UP*