A Tale of Two Agile Projects

Lessons from the trenches: CenterPoint Energy

2012
Introduction

- CenterPoint Energy (CNP) is a Utility in Houston, TX (with regional locations in MN, AR, TX, MS, LA and OK).
- CNP averages 70 IT driven projects per year (SAP, Web, New Applications, Vendor Managed Applications).
- Most projects are currently Waterfall driven and run over budget and behind schedule. However, most projects do deliver business requirements and value.
- The PMO office at CNP is fairly new (3-5 years old) and continuing to create process improvements.
- I’m the PMO manager for Web and New projects. I also just started the SAP CRM project and plan to implement using Agile methodologies.
Brief History of Two Agile Projects

- Project 1: Web front end for SAP Backend Customer Self Service Project
  - Agile teams:
    - SAP Team: 4 developers, 2 Business analysts
    - Web Team: 3 developers, 1 Business analyst
    - One PM/SCRUM master for both teams (me)
  - Team Makeup: All long time employees or contractors with strong working relationship. Team was not co-located, in Houston and MN
  - 3 Sprints (called mini releases) throughout project with PRD deployment at end of each sprint.
  - Infrastructure and Web framework already built prior to project start
  - Project timeline: 10 months (came in on time)
  - Project Budget: $750,000 (came in under budget)
Brief History of Two Agile Projects

Project 2: New Web Portal for Customer Information and Link to Service Providers

- Agile teams:
  - Infrastructure team: 10 core team members (all internal to CNP)
  - Web Team: Vendor Managed – core team varied from 15 - 30
  - Two PM/SCRUM masters, CNP PM for Infrastructure, Vendor PM for Web team

- Team Makeup: Completely different teams for each piece. Core team for infrastructure all internal and long time employees. Web team all vendor managed and most resources were new to either vendor or to Agile projects. Many were new to Web projects as well.

- Vendor team originally included off-shore team (SCRUM master, Testers, developers), but that was unsuccessful and all roles were brought on site to Houston.

- Infrastructure was not already built prior to project start and changes in platform impacted the application build of project. Infrastructure completed per plan.

- Original Project timeline: 8 months (cancelled after 12 months)

- Project Budget: $1.2M (cancelled after spending more than double the budget)
Group Exercise

- Break into teams and Determine How to get Project 2 back on Track.
  - Create a new plan for delivery
  - Create a lessons learned for executives

- Ground Rules:
  - You cannot fire/replace the vendor
  - Scope has already been reduced by 40% - further reduction would meet sponsor resistance.
  - The timeline is somewhat flexible for the business. Quality is not.
What Worked:

- Active participation of business. Our business process owner was engaged in product development and providing immediate feedback throughout development lifecycle.
- Transparency of Progress: with the sprint cycles, we saw the issues quickly rather than waiting for a “big bang” go live that would have kept issues unseen by management/business until go live.
- Mockups: iRise flows captured requirements and have provided a solid “go to” resource for gaps in functionality.
- Scope was easy to manage with sprint methodology. Core functionality was clearly outlined in use cases. Changes were tabled as enhancements by the business and deemed out of scope.
What Did NOT Work:

- Vendor managed process: Vendor did not make one deliverable deadline since they started the build part of the project.

- Agile User Story: The requirements were not defined to enough detail and the core team had to take the time to fully flush out requirements and gain functional sign off from the business. (Use cases kept splitting into multiple use cases without any new scope being added.)

- Vendor Managed Resources: Not having the ability to select resources, or to replace non performing ones, had a major impact on schedule, cost and quality of the product. Having resources off-shore without an existing working relationship with on-shore resources was not effective.
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<thead>
<tr>
<th>Issue</th>
<th>Impact</th>
<th>Lesson Learned</th>
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<tbody>
<tr>
<td>Rally Dev not system of record for all project work.</td>
<td>Unable to track progress successfully</td>
<td>Ensure that vendor is experienced with all project tools prior to start of project.</td>
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<td>Sprint Cycles do not account for major rework/Defects</td>
<td>Alpha release is 10 weeks late</td>
<td>Build quality accountability into the sprint cycle. Formalize acceptance/rejection</td>
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<td>SCRUM master not experienced. Offshore team unproductive</td>
<td>Extensive cost overruns</td>
<td>SCRUM master should be on-site with core team and accountable to daily deliverables</td>
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<td>Testing Process “fluid” instead of clearly outlined</td>
<td>More than 500 defects identified</td>
<td>Unit testing was non-existent. QA testing was limited to functional instead of integrated. Need solid QA lead driving testing and use of test cases/data</td>
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<tr>
<td>Project Management in Agile Role was “fluid”</td>
<td>Cost and time overruns</td>
<td>Vendor PM was not effective in role. Unable to complete either Agile or Waterfall methodology – need to ensure standards are followed</td>
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<td>Websphere Portal skills are not strong</td>
<td>Quality is not acceptable</td>
<td>Need to ensure solution selected has skill set readily available in the Houston Market.</td>
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A Hybrid Agile/Waterfall Project: A Success Story

- Business completed all business requirement documents for functionality prior to final acceptance of project deliverables, costs and schedule.
- iRise Mockups were created for all new functionality and approval was received by Working Team (larger than Steering Team) prior to development start.
- IT team was in house (or long time contractors) and experienced with existing code.
- Business dedicated resources were assigned to the project to ensure success is not only on IT functionality. Change management, communications, training and testing are all important roles and had team leads assigned.
- Project was planned with mini-release schedule to provide quick “wins” to the business and ensure that code is not locked for long periods of time.
- Project had support from top executives, but they were not involved in day-to-day management of the project. Only financial or change request discussions were escalated.
- We used a Waterfall (MS project) project plan, but had it grouped in Agile format. We had dedicated resources that worked on the releases and across activities as appropriate.