Agile Software Development with Offshore Teams – Can It Be Successful?

Ian Wilson

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And The Answer Is?

Yes!....

But....
### Agenda

- Background
- Is Agile Compatible with Offshore?
- Opportunities from Adopting Agile and Going Offshore
- How to Make Agile & Offshore Succeed  
  - Real-life Examples
- Business Benefits
- Key Learnings
Background

• Experiences based on 6+ years of Agile projects within a large multinational using offshore teams
• In-house and outsourced Agile teams used mostly in Russia
  – In-house development centre established in Russia
• Projects mostly in areas of supply chain management and sales and marketing
  – Direct revenue generation impacts
• Typical project size up to 15 people and 6-9 months duration
Is Agile Compatible with Offshore?

• Is offshore development at odds with the Agile Manifesto and Agile Principles?
  – ‘Individuals and interactions over processes and tools’
  – ‘The most efficient and effective method of conveying information to and within a development team is face-to-face conversation’

• Decision made to adopt Agile in an offshore environment
  – Several years experience of offshore development for ‘non-Agile’ projects
  – BKMs for offshore already learnt the hard way!
  – ‘non-Agile’ processes not meeting business needs
Opportunities from Adopting Agile and Offshore

• Why go offshore?
  – Costs
  – Skills
  – Reduce turnover and churn & increase project stability
  – Ability to ‘flex’ resource up and down
  – Need to be close to offshore business groups

• Why we adopted Agile methods?
  – Improve ability to respond to customer needs in a highly dynamic environment
    • ‘pre-Agile’ feedback from customers was ‘too little, too late’
  – Support innovative new business processes to radically improve competitive position
How to Make Agile & Offshore Succeed

• Getting Started
  – Choose a suitable pilot project
    • Will show the benefit of Agile methods
    • Total duration <=3 months
    • Start with a small offshore team <= 5
    • Decide on in-house or outsourced offshore resources
    • Bring whole team together for kick-off and initial planning meetings
  – Success criteria for pilot
    • Meet project deliverables
    • Establish BKMs for working between onshore and offshore teams
    • Establish credibility of Agile and offshore combo
  – As pilot we took a supply chain application interfacing with SAP and an outsourced team in Russia
  – Used XP and developed a ‘Remote’ XP operating model
Implement ‘Remote’ XP such that intent of XP core practices is maintained
How to Make Agile & Offshore Succeed (ctd.)

• What we learnt from pilots:
  – Keep developers collocated
  – Clarity of roles critical
  – Customers and Technical Project Manager (TPM) collocated or +/- 2hr time zones
  – More complexity the more time zones between customers and technical team
  – Continuous integration is critical
  – Hire the best offshore developers!
  – Executive sponsor from the customer is a huge advantage
# Operating Model – Roles

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<th>Role</th>
<th>Responsibilities</th>
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| **Project Manager**         | • Overall business and technical owner for project  
• Removes any roadblocks for project  
• Owns business support for the project |
| **TPM**                     | • Facilitates planning sessions and daily Scrum  
• Ensure that everyone is performing their role  
• Removes non-technical roadblocks |
| **Business Analyst** (Customer) | • Writes, prioritises and accepts stories  
• Provides daily feedback  
• Work in same or +/- 2hr time zone to TPM |
| **TDA**                     | • Technical guidance on data architecture  
• Supports data architecture issues for daily integration & deployment |
| **Technical Lead** (Enabler) | • Removes technical roadblocks  
• ‘Buck stops here’ person for daily integration & deployment  
• Ensures standards adherence  
• Ensures resource continuity  
• Provides application support for production systems |
| **Developer**               | • Writes automated tests  
• Develops code  
• Ensures that 100% of tests pass each time code is integrated |
Operating Model – Roles

- Program/Project Manager (PM)
- Technical Project Manager (TPM)
- Business Analyst(s) (BA)
- Technical Data Analyst (TDA)
- Technical Lead (Enabler)
- Developers

Onshore

Offshore
‘Remote’ XP Offshore Model

Onshore Site → Offshore Site → Onshore Site

TPM

Planning → Coding → Integration → Deployment

Customer

Per iteration structure

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‘Remote’ XP Offshore Model

- Customer and TPM collocated or no more that +/- 2hr time zone apart
- Good work day overlap between onshore and offshore teams (+ 3 hrs for these projects)
- Daily integration and deployment to BAs
- Release and 1st. iteration planning sessions FTF with customer, BAs, PM, TPM, and Technical Lead
  - Subsequent iteration planning sessions done remotely
- Daily remote stand-up meeting
- Technical Lead (Enabler) is a key role
Communication

• Critical element between onshore and offshore teams
  – Failure here means project is doomed!
• More about behaviours than tools
• Make good use of basic tools
  – Phone, teleconference
  – Instant messenger
  – Email
  – Application sharing/collaboration tools
  – Source control and integration environments
  – Excel can be very useful!
• Minimise differences between onshore and offshore working environments
• Minimise time zone deltas between onshore & offshore teams
Business Benefits

• Every offshore Agile project (30+) has exceeded business value goals
  – Below cost budgets
  – Faster ‘time to functionality’
• Typically >40% cost reduction compare to using waterfall processes (validated by Gartner benchmarking analysis)
• Reduction in lost opportunity costs to customer
• Faster delivery of innovative business processes and functionality
Business Benefits

• Introducing new business processes – example:
  – Improve response to a customer request to change an existing order (e.g. mix of products)
  – Response time from weeks to day(s) to be competitive
  – Implement rule based algorithms to reduce response time
  – New releases every 3-4 months
  – Onshore and offshore team 10-12 people
  – Exceeded all project CSIs and enabled fundamental business process change

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Key Learnings

• Agile and offshore CAN work together with great result!
• Clear partitioning of roles between onshore and offshore teams
• Technical Lead role is critical!
• Reduce time zone difference as much as possible between onshore and offshore teams
• TPM needs to be as close as possible to Customers
• Use FTF meetings (e.g. release planning) to build relationship and trust between onshore and offshore teams.

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Questions?