One Week Agile Readiness Assessment Report

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This report contains...

- Summary of our visit
- Our current understanding of the state of the union
- Observations: What we found
- Conclusion and Recommendations
- Plan for the next 5 months
- Appendix
  - Summary of discussions with various groups within the Org.
Expectations from our visit

- Understand current state of the organisation in terms of process maturity & cultural compatibility with Agile

- Formulate a strategy (plan) to improve team’s effectiveness and to take the teams to the next level

- Figure out a way to make the Agile DNA an integral part of the company’s internal improvement initiative
We had to understand...

- Current state of affairs and how the teams operate across the company
- Key challenges faced by the team and its management
- Key stakeholders and their expectations
- Gaps in terms of knowledge and skill levels of the team
- Background/Context around how the teams & processes have evolved
Deliverables of this Assessment

☑ Agile Adoption Roadmap (with specific recommendations for training/coaching)
☑ Identify Potential Internal Coaches
☑ Risks Backlog
☑ Specific feedback to teams who were interviewed during the assessment
☑ Some ideas on how to deal with uncertainty
Summary of our visit
What was done

- Discussion with 5 teams to understand how they operate as of today
  - Process, Team composition, etc.
  - Current Team structure
- Value Stream mapping of their development process
  - To identify bottlenecks and gaps
- Interviews and Reviews
  - To understand current pain points
- Watching planning meeting
  - Observe team’s behaviour
- Workshop on dealing with uncertainty
What was done...

- Meeting with important stakeholders to understand their expectations and pain points
- Pairing with Developers
  - Technical Debt, Code Quality, CI and other infrastructure
- Pairing with the Testers
  - Test plans, Test cases, building Quality into the Process
- Discussions with Scrum Masters and Project Managers
  - Planning, Estimation, Velocity, Retrospectives, etc.
- Discussions with the Product Owner
  - User Stories, Product Backlog, Acceptance Criteria, Reviews

Detailed agenda in appendix...
Our Understanding
Org Structure

☑️ Private information, not for public viewing…
Agile Journey So Far…

Objectives
- Reduce Release Cycles
- Improve Customer Engagement
- Value Driven Releases
- Quality and Efficiency

2012
- Initial move towards Agile
- Few product teams adopted Scrum
- Distributed Scrum Team; key roles in US; Decision making centralised

2013
- Complete shift towards Agile
- Big support from executive Management
- Large scale agile adoption initiated and monitored at sr. management level
- Shift towards co-location; Fully staffed agile teams
- Investment in Agile Training and Coaching

2014
- Full-time role formalisation (Scrum Master, Product Owner, UX Designer, Agile Coach)
- Significant progress on co-location and fully staffed agile teams
- Ownership and decision making at Agile team level (release plan, customer engagement)
- Training on agile practices and soft skills as well

2015
- Focus on Continuous Delivery
- Engineering excellence
- Cultural Change
Our Observations
We expect, **Resilience, Harmony & Agility**
But end-up with, **Brittleness, Chaos & Fragility**

Having been part of many other similar transformations:

**Good news:** Nothing strange or unexpected…
But we need to, **fix things quickly!**
Working Well (from our perspective)

- Executive and Senior Management commitment towards holistic agile transition
- Well thought out product management (BLL) and implementation (ENG) teams
  - Having long-term teams with names, instead of structuring teams by work
- Co-located teams with most of the cross-functional role present in the team
- Teams willingness to learn new skills
- Basic Agile training and awareness to most of the team members
- Involving support function such as Human Resource and Learning & Development teams
Needs improvement (from our perspective)

- Top-down thrust can backfire, we quickly need to get people’s full buy-in.

- “Better value to customers faster” is one core benefit expected from this transformation. But Human-side (people & team centric aspects) of Agile seems to be underplayed.

- Team’s buy-in towards the overall transition is weak. We need to make them an integral part of the transition, rather than, them feeling like its imposed on them.

- Engineering Excellence, Quality and Innovation

- Cross functional team behaviours focused on achieving team goals

- Thought leadership (Process, Product & People)

- Establishing & communicating product vision and goals

- Effective planning and execution
Agile Skills Lacking in the teams

- Embracing uncertainty/change and effectively finding ways to deal with it
- True collaboration and communication with everyone involved
- Teams are predominantly baby-seated by Seniors on the team
- Finding and eliminating 7 forms of wastage on teams
- Collective Ownership, drive (self-motivated), focus and discipline
- Fail-fast: Breaking a large problem down into small safe-fail experiments and then willing to try and learn quickly
- Systems thinking
- Open to experimenting with radical ideas
Risks - As we see it

- Overall, the company is not fully prepared to make the leap to Agile (rapidly inspect & adapt, servant leadership, buy-in from all employees, entrepreneurship, etc.) Yet, this is the need of the hour to grow & sustain the business.

- There is fear, confusion and scepticism in teams and mid-management.

- Teams are constantly worried about not meeting sprint goals, but not focusing on customer value and innovation.

- Teams are getting burn-out and its impacting the quality of the products.

- Current Agile implementation is very focused on Scrum ceremonies. Engineering excellence & Product Innovation practices are lacking.

- 2015’s goal of Continuous Delivery and Incremental Release

- Many teams are struggling to have stable product after each sprint. In spite of having a lot of QA & Dev process, the defect density is pretty much remaining constant. Teams are spending multiple sprints just fixing defects. This is a huge risk towards smooth incremental releases.
Risks - As we see it…

- Customer engagement to get real feedback, early in the cycle is missing from the Product Management. (especially while defining the product roadmap)

- We believe the market fitment of features in many products can be vetted with internal users, who are real consumers. In some cases there are real users of the products in near by companies. They can be engaged better.

- Except few products customers are not involved in the feature definition stage.

- Many products have a very long release cycle. With such a long release cycle keeping the customer excited about the team’s progress is extremely challenging.

- While POs and some customer representatives participate in the review process to sign off stories against acceptance criteria, customers are not playing around with the new features to test the practical usage of the feature. Gradually the customers will lose interest in the demos.

- Use of latest low-fidelity prototyping techniques is missing in many products. This is leading to late discovery of feedback.
Risks - As we see it...

- The 2 internal Agile coaches have not been able to win the team’s trust. Teams expect lot more contextual advice from them. Given the experience of the coaches and the fact that they are not embedded in the teams, this is extremely hard for the coaches to achieve.

- The product discovery & estimation process at the beginning of each release is not aligned with the Agile model. This could lead to the releases being set up for failure.

- While the Sr. Management has a very strong (right) & focused vision, the same passion and vision is not percolating to all the members of the org.

- The Education team is doing a great job, however teams lack an informal learning culture. Teams are fairly out-dated on technology, tooling, techniques, etc.

- The industry is moving beyond Agile. We don’t see the sense of urgency in the teams.
Our Recommendations

Key focus areas to mitigate the risks
Focus on Organisation Agility

- Coach few teams, create in-house success stories & use them to get entire organisation’s buy-in
- Create CoEs, SIGs and Technical Community forums for free and open exchanges of thoughts and ideas (informal, peer-to-peer learning)
- Ignite curiosity in teams and build a strong learning culture at every level
- Improving effectiveness of planning and estimation via a Collaborative Product Discovery and Story-mapping process
- Encourage a Testing Strategy which focuses on building the quality in process
- Build strong cross-functional teams of generalising specialists with T-shaped skills
- Focus on engineering excellence and eXtreme Programming practices for sustainable pace & high-quality products
- Enable effective contribution of Tech Info team members within sprints
Focus on Organisation Agility…

☑ Project Managers should focus on
  ☑ Thought leadership
  ☑ Winning team’s trust and respect
  ☑ Collaboration cross all the scrum teams in a business line
  ☑ Effectively coaching the team without being interpreted as command & control

☑ Product Owners should focus on
  ☑ Product vision, roadmap and collaborative discovery process
  ☑ Early customer engagement & validation of features to be built
  ☑ Value Stream mapping from end-user’s perspective
  ☑ Defining SMART Acceptance Criteria

☑ Scrum Masters should focus on
  ☑ Effectively coach the team to
    ☑ Conduct effective meetings
    ☑ Inspect & Adapt process and practices
  ☑ Build a cross functional team with T-Shaped generalising specialists
PMs need help with the following topics

- Coaching and Mentoring Self-Directed Empowered Team
  - Win their trust that they are really there to empower them
  - Equip the team with cross-functional skills

- Provide strategic direction to the teams
  - Engineering Excellence
  - Testing Strategy
  - Product Discovery
  - Learning Culture

- Broadcast success stories from the team across the organisation

- Talent Management (grooming and mentoring team members)
  - Facilitating the necessary training required

- Be the conduit between Sr. Management and the Team
POs need help with the following topics:

- Communicating the Product Vision and Roadmap (at least feature level)
- Story mapping and product discovery
- Understanding the business drivers, priorities and value chain
- Writing effective user stories
  - Slicing stories functionally rather than technically
  - Defining better Acceptance Criteria for the stories
- Helping the teams independently make implementation decisions
- Risk identification and mitigation for each story
- Collaboration with the team members to work-out dependencies
- Facilitating better knowledge sharing with the team
Scrum Master need help with the following topics

- Instead of working on multiple teams, SM should focus on 1 team to win their trust
- Understand the essence/spirit of Agile
- Using techniques like Value Stream Maps to identify bottlenecks
- Create Self-Directed Empowered Team
- Emerge as leaders and be the voice of the team, shielding the team from external interferences
- Facilitating more effective meeting (Planning Meeting, Standups, Demos)
- Capacity Planning
- Story Point (Relative Complexity) Estimation
- Intent behind standup meeting
- Using Retrospectives as a means to continuous improvement
- Process for following up on Retrospective action items
Developers need help with the following topics

- Good Development Practices
- Understanding and improving code quality
- Understanding the bigger picture and asking for it
- Working effectively with Legacy Code
- Test Driven Development & Behaviour Driven Development
- Working effectively in a dynamic environment with changing requirements
- Thin Slicing and Evolutionary + Incremental Design/Implementation
- Evolutionary Database Design and Refactoring Databases
- XP Practices like Continuous Integration (to avoid branching), Pair Programming, etc.
- Better productivity tools
- Cross-functional Skills
- Fail Fast approach
- Knowledge Sharing
- Impact Analysis
- Effective unit testing
Tester need help with the following topics

- Instead of finding defects, they need to focus on stopping them from getting in the product in the first place.
- Inverting the Test Pyramid (http://blogs.agilefaqs.com/2011/02/01/inverting-the-testing-pyramid/)
- Collaborating with Product Owners, SMEs and Devs to build domain & tech knowledge
- Collaborating with the PO/SMEs to better define User Stories and Acceptance Criteria
- Work with Devs to practice Acceptance Test Driven Development
- Exploratory testing and mistake proofing
- Create and maintain an effective automated (scripted) test suite
Plan
# Overall Strategy


<table>
<thead>
<tr>
<th>Pilot Projects</th>
<th>Key Roles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Team 1</td>
<td>Managers</td>
</tr>
<tr>
<td>Team 2</td>
<td>Product Owners</td>
</tr>
<tr>
<td>Team 3</td>
<td>Scrum Masters</td>
</tr>
<tr>
<td>Team 4</td>
<td>Tech Community</td>
</tr>
<tr>
<td>Team 5</td>
<td>Tech Writers</td>
</tr>
</tbody>
</table>

## 2. Org Level (Education, Performance, Hiring, CoE, SIG)

## 3. Pilot Projects

- Team 1
- Team 2
- Team 3
- Team 4
- Team 5
Prioritisation of the Overall Strategy

- **Pilot Teams**
  - We’ll focus on few pilot teams to establish a pattern that works inside India Development Centre.
  - Inside these pilot teams, we’ll create a working model which involves all the key roles (Managers, PO, SM, PM, Sr. Tech, etc.) required to succeed.
  - Representatives from each role will act as internal coaches to spread the knowledge to other teams inside their respective region.
  - Facilitate role-specific brown bag sessions & 1:1 coaching session every week to provide access to the external coaches. This will also be used as a platform to spread knowledge and showcase early success from teams.

- **Engineering Excellence**
  - Once the core team dynamics & basic Scrum framework is in place, we’ll start focusing on Testing Strategy, eXtreme Programming and Product Discovery practices.
  - Once the basic engineering practices are in place, we can Evolutionary Architecture and Continuous Delivery practices.

- **Org Level**
  - Once the basic team dynamics are in place, we’ll start focusing on Special Interest Groups (SIGs) on specific topics within each region.
  - Gradually SIGs across regions will interact with each other to form Centre of Excellence (CoE).
  - Hiring and Performance management will be focused next.
Need for Pilot Projects

- Trying to change the whole company is a long process. We first need to create some internal success stories on real (different) projects to
  - Get other team’s buy-in
  - Mine out patterns that work in our company/culture
  - Rapidly create expertise & local champions
  - Create some case studies & a platform for team members to learn about the new way of working
  - Use these pilot projects to constantly push the envelope on the process & innovation side
  - Minimise the risk of things going out of control. Also formulate a transition strategy (we’ve seen many company fail miserably when they try to do a big-bang roll out)
Holistic Maturity by Attaining Fluency

A Team’s Path Through Agile Fluency

We use this fluency model to guide us on the team’s progress and organisation’s investment in helping teams mature as they adopt an agile working culture.
# Attaining Fluency

To achieve Business Impact & Customer Engagement

<table>
<thead>
<tr>
<th>Investment</th>
<th>Outcome</th>
<th>Customer Engagement</th>
<th>Business Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Team development and work process design</td>
<td>Greater visibility into teams’ work; ability to redirect</td>
<td>Customers are aware of the progress and involved in reviewing/validating business value</td>
<td>Focus on Value delivery early and often</td>
</tr>
<tr>
<td>Lowered productivity during technical skill development</td>
<td>Low defects and high productivity</td>
<td>Team understands realistic market cadence and aligns releases accordingly</td>
<td>Delivers high-quality, incremental releases that map to market cadence</td>
</tr>
<tr>
<td>Social capital expended on incorporating business expertise into team</td>
<td>Higher value deliveries and better product decisions</td>
<td>Customers are able to quickly validate product’s market fitment</td>
<td>By focusing on concrete business metrics, we can monitor ROI for achieving business success</td>
</tr>
<tr>
<td>Significant effort in establishing organisational culture; inventing new practices</td>
<td>Alignment with organizational goals; synergistic effects</td>
<td>Tight collaboration and high synergy in laying out future product direction</td>
<td>By focusing on global optimisation, we can strategise business growth</td>
</tr>
</tbody>
</table>
Engaging with Pilot Teams

- Coaching strategy & outcomes vary as per project & pilot team’s needs
- The context, team skills & technology on every project differs, which requires context specific goals
- Before starting any coaching, we establish a working-agreement based on
  - Challenges highlighted by the team & its management
  - Team’s long-term & short-term goals and aspirations (All roles including the PMs are involved)
  - Agile Fluency Model
  - High-level risks identified by the coaches
- Governance (based on the working agreement)
  - Bi-weekly management reviews on progress
  - Metrics and measures evolve. Focus on outcomes & accomplishing collective goals
# High Level Pilot Team Coaching Schedule

<table>
<thead>
<tr>
<th>Coach</th>
<th>Nov</th>
<th>Dec</th>
<th>Jan</th>
<th>Feb</th>
<th>Mar</th>
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</thead>
<tbody>
<tr>
<td>Ravi</td>
<td></td>
<td></td>
<td>Team 1</td>
<td>Team 3</td>
<td>Team 5</td>
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<tr>
<td>(Full Time)</td>
<td></td>
<td></td>
<td>Team 2</td>
<td>Team 2</td>
<td>Team 3</td>
</tr>
<tr>
<td>[Starting from Nov]</td>
<td></td>
<td></td>
<td>Team 1</td>
<td>Team 4</td>
<td>Team 5</td>
</tr>
<tr>
<td>Naresh</td>
<td></td>
<td></td>
<td>Team 2</td>
<td>Team 3</td>
<td>Team 5</td>
</tr>
<tr>
<td>(Alternative Weeks)</td>
<td></td>
<td></td>
<td>[Starting from Jan]</td>
<td>Team 2</td>
<td>Team 3</td>
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<td>Team 2</td>
<td>Team 4</td>
<td>Team 3</td>
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<td></td>
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<td></td>
<td>Team 1</td>
<td>Team 3</td>
<td>Team 5</td>
</tr>
</tbody>
</table>

- **Weekly brown bag sessions for all PO, SM and PMs (2 hrs each)** - Ravi
- **Weekly 1:1 sessions for all PO, SM and PMs (30 mins slots, 4 hrs week)** - Ravi
- **Weekly brown bag sessions for Devs (2 hrs)** - Naresh
- **Weekly 1:1 sessions for Devs (30 mins slots, 4 hrs/week)** - Naresh

<table>
<thead>
<tr>
<th>Weekly</th>
<th>Mon</th>
</tr>
</thead>
<tbody>
<tr>
<td>12:30-2:30PM</td>
<td>SM Brown Bag 1:1 Sessions (60 mins/session)</td>
</tr>
<tr>
<td></td>
<td>1:1 Sessions (30 mins/session) Tech Brown Bag</td>
</tr>
<tr>
<td></td>
<td>PM Brown Bag 1:1 Sessions (30 mins/session) Tech Brown Bag</td>
</tr>
<tr>
<td></td>
<td>1:1 Sessions (30 mins/session) Tech Brown Bag</td>
</tr>
<tr>
<td></td>
<td>PO Brown Bag 1:1 Sessions (60 mins/session)</td>
</tr>
</tbody>
</table>

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Scaling Pilot Projects

Refine & Standardize

Agile Working Group

Try/Apply

2-6 months

Pilot Projects

Team 1
Team 2
Team 3
Team 4
Team 5

Coaching
Mentoring

Agile & Org. Transformation Experts

Internal Coaches & CoE + SIG

Use

Refine

Learn

Coach, Mentor, Support & Learn

All Projects

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To Achieve this Plan

- Ravi will start working with the 2 Pilot projects in Nov (alternative weeks with each project)
  - He will focus on the getting the team to 2 Star level as per the Fluency Model. This would require a very tight collaboration between all the roles and proper servant leadership model in the team.

- Naresh will start with 1 Pilot project in Jan (alternative weeks)
  - He will focus on Engineering excellence within the team and later across the org.

- We’ll identify one person in each role to play the internal coach role
  - These coaches are extremely important for the success of the pilot project. Post the pilot, they will spread the culture to other teams

- Internal Agile Coaches: We’ll take help from the two existing coaches to engage rest of the teams in the org & keep them updated with the progress on the pilot teams. They will also continue with some of their existing plans like self-assessment, etc.

- Intense training and mentoring will be required on the following topics:
  - Product Discovery & User Story Mapping workshop (5-Days) (Entire Team, including the PO)
  - Design Principles & Patterns workshop (4-Days) (Developers)
  - TDD & BDD workshops (3-Days) (Developers and Testers)
  - Refactoring Legacy Code workshop (2-Days) (Developers)
  - Test Automation and Exploratory Testing workshop (2-Days) (Testers)
Thank You!

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Appendix

☑ Detailed Agenda
☑ What’s Working Well
☑ Challenges Faced
☑ Detailed Coaching Schedule
☑ Skills to attain Fluency
Detailed Agenda
<table>
<thead>
<tr>
<th>Time</th>
<th>Meeting</th>
<th>Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Day 1</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>09:30 AM - 10:30 AM</td>
<td>Organisation Overview</td>
<td>All Sr. Directors</td>
</tr>
<tr>
<td>10:45 AM - 12:15 PM</td>
<td>Agile Readiness Assessment - Team 1 – Scrum Team + Project Overview</td>
<td>SM, PO, Architect and Manager</td>
</tr>
<tr>
<td>12:30 PM – 1:45 PM</td>
<td>Team 1 – Agile Readiness Assessment - Round Table discussions</td>
<td>Team Members</td>
</tr>
<tr>
<td>2:00 PM - 5:00 PM</td>
<td>Agile Readiness Assessment - Team 1 - Detailed review with scrum team</td>
<td>Team 1   - (Devs, QAs, TIs, POs)</td>
</tr>
<tr>
<td>5:00 PM – 6:00 PM</td>
<td>Agile Readiness Assessment - Discussions with Project Managers</td>
<td>Program Managers</td>
</tr>
<tr>
<td>6:00 PM - 7:00 PM</td>
<td>Agile Readiness Assessment - Discussion with Sr.Vice President of Business Line 1</td>
<td>Sr.Vice President of Business Line 1</td>
</tr>
<tr>
<td>Time</td>
<td>Meeting</td>
<td>Participants</td>
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<tr>
<td><strong>Day 2</strong></td>
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</tr>
<tr>
<td>9:30 AM – 10:00 AM</td>
<td>Agile Readiness Assessment - Day 1 retro</td>
<td>All Sr. Directors</td>
</tr>
<tr>
<td>10:00 AM - 11:00 AM</td>
<td>Agile Readiness Assessment - Insights from Project Manager</td>
<td>Project Managers</td>
</tr>
<tr>
<td>11:00 AM - 1:00 PM</td>
<td>Agile Readiness Assessment - Team 2 - Scrum Team + Project Overview</td>
<td>SM, PO, Architect and Manager</td>
</tr>
<tr>
<td>1:00 PM – 2:00 PM</td>
<td>Agile Readiness Assessment - Round Table discussions</td>
<td>Entire team</td>
</tr>
<tr>
<td>2:00 PM - 5:00 PM</td>
<td>Agile Readiness Assessment - Team 2 Detailed review with scrum team</td>
<td>Entire Team (Devs, QAs, TIs, POs)</td>
</tr>
<tr>
<td>5:00 PM - 6:00 PM</td>
<td>Agile Readiness Assessment - Discussions with Sr Technical Members</td>
<td>All Sr. Technical Members across all teams</td>
</tr>
<tr>
<td>6:30 PM - 7:30 PM</td>
<td>Agile Readiness Assessment - Discussion with Sr.Vice President of Business Line 2</td>
<td>Sr. Vice President of Business Line 2</td>
</tr>
<tr>
<td>Time</td>
<td>Meeting</td>
<td>Participants</td>
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<tr>
<td><strong>Day 3</strong></td>
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<tr>
<td>9:00 AM - 9:30 AM</td>
<td>Agile readiness Assessment - Insights from Tech Info Team</td>
<td>Tech Info Team Lead</td>
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<tr>
<td>9:30 AM - 10:00 AM</td>
<td>Agile readiness Assessment - Day 2 retro</td>
<td>All Sr. Directors</td>
</tr>
<tr>
<td>10:00 AM - 11:00 AM</td>
<td>Agile readiness Assessment - Insights from the Scrum Masters</td>
<td>All Scrum Masters</td>
</tr>
<tr>
<td>11:00 AM - 1:00 PM</td>
<td><strong>Agile readiness Assessment - Team 3 - Scrum Team + Project Overview</strong></td>
<td>SM, PO, Architect &amp; Manager + Naresh</td>
</tr>
<tr>
<td></td>
<td><strong>Agile readiness Assessment - Team 4 - Scrum Team + Project Overview</strong></td>
<td>SM, PO, Architect &amp; Manager + Ravi</td>
</tr>
<tr>
<td>1:00 PM - 2:00 PM</td>
<td>Agile Readiness Assessment - Discussions with Education Team</td>
<td>L &amp; D Team</td>
</tr>
<tr>
<td>2:00 PM - 5:00 PM</td>
<td>Agile readiness Assessment – Team 3 - Detailed review with scrum team</td>
<td>Entire Team (Devs, QAs, POs) + Naresh</td>
</tr>
<tr>
<td></td>
<td>Agile readiness Assessment – Team 4 - Detailed review of Project with scrum team</td>
<td>Entire Team (Devs, QAs, POs) + Ravi</td>
</tr>
<tr>
<td>5:00 PM - 6:00 PM</td>
<td>Agile readiness assessment - Insights from Internal Coaches</td>
<td>Agile Coaches</td>
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<tr>
<td></td>
<td>Team 3 Sprint Planning Meeting</td>
<td>Entire Team (Devs, QAs, POs)</td>
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<tr>
<td>Time</td>
<td>Meeting</td>
<td>Participants</td>
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<tr>
<td>Day 4</td>
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<tr>
<td>09:30 AM - 10:00 AM</td>
<td>Agile Readiness Assessment - Day 3 retro</td>
<td>All Sr. Directors</td>
</tr>
<tr>
<td>10:00 AM - 11:00 AM</td>
<td>Agile readiness assessment - Insights from QA perspective</td>
<td>QA Team Members</td>
</tr>
<tr>
<td>11:00 AM - 1:00 PM</td>
<td>Agile readiness Assessment – “Team 5” - Scrum Team + Project Overview</td>
<td>Project Manager, Product Owner and Scrum Master</td>
</tr>
<tr>
<td>1:00 PM – 2:00 PM</td>
<td>Agile readiness Assessment - Discussions around adopting Kanban</td>
<td>Teams trying Kanban</td>
</tr>
<tr>
<td>02:00 PM - 05:00 PM</td>
<td>Agile readiness Assessment - “Team 5” - Detailed review with scrum team</td>
<td>Entire Team (Devs, QAs, TIs, POs)</td>
</tr>
<tr>
<td>05:00 PM - 06:00 PM</td>
<td>Agile Readiness Assessment - Insights from Product Owners / Product Managers</td>
<td>PO &amp; PMs</td>
</tr>
<tr>
<td>06:30 PM - 07:30 PM</td>
<td>Discussion with Stakeholders in US</td>
<td>Sr. Vice President of Business Line 3</td>
</tr>
<tr>
<td>07:30 PM - 08:30 PM</td>
<td>Discussion with Stakeholders in US</td>
<td>Sr. Vice President of Business Line 4</td>
</tr>
<tr>
<td>Time</td>
<td>Meeting</td>
<td>Participants</td>
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<tr>
<td>Day 5</td>
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<tr>
<td>09:30 AM - 10:00 AM</td>
<td>Agile Readiness Assessment - Meeting with the HR Team to discuss how Agile will impact (help) them</td>
<td>HR Team</td>
</tr>
<tr>
<td>10:00 AM - 01:00 PM</td>
<td>Agile Way of Dealing with Uncertainty in a Complex Adaptive World - Workshop</td>
<td>All SMs; Coaches; All POs; All Sr. Leads</td>
</tr>
<tr>
<td>01:00 PM - 03:00 PM</td>
<td>Agile Readiness Assessment - <strong>Team 6</strong> - Scrum Team + Project Overview</td>
<td>Team 6 Members</td>
</tr>
<tr>
<td>03:00 PM - 05:30 PM</td>
<td>Working on the roadmap</td>
<td>All Sr. Directors</td>
</tr>
<tr>
<td>05.30 PM - 06.30 PM</td>
<td>Sync up call</td>
<td>All Stakeholders</td>
</tr>
</tbody>
</table>
What’s Working Well

- Project Managers (PM)
- Scrum Masters (SM)
- Product Owners (PO)
- Tech Architects
- QA
- Team
- SVPs
What we think is working well

Executive & Senior Management

- Solid commitment and support towards successful agile transition
- They know the nature of the beast and expectations are appropriately set
- Management is fully committed towards people’s success and their progress
- All roles are included across hierarchy and across the entire organisation
- Holistic investments including Human Resource, Learning & Development and Technology teams
- Objective is to deliver great, innovative products to customers
What we think is working well

Product Owners

- Integral member of the BLL team
- Acts as a bond between BLL and ENG team enabling implementation of features
- Participate in backlog grooming sessions along with the team
- Writing user stories along with acceptance criteria
- Are available to the team during the sprint for any clarification and providing feedback on user stories. Some POs even sign-off user stories as and when they are completed.
- Active participate in sprint reviews, along with external customers to provide sign-offs on user stories
What we think is working well

Scrum Masters

- Committed to facilitate various ceremonies and enabling team members
- Enabling communication and collaboration amongst team members
- Basic knowledge of agile and the nuances of the ceremonies
- Still relatively new in this role, but trying their best to perform the role of a SM
- Focusing on winning team’s trust and respect
What we think is working well

Team

- Commitment of the team to accomplish tasks
- Adherence to agile process
- Acceptance of the team on the Multi-rater feedback system
- Willingness to learn and pick new skills
Challenges Faced

- Sr. Vice Presidents (SVPs)
- Project Managers (PM)
- Scrum Masters (SM)
- Product Owners (PO)
- Tech Architects
- QA
- Team
Challenges faced by Sr. Vice Presidents

Teams

- Teams wound up in too much of day-to-day activities leading to losing the big picture
- There seems to be a lot of carryover sprint on sprint
- Predictability is lost. Teams don't know what and how much they can deliver
- Confusion on the various roles; role of leadership, etc. Lack of role clarity (esp. Cross Functional Roles) amongst team members. How best to involve Tech Info (Tech Writers) in teams?
- Surfacing timely RED flags to avoid last minute surprises is necessary
- People are suppressing their ideas
- Not asking the right Questions
- From total command and control structure to Self-Directed teams without any accountability, the company has swung the pendulum to the other extreme. We need to put the PMs as guard rails to help with the right level of self-direction
- Lacks the right mix of team members to manage personality conflicts
- Teams were not mature to handle both Sustenance Engineering and New Feature development
- Issue with knowledge transfers
- Too many stakeholders and general inertia to change
Challenges faced by SVPs…

✓ Project Managers

✓ PMs were left out in the initial communications. PMs have made themselves NON-FUNCTIONAL. They seem to have withdrawn and taken the back seat. They are expected to:

✓ manage release cycles
✓ work allocation between the various scrum team
✓ be the bond between the Sr. Management and the teams
✓ be involved in teams and help them with strategy and roadmap
✓ mentor and help with career management of teams

✓ Scrum Masters

✓ SMs are new and still in the process of learning
✓ Servant leadership mentality is lacking in the SMs

✓ Product Owners

✓ Effective grooming of backlogs by POs
✓ POs not appreciating technical debt but focusing more on feature completion
✓ Need for better conversations between Team and PO to flesh stories
Challenges faced by SVPs…

✔ Quality
✔ Too many defects. Lot of effort in QA but defects seems to be increasing
✔ Defect rates are high with no visibility on the how they are being managed given that the GA release is just 8 weeks away
✔ Lack of quality and automation effort in the right direction
✔ Few teams are exploring TDD. But we still don't have a strategy in place?

✔ Release Cycles
✔ Teams don't appreciate the rational behind long release times of the products
✔ Mentality of delivering products to customers not just completing sprints is lacking
✔ Target dates are seen as bad (RED)
✔ Long project time lines have some serious limitations:
  ✔ Lot of churn due to changing priorities
  ✔ Hard to keep up the motivations and energy levels of the team
Challenges faced by SVPs...

☑️ Agile Transition

☑️ As an Organisation, we are still struggling with the agile transition

☑️ Lack of Governance with the focus on Self-Directed teams

☑️ Lack of accountability

☑️ There is a lack of tight feedback cycles

☑️ Different interpretations of agile amongst teams

☑️ We still see a lot of Agile transition with the bad habits

☑️ Need for better communication, coordination and visibility with clarity on the big picture
PM: Issues/Concerns with Agile Adoption

- Self Directed teams
  - Misinterpretation: self-directed teams = No manager involvement required
  - Continuous Improvement is missing
  - Lack of passion & ownership
  - Lack of commitment towards release goals
  - Lack of accountability
  - Lack of autonomy in hiring/replacements
  - Lack of empowerment and decision making authority
  - Hard to explain to the team, the thin difference between coaching/mentoring & managing
  - Teams try to blame something for failure rather than owning it
  - Complacency and reduced risk taking ability - Willingness to come out of comfort zone
  - Too many key stakeholders/bosses for a member
  - Driving (technical) initiatives requires multiple layers of approval to get into backlog
  - Lack of insight on team's progress (forcing us to pay close watch)
  - Teams are not challenging the status-quo and failing to innovate
  - Failing to understand big picture & team's contributes to big picture
PM: Issues/Concerns with Agile Adoption

- **Agile Practices**
  - Planning and Estimations is failing
  - Are we missing the human side of agile
  - Is quality being build in? We've a huge number of bugs each sprint
  - Inefficient grooming sessions
  - For some user stories enough tasks are not created with the level of granularity required. This makes it slightly difficult while tracking
  - Managing Customer which are not planned during the sprint
  - Product Backlog as per market needs is missing
  - Customer engagement and bigger vision missing from product management organisation
  - Version One is not updated regularly
  - Process is not geared towards Product Development
  - Increasingly "Agile Process/Practices" encroaching upon new ideas/implementations/experimentations
PM: Issues/Concerns with Agile Adoption

✓ Road blocks
  ✓ Incomplete understanding of large teams on how to include partially allocated members
  ✓ Since PMs are not part of the day to day activities impediments are coming to notice very later stage of the sprint which causes waste of time
  ✓ Team member don't raise their concerns or observations timely

✓ Communication
  ✓ Lack of 'Agile Role' clarity from all levels
  ✓ Team is seeing manager as an outsider
  ✓ Some of the earlier coaching or expectations which asked Managers to move away from the mainstream activities
  ✓ Different interpretations of the direction given by Sr. Management
  ✓ Manager's role is not clearly defined in the current model
  ✓ Lack of transparency at some quarters
PM: Issues/Concerns with Agile Adoption

✓ Embracing Change

✓ Self-retrospection to bring change in you before expecting change in other team members is missing
✓ Failing to understand the cultural shift
✓ Resistance to change from old school
✓ Ourselves- Willingness to ask hard questions

✓ Performance Management

✓ Manager involvement is viewed from impact on performance review
Role PMs would like to Play

- Coaching/Mentoring/Leading the team
  - Understand real issues and help guide team to overcome or solve the problem
  - Mentoring - Facilitate conflicts resolution between roles
  - Educate coach as necessary
  - Educate team on the roles & responsibilities through coaching & setting right expectations
  - Help team to successfully execute projects using agile methods
  - Coaching team, time to time on practices and behaviour
  - Always appreciate team for what they accomplished and encourage for what else they do
  - Regular feedback
  - Continuous Communication

- Remove impediments
  - Help remove roadblocks and impediments in adoption of agile
  - Be aware of roadblocks through discussions and help members solve the same

- Publishing success stories
Role PMs would like to Play…

- **Engineering Excellence**
  - Play an active role in quality check
  - Focus on more Engineering Excellence and Quality
  - Provide the necessary training
  - Be part of the tech discussions, estimations, tech planning, quality assurance aspects
  - Would like to take part in defining the future vision of the product

- **Team Behaviour**
  - Bring Transparency
  - Accountability
  - Bring more openness culture using different tools and techniques.
  - Rewards and recognise efforts
  - Drive team towards innovation
  - Eliminate waste

- **Talent Management**
Impediments for playing effective Agile Manager Role

- **Role and Responsibilities**
  - Lack of clarity and guidelines
  - Not clear on Agile Functional Roles
  - No clear guidelines or directions for members who are not 100% allocated to scrums

- **Team Behaviour**
  - How to make every team member participate in discussions or make active meetings (make them actively participate in discussions)
  - Individual team members are great but together there is no sync
  - Culture of team brings down enthusiasm and passion. Need lot of energy to pull oneself up
  - Some time everyone's opinions are not considered

- **Different maturity levels of agile**

- **Undefined (un-prioritised) backlogs**

- **Not interested in agile methodology**
Challenges faced by ScrumMasters

- Clarity on Roles in the organisation
  - Management Awareness - mix up of roles (PMs, SM)
  - Scrum Masters are messengers of PMs

- Agile Planning
  - Managing change in Requirements and SE work
  - Estimation effectiveness and lack of Acceptance Criteria in stories
  - Managing unplanned work

- Teams still waiting for direction from PM/SM
  - Education Gap
  - Very few stories are picked up by the team
  - Passion amongst the team members
Challenges faced by ScrumMasters

- Too many meetings
  - Teams on an average spend about 1.4 hrs in a day for meetings.
  - Planning to get everyone for all of this is challenging
- Ineffective meetings
- How can we improve ourselves
  - We need effective coaching and mentoring
- Whom do we go to when there are issues?
  - Intrusion from PMs and POs with directions that are often contradicting
- Need a better way to handle planned and unplanned releases
- Lack of requirement clarity
- How to deal with sprint spillovers?
Advantages of Scrum

- Get to see something early
- Early time to market - don't have to wait for everything to be completed
- Collaboration
- Changes can be incorporated - pleases the customer
- Higher feature ownership
Limitations of Scrum

- Need teams members who can independently execute items
- Covers up non-performing members
- Individual accountability

Also SMs feel Scrum is applicable for the entire Product Development Cycle

Clearly SMs need more coaching to understand Agile/Scrum!!
Challenges faced by PO

- Process for the sake of process adherence is killing innovation & delivery
- Teams unable to accommodate the obvious aspects of a user story without explicit Acceptance Criteria
- Teams only focus on burning Sprint Backlog and not the Release Backlogs
- Teams playing safe and are quite laid back
- Teams lack understanding of the Big Picture while there is enough communication from management.
- Change is priorities and requirements are frowned upon by the team
- Involvement of Internal Consumers in backlog grooming and reviews
- PMs influencing the sprint backlog items without the knowledge of the PO
Challenges faced by Tech Architects

- Thrust of agile process
- Intermediate phase in transition is too much taxing
- Lack of role clarity and accountability of Managers, POs and SMs
- Agile is practiced as mini water-falls
- Need for strong agile coaches (esp. Technical Coaches)
- Cross functional expectation is incorrect since that inhibits any specialisation and career growth
- Change in requirements and knowledge of POs is questionable
- Agile has introduced more process and more managers, which is causing more confusion than before
Challenges faced by QA

- How to manage Automation?
  - Within sprints and release levels
  - Coverage and quality of automation
  - Sustenance tasks vs. new features

- Cross-Functional Role - Is it realistic/practical?

- How to manage change in requirements both at sprints and release levels?
  - How to manage clarification and expanding scope inside the sprint?

- Agile Planning
  - Effective estimations given the change in Requirements and SE work

- How to manage risk inside Agile?
  - Not thinking through end-to-end scenarios
Challenges faced by Team

- Estimation (story points vs. hours) & Planning (capacity vs. velocity) Confusion
  - Esp. because of varied type of work R&D, Sustenance and new feature
- Clarity on role of a Cross Functional team member
  - What are the expectations of cross functional team member?
  - Need more skills training to improve
- Teams don’t like to work on both Sustenance Engineering and new Features
- Feedback process and performance appraisal
- Inaction on retrospective points
- Poor Product Quality and huge number of bugs inject despite
  - heavy QA and review process
  - Code review at multiple levels is not helping reduce bugs
Challenges faced by Team

- Scope changes mind sprint, estimations go up, however nothing is removed from the sprint backlog
- Lack clarity on tasks and story details post discussions
- How to manage long release time lines
  - Sometimes up to 50% changes from the original plan
  - How to measure and show productivity improvements?
- What are the quality and productivity metrics?
- Teams seem to be chasing burn-down charts
- While the planning is done using Story Points but the success or failure is measured by the effort (Ex. Hours) on completing stories
- Challenge in working on some complex modules
- Knowledge of POs is questionable
Challenges faced by Team

☑ Too many meetings, long reviews and unplanned meetings
☑ Setting up direct customer interaction will help rather than going through PO
☑ Micro management by managers
  ☑ Penalties imposed on teams when the team members skips ceremonies such as Daily Stand-up
☑ Automation within the sprints
☑ Adapting to agile mindset
☑ Performance appraisal by manager who are not part of the team
☑ Education on providing and receiving feedback in the Multi-rater system
☑ Expectations of accomplishing work in non core areas of individuals in the name of Cross Functional team member. (Ex. Tech writers to fulfil in the role of QA and similarly for others)
Attaining Fluency
Knowledge & Skills
### High-Level Improvement Areas (Focus Areas)

<table>
<thead>
<tr>
<th>Agile DNA</th>
<th>Engineering Excellence</th>
</tr>
</thead>
<tbody>
<tr>
<td>✓ Culture to embraces change</td>
<td>✓ Inverting the Test Pyramid</td>
</tr>
<tr>
<td>✓ Innovation centricity</td>
<td>✓ TDD/BDD</td>
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<tr>
<td>✓ Team collaboration</td>
<td>✓ Automation</td>
</tr>
<tr>
<td>✓ Team events</td>
<td>✓ CI with static &amp; dynamic code analysis, reporting, build staging</td>
</tr>
<tr>
<td>✓ Awareness</td>
<td>✓ Clean Code (Craftsmanship)</td>
</tr>
<tr>
<td>✓ Transparency</td>
<td>✓ Design principles &amp; patterns</td>
</tr>
<tr>
<td>Customer collaboration</td>
<td>✓ Refactoring skills + Code smells</td>
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<tr>
<td>✓ Better engagement</td>
<td>✓ Coding conventions</td>
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<tr>
<td>✓ More value delivered faster</td>
<td>✓ Architectural patterns</td>
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<tr>
<td>✓ Focus on Internal Customers</td>
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<tr>
<td>Product Discovery</td>
<td>Dev Ops Team</td>
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<tr>
<td>✓ Story mapping</td>
<td>✓ Tools for Dev, Test &amp; Process</td>
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<tr>
<td>✓ Estimation</td>
<td>✓ Automation (beyond test automation)</td>
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<tr>
<td>✓ Project plan</td>
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<tr>
<td>✓ User Experience</td>
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<tr>
<td>Governance (What, How &amp; Tools)</td>
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<tr>
<td>Internal coaches (Network of change agents)</td>
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<tr>
<td>On-boarding (Org, Project, Level &amp; Role)</td>
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<tr>
<td>Learning &amp; Development</td>
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</tbody>
</table>
Agile DNA

☑ Team Collaboration
  ☑ Cross functional self-sufficient teams
  ☑ Project Wikis and Project handbooks
  ☑ Continuous improvements, retrospectives, futuroscopes
  ☑ Collaboration games for running effective meetings
  ☑ Information radiators in the team room
  ☑ Appraisal process should be more team centric not individual centric. Add things like 360 Degree reviews.
  ☑ Get first hand working experience with the candidate before hiring/rejecting them during the interview process

☑ Building a learning culture
  ☑ Pair Programming and Cross-functional pairing
  ☑ Encourage Generalizing Specialists
  ☑ Refactoring fests, design fest, hackatons, code retreat, coding dojos
  ☑ Book clubs, library, open talks, Tech talks, user groups, conferences
  ☑ Scratch your person itch day
  ☑ CoE, SIGs, Tech Evangelists
  ☑ Use game mechanics to drive the right behaviour in employees
Clean Code (Craftsmanship) Fundamentals

- Developers and Testers need to master these skills/concepts
  - Difference between
    - testing v/s checking
    - black box v/s white box
    - happy v/s negative
    - unit v/s integration testing
    - API testing v/s GUI testing
  - DB testing, Performance testing, Load testing, Security testing, etc.

- Basic unit testing skills
  - Tools
  - Breaking dependencies between classes/layers (mocking/stubbing/simulators)
  - Unit Testing patterns
Clean Code (Craftsmanship) Fundamentals...

- Continuous Integration process should automate
  - Code quality checks like C3 (Coverage, Complexity & Churn)
  - Traceability
  - Static code analysis,
  - Dynamic code analysis
  - Reporting
  - Historical data/trends
  - Build Pipeline

- Skills required for Simple Design
  - OO Design principles & patterns
  - Refactoring + Code smells
  - Coding conventions & idioms
  - Architectural patterns
Recommended Tools

- Productivity Tools - Eclipse, IntelliJ, ReSharper
- Unit Testing - xUnit, Mockito, Moq, Jasmin, QUnit
- Behavior Driven Development - SpecFlow, Cucumber, FitNesse
- Evolutionary Database Migration tool - Liquibase, Fly Weight, Migrator.Net, MigSharp
- Mutation testing - Jumble, NinjaTurtles, CREAM, Nester
- Build & Deployment - Gradle, NAnt, nRake
- CI Server - Jenkins, Teamcity
- Code Coverage - Emma, OpenCover/PartCover, NCover, dotCover
- Other CI Tools: JDepend, FxCop, StyleCop, CheckStyle, FindBugs, Sonar, PMD
- Version control - Git
- Web Automation testing - Selenium, Sahi, Watir
- WinForm Automation testing - White, Quail
- Code Review - Barkeep, Reviewboard, Rietveld

Thank You!

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