WELCOME YOUR NEW DIGITAL TEAM MEMBER

Scrum Masters, Be Aware.
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• Accenture Agile Professional Community Lead
• Agile Practitioner
• Half Marathon Runner
• Oxfam 100 KMS Trailwalker
• Weekend Cook
• Worships Manchester United (Glory Manchester United)
RAGHU MEHARWADE

• Oxfam Trailwalker
• Lead Functional Architect – Accenture myWizard Agile
• Scrum Master/Agile SME/Coach
• Innovator
Attendee Demographics
AGENDA

01  Ideal Role of a Scrum Master
02  The Scrum Master in Reality
03  Basics of AI and It’s Impact
04  Opportunities of Applying AI Automation in the Agile Lifecycle
05  Virtual Scrum Master: Functional Representation
06  Case Study
07  Challenges in Adopting The Virtual Scrum Master
08  Scrum Masters, What’s Next?
ROLE OF A SCRUM MASTER

Facilitator

- Responsible for Agile values and practices
- Helps the team to perform at their highest level
- Protector from external influences
- Protects the team from complacency
THE SCRUM MASTER IN REALITY

Managing operational expectations of the team and leadership

Teams working in distributed environments

Little time to devote to coaching and guiding the Scrum Team on Scrum principles and practices.

Scrum Master have become glorified post masters
CAN ARTIFICIAL INTELLIGENCE (AI) BE APPLIED AND HELP THE SCRUM MASTER / TEAM MEMBER
WHAT IS ARTIFICIAL INTELLIGENCE?
WHAT CAN AI DO?
AI ALLOWS SMART MACHINES TO EXTEND HUMAN CAPABILITIES

- PERCEIVE THE WORLD
  - Computing Vision
  - Audio Processing

- ANALYZE AND UNDERSTAND
  - Natural Language Processing
  - Knowledge Representation

- MAKE INFORMED DECISIONS
  - Machine Learning
  - Expert Systems

- IMPROVE PERFORMANCE
  - Virtual Agent
  - Identity Analytics
  - Cognitive Robotics
  - Speech Analytics
  - Recommendation Systems
  - Data Visualization

SENSE
LEARN
COMPREHEND
ACT

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HOW DO WE CLASSIFY AI?

- **ASI (Artificial Super Intelligence)**
- **AGI (Artificial General Intelligence)**
- **ANI (Artificial Narrow Intelligence)**

Singularity
WHY ARE WE TALKING ABOUT AI?

Workers say AI will change their job in the next three years. 87%

Workers are already using some aspect of AI at work. 39%

Workers feel at least “some” or “half” of their job could be performed by intelligent automation. 76%

Routine work hours expended across today’s PPM disciplines could be eliminated as a result of collaboration between humans and smart machines. 80%

Source:
https://www.gartner.com/smarterwithgartner/smart-machines-to-take-over-most-routine-ppm-work/
https://www.atlassian.com/teamwork/artificial-intelligence
APPLICATION OF ARTIFICIAL INTELLIGENCE (AI) TO HELP THE SCRAM MASTER / TEAM MEMBER
CAN YOU IDENTIFY THE TASKS OF A SCRUM MASTER/AGILE TEAM THAT CAN BE AUTOMATED USING AI?
APPROACH TO AI AUTOMATION

Faster

Better

& then

Governance

Track & Control
Metrics / Status Reporting
Manage Risks / Issues / Impediments
Monitor Backlog

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VIRTUAL SCRUM MASTER: FUNCTIONAL REPRESENTATION

Team / Product Owner / Scrum Master / Stakeholders

Virtual Scrum Master with AI Engine

Lifecycle Tools
- TFS
- JIRA
- CA Rally
- VersionOne
- Jenkins
- HP ALM
- & Other tools

Tools

- Structured
- Unstructured
- Semi-structured
# Virtual Scrum Master Features

<table>
<thead>
<tr>
<th><strong>Track</strong> story quality</th>
<th><strong>Check</strong> story viability</th>
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<tbody>
<tr>
<td><strong>Monitor</strong> the overall project status</td>
<td><strong>Introduce</strong> chatbot 24/7</td>
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<tr>
<td><strong>Perform</strong> predictive and descriptive analytics</td>
<td><strong>Finalize</strong> self-heal routine issues</td>
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<tr>
<td><strong>Report</strong> on Agile metrics</td>
<td><strong>Provide</strong> alerts and recommendations</td>
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<tr>
<td><strong>Guide</strong> support for scaled Agile practices</td>
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**Assist** with teams, including:
- Release and sprint planning
- Daily stand-up
- Retrospective
- Report automation
CASE STUDY
USE OF VIRTUAL SCRUM MASTER FOR A MULTI-LINE INSURER

Experience Report:
https://www.agilealliance.org/resources/experience-reports/individuals-and-interactions-over-processes-and-tools/
IMPLEMENTING VIRTUAL SCRUM MASTER

- Team Foundation Server (TFS) integrated with Virtual Scrum Master
- Microsoft Test Management (MTM)

- Story Readiness Assistant
- Scrum Assistant: Release Planner, Sprint Planner

- Scrum Assistant: Retrospective, Daily Stand-Up

- Continuous Integration/Continuous Delivery using GIT, TeamCity, TDS, Octopus Deploy, Sitecore Ship

- Agile Predictive & Descriptive Analytics
- Alerts & Recommendations
- ChatBot

- Automated Smoke & Regression Testing using Selenium
- Automated Visual Test Comparison
- Webtrends Analytics
- Automated Load Test using Visual Studio
- Performance Monitoring using Visual Studio

- Smoke test Integration with CI and Auto-generated Mails Post Deployment in System Integration & Pre-prod Environments

DevOps
- Test Automation
- myWizard
- Others

Governance

Discovery
- Team Foundation Server (TFS) integrated with Virtual Scrum Master
- Microsoft Test Management (MTM)

Preparation
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Other Tools:
- Team Foundation Server (TFS)
- Microsoft Test Management (MTM)
- Scrum Assistant: Release Planner, Sprint Planner
- Scrum Assistant: Retrospective, Daily Stand-Up
- Continuous Integration/Continuous Delivery using GIT, TeamCity, TDS, Octopus Deploy, Sitecore Ship
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Report Automation
**BENEFITS GAINED**

**Team**
- Reduction of time spent by team attending various Agile ceremonies from **95 hours** to **63 hours** per sprint

**Scrum Master**
- Reduction of non-productive hours from **27 hours** to **9 hours** per sprint

**Key Features Used**
- ❖ Dashboards
- ❖ Scrum Assistants
- ❖ Virtual Scrum Master
- ❖ Agile AI & Analytics
- ❖ Publish Metrics
CHALLENGES IN ADOPTING THE VIRTUAL SCRUM MASTER

PEOPLE
- Fear of machines taking over jobs
- Convincing buyers of its value
- Mindset change to accept virtual Scrum Master as a part of the team
- Virtual Scrum Master is impeding the collaboration and discussions
- Virtual Scrum Master is taking the team towards command and control behavior

PROCESS
- Data confidentiality
- Insights are as good as the underlying data
- Short duration projects
- Investment priorities / budgetary constraints
- Become explainable, ethical, responsible AI

TECHNOLOGY
- Virtual Scrum Master needs data from various tools
- Demystifying AI technologies
- Low data volume/quality
**SCRFUM MASTERS, WHAT’S NEXT?**

**GO BEYOND AGILE**
- Scale Agile
- Learn new techniques & practices
- Promote hackathons & set up dojo teams to drive innovation & excellence

**CHALLENGE THE PROCESS**
- Product mindset
- Value Stream Mapping across the product lifecycle
- Push for CI-CD pipelines

**STAKEHOLDERS**
- Product Owners
- Support teams
- Business Users
- Hiring managers

**BE PART OF THE TEAM**
- Assist the development team
- Coach teams on engineering practices

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**EVOLVE FROM PROCESS SCRUM MASTER TO A “GREAT” SCRUM MASTER**
CONCLUSION

• Today’s age is of human empowerment, **AI in Agile will help us to increase collaboration** between and within the teams and augment it to the next level where we are continuously improving

• Disrupted Agile with **AI is no longer a trend. It’s a reality** that’s being accelerated by increased automation in the software development process, via artificial intelligence and cognitive computing.

• **AI can help us to do Agile** better. Embrace your new digital co-worker!
Q&A
THANK YOU

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