LEAN TOOLS FOR AGILE SOFTWARE DEVELOPMENT – What’s in your toolbox?

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Lean Tools for Agile Software Development

- Similarities of Agile and Lean
- Lean Tools
  - Kano Curve
  - Value Stream Mapping
  - Fishbone Diagram and 5 Why’s
  - Other
- Q&A
## The Principles Behind Disciplined Agile

<table>
<thead>
<tr>
<th>Principle</th>
<th>Action</th>
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<tr>
<td>Delight the Stakeholders</td>
<td>Welcome Changing Requirements</td>
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<td>Delivery consumable solutions frequently</td>
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<td>Stakeholders and developers work together daily</td>
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<td>Build teams around motivated people</td>
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<td>Early and Continuous Delivery of Valuable Solutions</td>
<td>Sustainable delivery pace</td>
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<td>Continuous attention to technical excellence</td>
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<td>Simplicity: the art of maximizing the amount of work not done</td>
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<td>Self-organizing teams</td>
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<td>Face-to-face conversation is best</td>
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<td>Measure Success via Consumable Solutions</td>
<td>Leverage and evolve assets within your enterprise</td>
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<td>Visualize work to produce a smooth delivery flow; Minimize WIP</td>
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<td>Evolve the enterprise to support agile</td>
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<td>Regular reflection &amp; adaption</td>
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Lean Principles of Software Development

Eliminate Waste  Build Quality In  Create Knowledge  Defer Commitment

Deliver Fast  Respect People  Optimize the Whole

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#DADay2018  Lean Software Development: An Agile Toolkit by Mary Poppendieck 2003
Kano Curve

- Could-haves (unspoken needs, “wow” factors)
- Should-haves (spoken needs, more is better)
- Must-haves (unspoken needs, taken for granted)
- Reverse

Customer response vs. Degree to which a customer need is met

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Value Stream Mapping
Fishbone (Ishikawa) Diagram

To get to the root cause – Ask WHY at least five times!!
Other Tools

• **5S** – Waste Identification and Removal
• **Poke Yoke** – Mistake Proofing
• **Persona/Journey Mapping** – Identifying the Value Stream for Specific Groups
• **Hansei** – Reflection i.e. Retrospective
Tools Summary

Roadmaps

Envision
Get going in right direction

Collaboratively build a consumable solution in an evolutionary manner

Next release
Release solution
Operate & support
Decommission solution

Change requests

Concept Inception Construction Transition Production Retire

Delivery
DevOps

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Thank You!