Agile and ITIL: Friends or Foes?

Presenter: Heather Milam, VP of Quality and ITIL
What is an IT Service – Delivering value to the Customer to facilitate outcomes the customer wants to achieve without ownership of costs or risks.

What is IT Service Management – Entire activities, directed by policies, organized and structured processes an supporting procedures that are performed by an organization to design, plan, deliver, operate and control IT services to customers.

History of ITIL
- Est. 1980’s by UK Government Central Computer & Telecommunications Agency (CCTA)
- 2006 V2 - Service Support and Service Delivery
- 2007 V3 - Extended beyond for a more holistic view of IT
- 2019 V4 - Focus DevOps, Lean and Agile, incl. Digital transformation, Cloud, AI ops, Microservices
Like SAFe, ITIL is a Framework

Before we start: What is ITIL?
A Framework:

ITIL is a set of practices for IT service management (ITSM) that focuses on aligning IT services with the needs of business.

SAFe: A Framework for scaling Agile across an enterprise
IT Service – A means of delivering value to the Customer to facilitate outcomes the customer wants to achieve without the ownership of the specific costs or risks.

• Based on this definition....

• Do you believe the products your company provides would be considered an IT Service?
Examples of Just Some IT Services Your Company May Use:

- Jira Software
- TCS 50 Consultancy Services
- Tata Consultancy Services
- Microsoft Azure
- Office 365
- Cisco Webex
- HP Enterprise
- Splunk
- VMware
- IBM
- ServiceNow
- Verizon
- Virtual Clarity
- Citrix XenApp
- CenturyLink
How are Agile and ITIL Similar

• Provide a Framework for guidance
• Set of Best practices, principles, guidelines and standards
• Provides a standard set of skills, training and capabilities for all to work the same regardless of technology stack
• Geared toward best in class or most efficient way to work
• Workflow and integrations of workflows
• Automation is key
• Measurable
• Predictability
• Transparency
More Similar Than You Might Think!

ITIL® Practitioner’s 9 Guiding Principles

1. Focus on Value
2. Work Holistically
3. Keep It Simple
4. Design for Experience
5. Collaborate
6. Progress Iteratively
7. Observe Directly
8. Be Transparent

Agile 12 Guiding Principles

1. Satisfy The Customer
2. Deliver Working Software Frequently
3. Collaborate Daily
4. Welcome Changing Requirements
5. Insure Of Progress Through Working Product
6. Motivated Individuals
7. Continuous Attention To Simplicity
8. Promote Sustainable Development
9. Self-organizing

Visual Credit: ITSM Zone & Slide Salad
Close the ITIL Gap in SAFe

#1 Take an economic view

#2 Apply systems thinking

#3 Assume variability; preserve options

#4 Build incrementally with fast, integrated learning cycles

#5 Base milestones on objective evaluation of working systems

#6 Visualize and limit WIP, reduce batch sizes, and manage queue lengths

#7 Apply cadence, synchronize with cross-domain planning

#8 Unlock the intrinsic motivation of knowledge workers

#9 Decentralize decision-making

Work Holistically
5 stages of an ITIL Service Lifecycle

**SERVICE STRATEGY**
- Who Are the Customers?
- What Services Are Needed?
- What Capabilities Are Required?
- How Services Will Be Funded and Delivered?
- How Value Will Be Determined?
- Who/How Will Manage the Business Relationship?
- Overall Policies and Objectives for ITSM

**SERVICE DESIGN**
- Realize the Strategy
- Create the Service Catalog
- Design Efficient, Cost Effective Services, Processes & Policies
- Identify & Manage Suppliers
- Create Capacity & Availability Plans
- Address Security Requirements
- Support Business Continuity Plans
- Create SDF (Service Design Package)

**SERVICE TRANSITION**
- Implement New Services Per Design
- Build, Test and Deploy Services
- Plan and Manage Changes to Services
- Manage Risk to Existing Services
- Provide Knowledge on Service / Assets
- Ensure Business Value is Obtained

**SERVICE OPERATIONS**
- Deliver Services to Authorized Users
- Within Service Levels
- Optimize Cost and Quality
- Execute Operational Controls
- Build & Maintain User Satisfaction
- Minimize Service Outage Impact
- Enable Business Outcomes

Continual Service Improvement
- Realign to the changing business needs
  - Implement improvements
  - Improve effectiveness
  - Improve efficiency
  - Optimize costs
5 Stages of ITIL Aligned to Agile

Service Strategy
- Approved Business Case

Service Design
- Project Vision Statement
- Product backlog
- Sprint planning
- Sprint backlog
- Sprint execution
- Sprint retrospective
- Sprint review

Service Transition
- INSPECT
- ADAPT

Service Operation
- Daily scrum
- ELS

Warranty Service-Requirements

Visual Credit: ITIL.org
A High Level Alignment of ITIL to SAFe

Service Strategy

Service Design

Service Transition

Service Operations
**Service Strategy VS Lean Portfolio Mgmt.**

### Service Strategy NFRs
- Plan for Operations
  - Strategy
- Cost of Operations
- Prepare the Demand
- Customer SLAS

### Lean Portfolio Mgmt.
- Governs Portfolio
- Sets Strategy
- Economic Value Analysis
  - Canvas
  - Charter
Design for Operation ‘ilities

Improve


Specification
Development
Deployment
Evolution
DevOps & ITSM

- ITIL encourages organizations to continuously adapt processes to current business needs
- Apply agile, lean and DevOps principles over a foundation of ITIL best practice
- ITSM processes are essential to ongoing operations, continual improvement and value creation
- DevOps needs ITSM best practices to meet the goal of deploying faster changes without causing disruption
- The integration of DevOps and ITSM helps to identify, reduce and eliminate ongoing risks and constraints

Repeatable service management processes can lead the way to stable continuous delivery and increased flow.
<table>
<thead>
<tr>
<th>Service Transition</th>
<th>DevOps/Release/Agility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application Development</td>
<td>Agile Team Create</td>
</tr>
<tr>
<td>Service Validation/Testing</td>
<td>High Quality Solution</td>
</tr>
<tr>
<td>Transition the information</td>
<td>End Architecture / Design</td>
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<tr>
<td>to operate. Automate and</td>
<td>Continuous Delivery Pipe</td>
</tr>
<tr>
<td>Build for Success and</td>
<td>Release On Demand</td>
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<tr>
<td>Recovery</td>
<td>Customer Activation</td>
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</table>

Transition the information to operate. Automate and Build for Success and Recovery.
Service Operations vs DevOps/Agile

Service Operations
- Build For Monitoring
- Building Auto Recovery
- Segment Access
- Feedback Loop
- Known Defects at Release
- IT Operations Control
- Capturing Knowledge
- Building for Reduced Cost
- Identify the failure

DevOps/Release/Agility
- Instrumentation, Logging
- Automated Recovery
- Infra or Access
- Backlog Prioritization
- Defect Triage
- Scheduler Jobs / Maint.
- Tech Knowledge
- Run Books – How to Solve
- Usage Optimization
Do you focus on stabilizing your environment?

**Self-assessment: Stabilize sub-dimension**

1. **Sit** — We experience frequent unplanned outages and/or security breaches with long recovery times.
2. **Crawl** — We experience occasional unplanned outages, but recover within our service level agreements.
3. **Walk** — We have very few unplanned outages; availability, security, and disaster recovery measures are effective.
4. **Run** — We have no unplanned outages; We plan and rehearse failure and recovery.
5. **Fly** — We maximize resiliency by deliberately injecting faults into our production environment and rehearsing recovery procedures.
Do you build for Quick Response?

Self-assessment: Respond sub-dimension

1. Sit — Customers find issues before we do; resolving high priority issues is time consuming and reactive; customers have low confidence in our ability to recover from production issues.

2. Crawl — Operations owns production issues; development involvement requires significant escalation; teams blame each other in times of crisis.

3. Walk — Development and Operations collectively own the incident resolution process; recovering from major incidents is reactive but a team effort.

4. Run — Our monitoring systems detect most issues before our customers do; Dev and Ops work proactively to recover from major incidents.

5. Fly — Our monitoring systems alert us to dangerous conditions based on carefully-designed tolerance thresholds; Developers are responsible for supporting their own code and proactively issue fixes through the pipeline before users are affected.
• Release & Change Management
• Problem Management
• Knowledge Management
• IT Service Continuity (ITSC) & Availability Mgmt.
• CMDB (Configuration)
• Service Desk & Incident Mgmt. IT Operations Control
• Technical Customer Advocates/Service Level Mgmt.
• Process Manager Financial Operations
• Event Management / Monitoring / AI Ops
• Capacity management
• Asset Management

Service Reporting and Continual Improvement are the responsibility of All Process Managers and Owners
Key Performance and Risk Indicators are a standard mechanism to show progress.

Transformation Measures
• ITIL Capability Maturity Model
• ITSM Process Maturity

Results Measures
• Availability
• Mean time to resolve
• Mean time to identify
• Change without customer impact
• Major problem aging
• Knowledge articles evaluation
• Many more by process
• Remember customer value & satisfaction is realized thru the holistic end to end service, not just a feature.

• Think with an operational mindset in everything you do.
  
  • Strategy -> Portfolio Mgmt.
  • Design -> Business Solutions/Systems Engineering
  • Transition -> DevOps/Release/Agility
  • Operate -> DevOps/Release/Agility

• Put your Technical Service Desk hat on, if you were in that room... ask yourself
  
  – How would I know I have an event or incident?
  – What would I need to know if this service falls to it’s knees?
  – How can I expedite the return to service?
  – How can I get myself out of needing to be called to the bridge?
  – What did I learn during the build lifecycle that I should share or automate before it happens in production?
ITIL and SAFe are both frameworks geared to run “Best in Class”
Both have matured to support and integrate the other’s frameworks.
Both are intended to “Provide Value” and “Ensure Customer Satisfaction”
SAFe and ITIL are complementary.

ITIL is a reflection on how well the organization is following SAFe DevOps.