HDI® 2018 CONFERENCE & EXPO

Flow, Feedback and the Service Desk

Donna Knapp @ITSM_Donna

dknapp@itsmacademy.com

CONNECTING THE WORLD OF SERVICE & SUPPORT

#HDIConf

About…

CONNECTING THE WORLD OF SERVICE & SUPPORT

ITSM Academy

- Full service provider of IT Service Management (ITSM) education and advice
- Accredited and sustainable education and training
  - ITIL®
  - Process Design (CPDE)
  - DevOps
  - Agile Service Management®

Donna Knapp

- Author
- Curriculum Development Manager
- Certified Process Design Engineer
- ITIL® Expert, ITIL Practitioner
- DevOps Foundation, DOL, DTE
- Certified Scrum Master
- Certified Agile Process Owner
- Certified Agile Service Manager
- Certified in Knowledge-Centered Support (KCS) Principles

ITSM ACADEMY …educate & inspire®

DevOps Campus …at ITSM Academy

ITIL® is a registered trade marks of AXELOS Limited.

#HDIConf

HDI 2018
CONFERENCE & EXPO

CONNECTING
THE WORLD
OF SERVICE &
SUPPORT

Agenda

Flow

Feedback

Experimentation and continuous improvement

The role of the service desk

The role of leadership

HDI 2018
CONFERENCE & EXPO

CONNECTING
THE WORLD
OF SERVICE &
SUPPORT
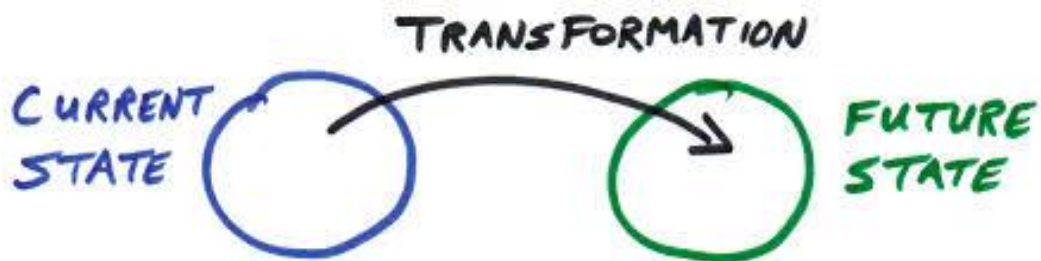
IT is Undergoing a Transformation

HDI 2018
CONFERENCE & EXPO

CONNECTING
WORLD
OF SERVICE &
SUPPORT

Agile and DevOps Practices are Part of the Transformation

Speed – Agility – Productivity – Stability – Quality

The Business   **Agile/Lean/DevOps/Agile Service Management**

Winning through Innovation

Continuous Integration, Continuous Delivery, Continuous Testing, Continuous Monitoring, Continuous Operations

Improving the ability of IT to produce software faster improves the ability of the business to deliver value to customers faster.

An important point…

- Not all applications are created equal
- Agile and DevOps focus on applications where speed will make a **business** difference

DevOps is a cultural and professional movement that stresses communication, collaboration and integration between software developers and IT operations professionals while automating the process of software delivery and infrastructure changes

HDI 2018
CONFERENCE & EXPO

CONNECTING
WORLD
OF SERVICE &
SUPPORT

What this Means to the Service Desk

- Variable rate projects are heading your way
  - Understand the implications
- You are still the 'face' of IT
- Get good at setting expectations
  - Service level agreements
  - Service catalog
  - Communication channels (meet customers where they are)
- Get good at asking for what you <u>need</u>
- Get good at communicating what you <u>do</u> and what you <u>have</u>

The Service Desk plays an important role in both (1) helping the business and IT prepare for a faster rate of change and (2) capturing customer experience.

HDI 2018
CONFERENCE & EXPO

CONNECTING
WORLD
OF SERVICE &
SUPPORT

DevOps and Technical Support

- 73% of support teams are dissatisfied with their current level of involvement with development
- 32% do not share knowledge articles between the support and development teams
- While 89% of organizations have a change management process implemented, only 49% of organizations have one that works
- 10% of organizations are considering DevOps
  Source: HDI Research Brief 02/2016

How can we change things?

Flow

Understand and increase the flow of work

Flow

• Principles of Lean thinking

Define Value
Map Value Stream
Create Flow
Customer Pull
Pursue Perfection

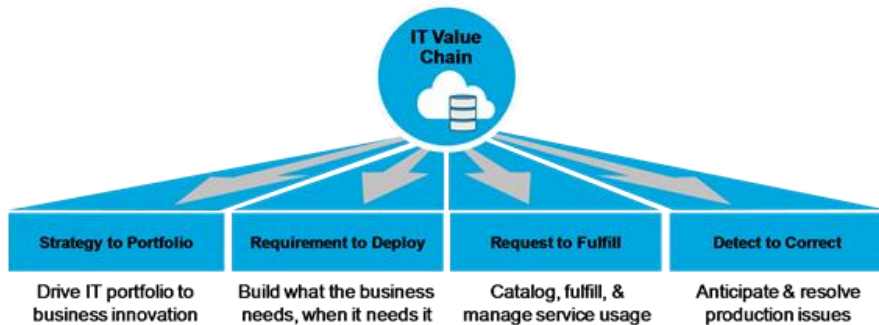Remove Waste Maximize Value

Theory of Constraints

Identify the most important limiting factor (i.e., constraint) that stands in the way of achieving a goal and then systematically improve that constraint until it is no longer the limiting factor.

IT Value Streams

| IT4IT is a standard reference architecture for managing the business of IT. |

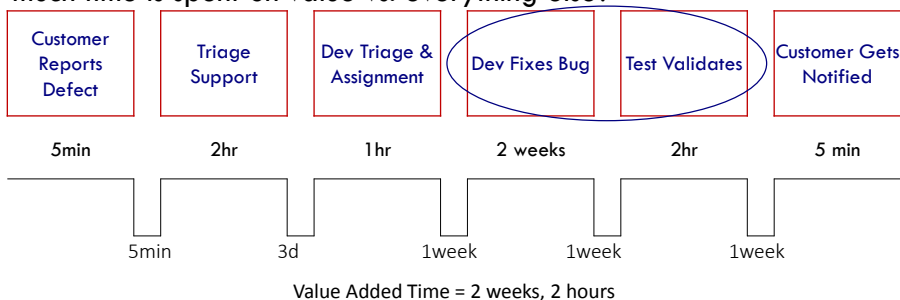**IT Value Chain**

Strategy to Portfolio	Requirement to Deploy	Request to Fulfill	Detect to Correct
Drive IT portfolio to business innovation	Build what the business needs, when it needs it	Catalog, fulfill, & manage service usage	Anticipate & resolve production issues

Source: http://www.opengroup.org/it4it/about

The IT4IT Reference Architecture standard can be downloaded from The Open Group web site.

A Simple Example – Current State

Value efficiency: Being able to produce value with the minimum amount of time and resources.

Defect Resolution Process

- Where is value created in the process?
- How much time is spent on value vs. everything else?

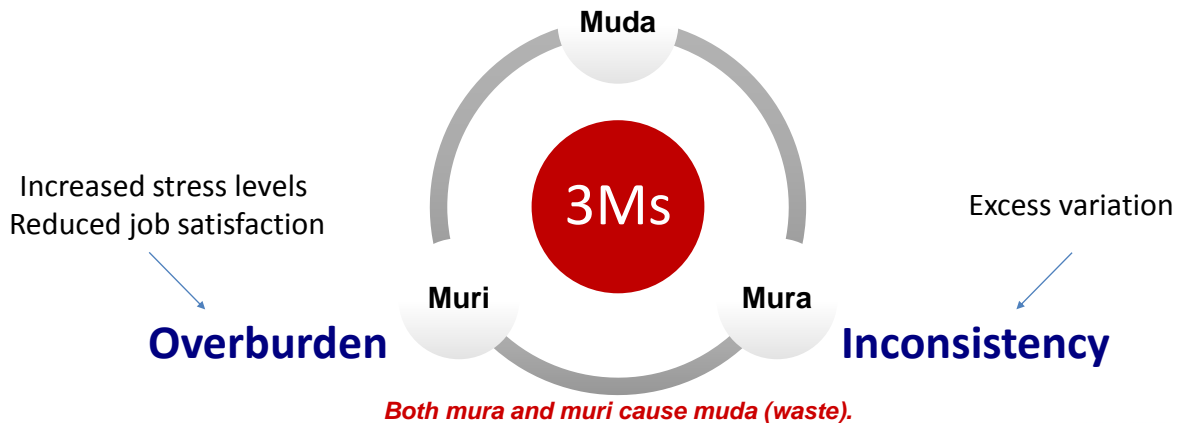| Customer Reports Defect	Triage Support	Dev Triage & Assignment	Dev Fixes Bug	Test Validates	Customer Gets Notified
5min	2hr	1hr	2 weeks	2hr	5 min

| | 5min | 3d | 1week | 1week | 1week | |

Value Added Time = 2 weeks, 2 hours

In this example, it takes the organization 6 weeks to deliver 2 weeks worth of value to the end customer.

Barriers to Flow

Waste

Muda

Increased stress levels
Reduced job satisfaction

3Ms

Excess variation

Muri

Mura

Overburden

Inconsistency

Both mura and muri cause muda (waste).

The Tiered Support Challenge

- The traditional tiered support model is designed to handle incidents in the most efficient way possible

- Despite its intended benefits, challenges are emerging including
  - Work in process (WIP) queues
  - Delayed resolution as an incident works its way through the tiers
  - Overwhelmed service desk analysts and subject matter experts
  - Incorrect incident routing resulting in delays, lost productivity and ticket bouncing
  - Poor collaboration and knowledge sharing

An ineffective tiered support model leads to longer recovery times, higher cost per incident and lower user productivity and satisfaction.

HDI 2018
CONFERENCE & EXPO

CONNECTING
WORLD
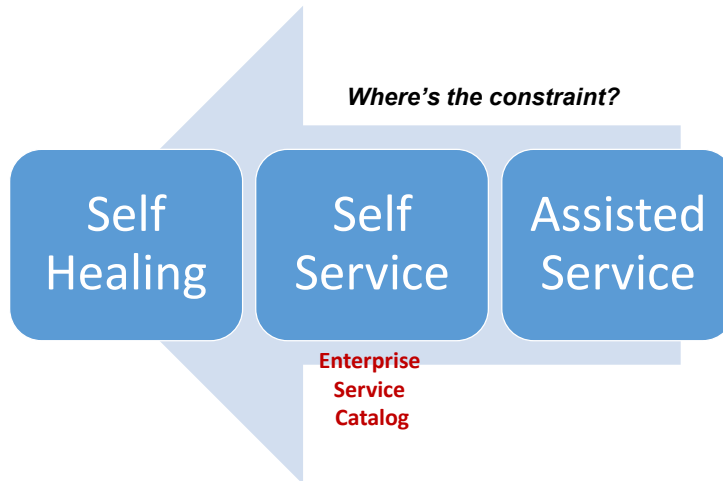OF SERVICE &
SUPPORT

Improving Flow

- Understand the flow of work from "idea" to "valued use" of a new feature, product, or service
- That includes
  - Customer satisfaction
  - User experience
- Understand and remove constraints
  - Reduce or remove constraints related to non-development issues
- Never allow local optimization to cause global degradation
- Understand the entire system
  - People, processes, technology, information

HDI 2018
CONFERENCE & EXPO

CONNECTING
WORLD
OF SERVICE &
SUPPORT

Common and Emerging Practices

Shift Left

Where's the constraint?

Self Healing	Self Service	Assisted Service

Enterprise Service Catalog

The use of virtual customer assistants (VCAs) will jump by 1,000% by 2020 (Gartner).

Collaborate

- Swarming – involves getting the 'whole team' together to focus on solving a single incident or problem

  Swarming helps the service desk overcome the challenges of the tiered support model.

- Kanban – pulls work through a process at a manageable pace

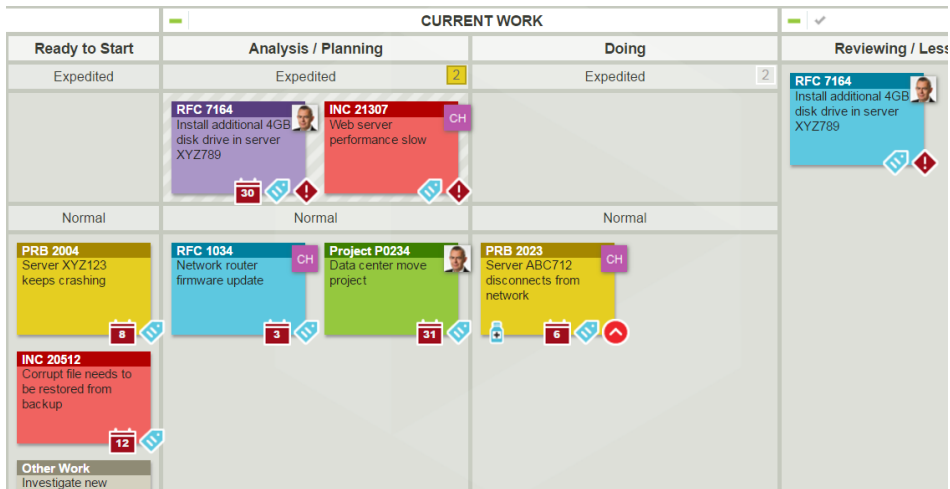 *Kanban Limits work in progress (WIP) to capacity.*
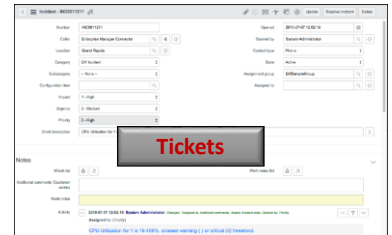
Sample KanBan

Image credit: Stuart Rance

Feedback

Create and amplify short feedback loops that enable continuous improvement

The Information Flow Challenge

Backlog

JIRA · VERSIONONE *Accelerate Software Delivery*

User Stories

As *who*, I want *what* so that *why*.

Just enough.
Just in time.

Tickets

servicenow · bmc · Cherwell

Understand how information is used and how work gets done.

Improving Feedback

- Understand and respond to the needs of all customers – both internal and external
- Shorten and amplify all feedback loops
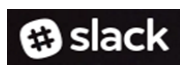- Create and embed knowledge where needed

FEEDBACK

HDI 2018
CONFERENCE & EXPO

CONNECTING
WORLD
OF SERVICE &
SUPPORT

Common and Emerging Practices

ChatOps

Chat client + chat bots = conversation-driven development, delivery and support.

Eric Sigler	I think something's up with the latest changes to Apollo.
Eric Sigler	!lock apollo production
Officer URL	✓ apollo production locked
Eric Sigler	Here's a log snippet from the web server:
Eric Sigler	!enhance "10.0.0.1", "-", "02/Dec/2014:06:34:32 +0000", "GET /someurl HTTP/1.0", "-", "-", "200", "3704", "-", "a-totally-fake-user-agent", "127.0.0.1"
Officer URL	"*a-fake-production-webserver-dns-name* (US-WEST-2B, environment: production)", "-", "02/Dec/2014:06:34:32 +0000", "GET /someurl HTTP/1.0", "-", "-", "200", "3704", "-", "a-totally-fake-user-agent", "127.0.0.1"
Eric Sigler	!status
Officer URL	Status: NORMAL
Eric Sigler	!define me apollo
Officer URL	apollo is a highly available service that creates and delivers On-call Handoff Notifications to Mercury.
Eric Sigler	All clear
Eric Sigler	!unlock apollo production
Officer URL	✓ apollo production unlocked

The transparency of ChatOps shortens feedback loops, improves information sharing, enhances team collaboration and enables cross-training. It can also be used to decrease MTTR .

HDI 2018
CONFERENCE & EXPO

CONNECTING
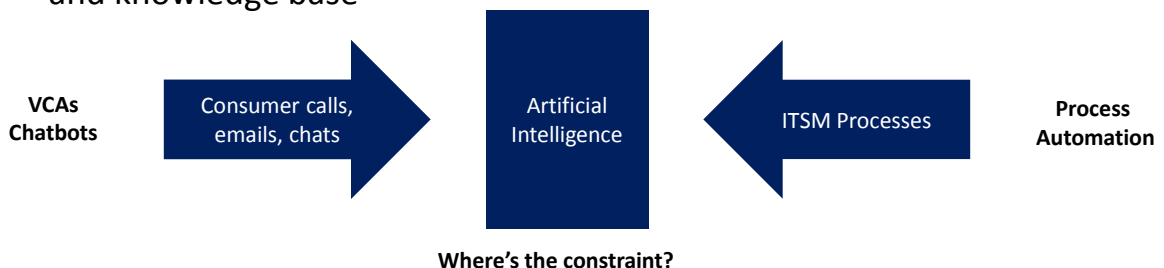WORLD
OF SERVICE &
SUPPORT

The Obvious Example, but…

The Service Desk plays an important role in identifying how best to keep customers and stakeholders informed.

- …the traditional monitoring approach doesn't work anymore
- DevOps incorporates monitoring as a component of the toolchain
- Leading platforms combine artificial intelligence and machine learning to proactively identify issues and their underlying root causes
- …and yet, 43% of organizations use manual processes to keep customers and internal stakeholders up to date*

HDI 2018
CONFERENCE & EXPO

CONNECTING
WORLD
OF SERVICE &
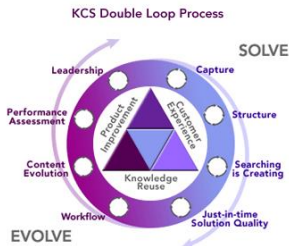SUPPORT

Artificial Intelligence

- Artificial intelligence can be applied to ITSM in a variety of ways
- It relies heavily on and contributes to the organization's historical data and knowledge base

| **VCAs Chatbots** | Consumer calls, emails, chats → | **Artificial Intelligence** | ← ITSM Processes | **Process Automation** |

Where's the constraint?

Through 2020, 99% of artificial intelligence initiatives in IT service management will fail due to a lack of an established knowledge management foundation. (Gartner)

HDI 2018
CONFERENCE & EXPO

CONNECTING
WORLD
OF SERVICE &
SUPPORT

Knowledge-Centered Service

KCS Double Loop Process

SOLVE

Leadership — Capture

Performance Assessment — Structure

Content Evolution — Searching is Creating

Workflow — Just-in-time Solution Quality

EVOLVE

Product Improvement — Customer Experience — Knowledge Reuse

Source: Consortium for Service Innovation

- Redefine what's really needed (including acceptance criteria)
- Build fast feedback loops that help improve the effectiveness of knowledge articles and artifacts
- Capture 'just enough' documentation and evolve as needed based on demand and usage
- Collaborate on the format of knowledge articles and artifacts
- Accept artifacts already being produced as part of the development lifecycle or that come in a form other than a traditional article
  - User stories
  - Release notes
  - In-application documentation
  - Videos

Increasingly, the process of producing heavily-edited manuals and knowledge articles is viewed as too slow and heavy handed.

HDI 2018
CONFERENCE & EXPO

CONNECTING
THE
WORLD
OF SERVICE &
SUPPORT

But we want to help!

Service Desk Current State

Where is your organization?

Strategic

Proactive

Reactive

Service Desk

Proactive Business Partner (Trusted Advisor)

Help Desk

Automation will free service desk analysts to focus on higher-level tasks and on personalized, specialized support services .

The Evolution to Proactive Business Partner

- As connected devices become more sophisticated, they will self-diagnose and seek help without human intervention
- This, coupled with the capabilities of AI and virtual support agents will result even further in reduced need for reactive support services
- This frees service desk analysts to focus on
  - Proactively identifying and leveraging existing IT capabilities to improve business capabilities
  - Enabling business user self sufficiency (e.g., by designing and managing automated self services)
  - Serving as a trusted advisor

Focus on developing capabilities your business partners want and will use and on building out your brand as a trusted advisor.

The Future is Here

"Many significant innovations in the past have been associated with a transition period of temporary job loss, followed by recovery, then business transformation and AI will likely follow this route.

AI will improve the productivity of many jobs, eliminating millions of middle- and low-level positions, but also creating millions more new positions of highly skilled, management and even the entry-level and low-skilled variety."

Svetlana Sicular, Gartner

HDI 2018
CONFERENCE & EXPO

CONNECTING
WORLD
OF SERVICE &
SUPPORT

Start Now!

YOU ARE HERE

- Start where you are
- Align with Agile, Lean and DevOps values
- Understand and increase the flow of work
  - Expose and eliminate waste
  - Improve the constraint
  - Identify the new constraint
- Shorten and amplify feedback loops
- Embrace automation

By 2020, artificial intelligence will create more jobs than it eliminates. (Gartner)

ITIL's guiding principles reflect Agile and Lean values.

Focus on VALUE	DESIGN FOR EXPERIENCE	START WHERE YOU ARE
WORK HOLISTICALLY	PROGRESS Iteratively	OBSERVE DIRECTLY
BE TRANSPARENT	COLLABORATE	KEEP IT SIMPLE

HDI 2018
CONFERENCE & EXPO

CONNECTING
WORLD
OF SERVICE &
SUPPORT

Thank you for attending this session.

Please complete the session evaluation form
www.HDIConference.com/Eval or on the **App.**

#HDIConf