



Service Management for Digital Age with DevOps and SIAM

April 24<sup>th</sup> 2018





" EXIN® is a registered trademark."

" SIAM® is a registered trademark."

"ITIL® is a registered trade mark of AXELOS Limited, under the permission of AXELOS Limited. All rights reserved."

SKILLS ASSOCIATION

"The Swirl logo™ is a trade mark of AXELOS Limited, under the permission of AXELOS Limited. All rights reserved."

"The ITIL® Accredited Training Organization logo is a registered trade mark of AXELOS Limited., under the permission of AXELOS Limited. All rights reserved"

## Introductions

- Qualiti7
  - Founded in 2005, expended into Nova Scotia in 2012
  - Specialized in adaptation and implementation of IT Service Management framework
  - Accredited Training organization on multiple practices
    - ITIL, DevOps, SIAM, PRINCE2, BRMP
    - New for 2019 :Lean-IT, IT Asset Management (IAITAM)
- Your Speaker
  - President and founder of Qualiti7
  - Involved with PD Summit and itSMF-Atlantic since 2011
  - Hold multiple industry recognitions (ITIL<sup>®</sup> Expert, Resilia Practitioner, SIAM, DevOps, PRINCE2)
  - Certified trainer for ITIL, DevOps, SIAM, PRINCE2,

## Where does ITSM come from...

- Developed by the UK Government
- Help provide more structure to IT Service Delivery
- Introduced process structure around notion of Life Cycle
- Includes foundation for Service Improvement and Serice Governance
- Evolved through 4 versions over 28 years



- 1990: CCTA publishes the ITIL booklets (first cerification exams in 1991)
- **2000:** Publication of ITIL<sup>®</sup> v2.
- **2006:** Arrival of ISO/IEC 20000 certification for organizations based on ITIL<sup>®</sup>.
- 2007: Publication of « ITIL<sup>®</sup> Refresh » (ITIL<sup>®</sup> v3).
- **2011:** ITIL<sup>®</sup> 2011 revision.
- 2013: ITIL<sup>®</sup> becomes the property of AXELOS, a joint-venture between Cabinet Office and Capita
- **2018:** Changes to the ITIL Examination Institute structure (Lone E.I.)
- Adaptation of ITIL<sup>®</sup> for end of 2018 where its core concepts will remain but will enable easier integration with complementary and recent good practices.

Copyright

## Where is ITSM today...

- ITIL® is still the most widely adopted ITSM framework
- Introduction of new good practices in support of greater responsiveness from IT (Agile, DevOps)
- Increased pressure on IT to match Organization pace of change
- ITSM practices must ensure system's quality and information security
- Many organizations struggling to adapt their existing ITSM processes to balance Velocity with Reliability and Resilience
- Often, IT is also expected to deliver great value while optimizing (i.e. reducing) its budget
- Frequent stories where IT failed to deliver value to clients or where IT services were so imperfect the organization (IT and Business) lost credibility on the market or in the community.

## Many IT Management Good Practices ...



Page 6

## Where is ITSM going...

- Balancing control with 'need for speed'...
- Using Risk Management to develop guidelines to apply appropriate level of control
- Adapting to business velocity
- Adapting to Information security and privacy imperative
- Adapting to Agile and DevOps culture
- Adapting to multi-vendor environment
- Incorporating/interfacing/leveraging Lean/SixSigma tools and techniques

# ITIL<sup>®</sup> covers multiple aspects of Service Lifecycle

#### CONTINUAL SERVICE IMPROVEMENT

## Seeks service quality assurance and improvement.

Focuses on assessement, measures and improvement initiatives

#### SERVICE STRATEGY

Seeks to optimize service value.

Focuses on business value of IT services, justification and prioritizing investments in IT

#### **SERVICE DESIGN**

Seeks at optimizing resources required to deliver and operate IT services.

Focuses on requirements, assessment of reoursces needed, negotiation, agreements and accountability

#### SERVICE TRANSITION

Seeks to enable and coordinate service evolution while ensuring overall reliability and quality.

Focuses on impact analysis and planning of changes and related controls

#### SERVICE OPERATIONS

Seeks to ensure that services work as per agreed service levels.

Focuses on monitoring and service restoration.

## What is ITIL<sup>®</sup> and what does it bring?

- Lifecycle approach to delivering and managing IT services
- Provides general IT Service definition
  - Service Support (hours, response time, communication, etc.)
  - Service Availability (% and schedule)
  - Service and Information Security
  - Service Capacity and Performance
  - Service Continuity
  - Service Cost
- Defines IT department policies and guidelines on general IT Service Management



Define process objectives and governance

# What is ITIL<sup>®</sup> and what does it bring?... continued

- Service/Process consistency across the IT Department
- Predictability on activities and outcome
- **Traceability** and metrics for KEY activities
- Defined responsibilities and boundaries

## A word on Service Governance

- ITIL defines the role of Process Owner : Accountable for the global process outcome. Defines process policies and controls.
- ITIL defines the role of Process Manager : Helps implement process locally by adapting procedures while respecting the controls required by the IT department and clients.
  - Should have some latitude to adapt how resources are used to achieve efficiently the process outcome
  - Should make recommendations to the process owner to balance process control and velocity
- A process can be executed differently for different services/clients based on business need, risks
- ITIL defines the role of Service Owner : Accountable for the end-to-end Service delivery and support, across the lifecycle.
- Process Owners and Service Owners typically report (hierarchically or functionally) to the Service Management Office (SMO), which would act as Service Governance body.



## A granular view of the ITIL Framework



# What is Management of Risk (M\_o\_R) and what does it bring?

- M\_o\_R<sup>®</sup> is a route map for risk management, bringing together principles, an approach, a set of interrelated processes, and pointers to more detailed sources of advice on risk management techniques and specialisms.
- It also provides advice on how the principles, approach and processes should be embedded, reviewed and applied depending on the nature of the objectives at risk.



# What is Management of Risk (M\_o\_R) and what does it bring?

- Know when risks are acceptable to proceed with a certain approach (Agile/Waterfall/DevOps/Corporate functions)
  - Risk of moving too slow for the business
    - Loss of business opportunity
    - Negative reputation of IT
  - Risk of moving too fast for the IT organization
    - Decreased reliability
    - Possible loss of data
    - Possible security breach
- Formal risk register
- Formal risk management process and techniques
- Recognize when a risk occurred and adapt the guidelines
- Support service governance

DevOps is a set of practices intended to reduce the time between committing a change to a system and the change being placed into normal production, while ensuring high quality.

## What is DevOps and what does it bring? continued

#### **DevOps Core Principles**



#### **DevOps toolset chain**



### **DASA Skill and Competencies**



#### **Cross-functional autonomous teams**



## **Organizing for DevOps**



Monitoring
Deployment
Logging
Control

Service Discovery
Auto-Healing
Image: Control of the service of the



Spotify

Teams divided into **Tribes** and **Squads** and integrated through **Guilds** 



- DevOps allows IT departments to organize their crossfunctional resources and activities in an autonomous fashion
- Increase focus on Customer results and outcome
- Reduce the effects of silos and process/organizational bottlenecks
- Progressively automate activities and leverage 'consumerized IT'
- Gives more accountability to service centric teams
- Encourage autonomy, self-managed teams and leadership

## What is SIAM and what does it bring?

Service Integration and Management (SIAM) is an approach to managing multiple suppliers of services (business services as well as information technology services) and integrating them to provide a single business-facing IT organisation. It aims at seamlessly integrating interdependent services from various internal and external service providers into end-to-end services in order to meet business requirements.





## What is SIAM and what does it bring?

- Provide structure to govern a multi-vendor ecosystem
- Introduce the Service Integrator Layer (role/functions, processes, practices and structural elements)
- Defines specific integration activities during service lifecycle stages;
  - Sourcing and vendor strategy
  - Service integration design
  - Integrated Service building, testing and implementation
  - End-to-end service operation and monitoring
  - Integrated service governance and improvement
- Helps develop a comprehensive, integrated sourcing policies and guidelines.

## What is Lean and what does it bring?

- Lean is a proven quality and performance improvement methodology. Key Aspects:
  - Rational, data-driven approach focused on getting rid of activities that do not add value;
  - Intense involvement of management in what is occurring on the work floor;
  - Encouraging employees to devise solutions for problems;
  - Managers facilitate improvement (ensure resources for improvement steps)

## What is Lean and what does it bring?

Lean thinking and acting is all about:

- Increase Customer value
- Eliminate Waste
- Management as facilitator
- Involvement of all employees
- Continual Improvement
- Preserving value with less work"





## What is Lean and what does it bring?

Lean will help optimize Processes and Services by Reduce Waste, Variability and Inflexibility



- Fixed service time frames or release schedules
- Batch and queue operating model
- Specialized resources in a limited number of tasks

## How to succeed the adaptation ?

- The optimal IT Management framework will leverage multiple good practices and offer a hybrid and adapted framework
- 'Tool first' approach will not work... it needs to be driven by process objectives and goals
- Use ITIL/ITSM and MoR as the foundation processes for your velocity and integration guidelines
- Define Process Objectives and Controls, using ITIL principles (Process owner)
- Define specific process guidelines in line with the risks identified for specific services or specific clients. (Process Managers)

# How to succeed the adaptation ? (...continued...)

- Use guidelines to ensure process velocity and control (Process Managers) and use Service Governance to ensure process and service outcome are achieved (Process Owner)
- Use Agile/DevOps approaches where velocity is required
- Use SIAM in complex multi-vendor systems/services
- Use ITIL/ITSM and CobiT to implement IT Service Governance
- Start with 'good enough' processes and apply Lean techniques to support Continual Service Improvement (Process Owner and Managers)

The future is promising for ITSM driven organizations...

- ITIL will be adapted in 2018 to enable better integration with other recent good practices
- Service Management is no longer about 'Just ITIL'... it is about an integrated set of practices adapted to meet business needs
- It will take more than just applying what is written in books... IT department will need to define what is key to their success and their client's success
- With the help of an SMO, governing IT Services will create a dynamic IT Service Management ecosystem, able to react while managing risk related to velocity (or lack of...) and controls.



# Thank you!

## www.qualiti7.com

## Jean-Claude (JC) Beaudry

#### Senior Associate Qualiti7 Canada

jean-claude.beaudry@qualiti7.com

- T. 902-482-6466
- C. 902-497-4514