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Implementing Lean in ITSM

Best practices to improve service desk efficiency

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Summary

IT teams are the backbone of every organization- be it a large enterprise, a medium-sized firm or a small, growing company. They are an integral part of the business ensuring a smooth functioning of its internal operations. Indeed, the IT teams have come a long way since the early days of digital revolution in the workplace. In the past, the IT teams were often erroneously regarded by employees of a company to perform mundane tasks such as ensuring the printer has a good supply of paper.

Evolution of the IT team

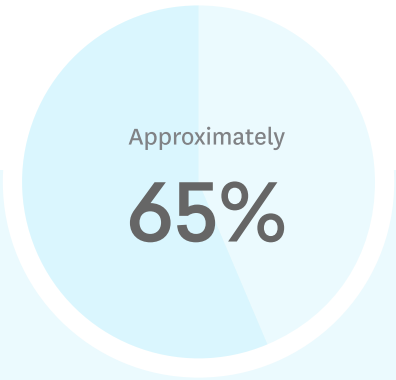
Over the years, this wrong perception has changed. As businesses evolved to keep up with changing technology, the roles and responsibilities of IT teams constantly expanded. Nowadays, IT teams are responsible for information security, service delivery, service architecture, infrastructure management, operations management, applications management and system development. The tech-savvy employees of today acknowledge the extent of an IT team's work and the critical importance of their responsibilities.

However, the one thing that has not changed all these years, is the enormous pressure placed on IT teams to resolve issues swiftly while being cost effective. Nowadays, most organizations are focused on improving time to market and it has become essential to resolve issues faster.

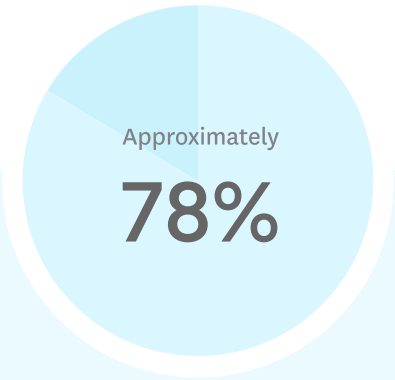
Adopting a methodology such as Information Technology Infrastructure Library (ITIL) to manage Information Technology Service Management (ITSM) and using a ITSM tool can go a long way in improving the efficiency of an IT team. There are also many tricks and tips that an IT team can utilize to be more cost effective and efficient and one such trick is to implement Lean in the ITSM process.

What the IT industry thinks about Lean?

Freshservice asked 500 IT professionals their thoughts on Lean ITSM and here's what we found.



Of IT professionals believe implementing **Lean in ITSM would go a long way** in improving the efficiency of the IT teams.



Of IT professionals found **Lean in ITSM to be a viable solution** to adopt in the future.

Given this positive response, a question to be considered is why adoption of Lean in ITSM is not widespread. Our research team recognized that lack of proper documentation related to Lean implementation in ITSM and lack of communication about success stories in Lean ITSM are some of the major reasons.

As we are a bunch of do-gooders, we decided to bring to you, a brief report on the advantages of implementing Lean in ITSM and how to implement it in your ITSM process to be more efficient.

Before we take a look at how to implement Lean in ITSM, it is imperative to understand the concept of Lean, its principles, and what is categorized as non-value adding and unnecessary activities (called waste).

A brief history of Lean

The principles of lean production was introduced in a book called “The Machine That Changed the World” in the year 1990. The book’s authors, Womack, Jones and Roos observed and documented the production system followed at Toyota Motor Company. They concluded that adopting Lean principles would increase the efficiency of any value creating activity in any industry. Though their prediction was viewed with dubiousness at that time, the tremendous success of Toyota in the following years, stood to support their view. Over the years, it's proven success streak in the manufacturing domain inspired many organizations from various other industry sectors to adopt and implement Lean.

What is Lean?

As a result of its popularity and groundbreaking success in the manufacturing domain, there are numerous research work available on Lean and its related concept; though not so much about Lean in ITSM. We do not want to do into a pedantic summarization of all the definition that is available on Lean. So, we stick to the pioneers, Womack and Jones’ definition.

Womack and Jones explain the concept of Lean in a book called Lean Thinking, which is an action guide for organizations vying to adopt Lean. The authors maintain that a lean way of thinking allows companies to “specify value, line up value creating actions in the best sequence, conduct these activities without interruption whenever someone requests them, and perform them more and more effectively”.

In simple terms, Lean is a concept that would pave way for companies to focus on value creating activities, ensure that these activities occur without any interruptions or delays while continuously striving to perform these activities better than the previous time.

This concept is the foundation for the five principles of Lean which is essential to transform a value creating activity into a Lean process that is more efficient.

Principles of Lean

Lean Enterprise Institute defines Lean as means to create more value for the customers by eliminating non-value adding and unnecessary activities in a process.

The following are the five principles of lean:

- **Identify Value:** Activities that add value to the customers are the only ones that matter.
- **Map the Value Stream:** Identifying the actions that are required to achieve an output; eliminating unnecessary steps is crucial to achieve a Lean process.
- **Create flow:** The flow of the value creating steps should be uninterrupted.
- **Establish Pull:** Customers should request for something for a process to start rather than providing it to them before they request it.

- **Seek Perfection:** Constantly strive to improve the process.

Non value adding and unnecessary activities recognized in Lean

As erudites in ITSM, you are aware of all the processes involved in ITIL methodology. But in order to successfully implement Lean in ITSM, it is important to understand what Lean identifies as non-value adding and unnecessary activities (termed waste in Lean terminology). Famously termed as the 3Ms of Lean- Muda (waste), Muri (overburden) and Mura (unevenness) are the three broad classification of waste.

- **Muda-** It impedes the flow of an ITSM process. Lean categorizes Muda into seven categories such as transport, inventory, motion, waiting, over-producing, over-processing, and defects.
- **Muri-** Improper workforce management; overburdening the agents, needing them to put in more effort and work for a longer period than possible.
- **Mura-** Unplanned and unscheduled work process that makes the agents hurry to complete work and then wait.

Lean in Information Technology Service Management (ITSM)

The concept of Lean when applied to ITSM is elimination of waste and focusing on customer value; waste in the ITSM context refers to non-value adding but necessary activities in a process and non-value adding and unnecessary activities in a process. The former can be eliminated by changing the business conditions and constraints. The latter can be eliminated (almost immediately) by adopting a Lean process.

What is customer value in IT service management?

The concept of value in a service industry is unique; as you very well know, it is not tangible. In IT service management industry, the end-users (employees in an organization who are requesters) are the customers and value here would be defined by:

- Ability to solve issues swiftly
- Reliability of the IT team
- Responsiveness
- Easy accessibility
- Ensuring the accuracy of the solution provided

Advantages of implementing Lean in ITSM

Reduction of non-value adding and unnecessary activities would go a long way in improving process efficiency. By implementing and continually sustaining a Lean process, an IT team in any organization would be able to:

Identify and eliminate bottlenecks

Mapping the value stream of a process will enable you to identify bottlenecks in the process; addressing this will improve process efficiency significantly.

Reduce time spent on resolving issues

Removing the bottlenecks will reduce the resolution time (time since a ticket is initiated to its closure) considerably.

Ensure effective utilization of an agent's time

Unplanned workflows will overburden an agent and sometimes once the issue is over, an agent will have nothing to do. Adopting a Lean process will maintain the efficiency of an agent's time.

Reduce cost

The most important benefit of all- IT teams with their stringent cost restriction will reap benefits by implementing Lean. Improving process efficiency and ensuring effective use of resources will reduce cost spent in the long run.

Improve CSAT

As efficiency of a process improves, promptness in resolving issues also increases significantly. End-user satisfaction with the IT team will increase drastically.

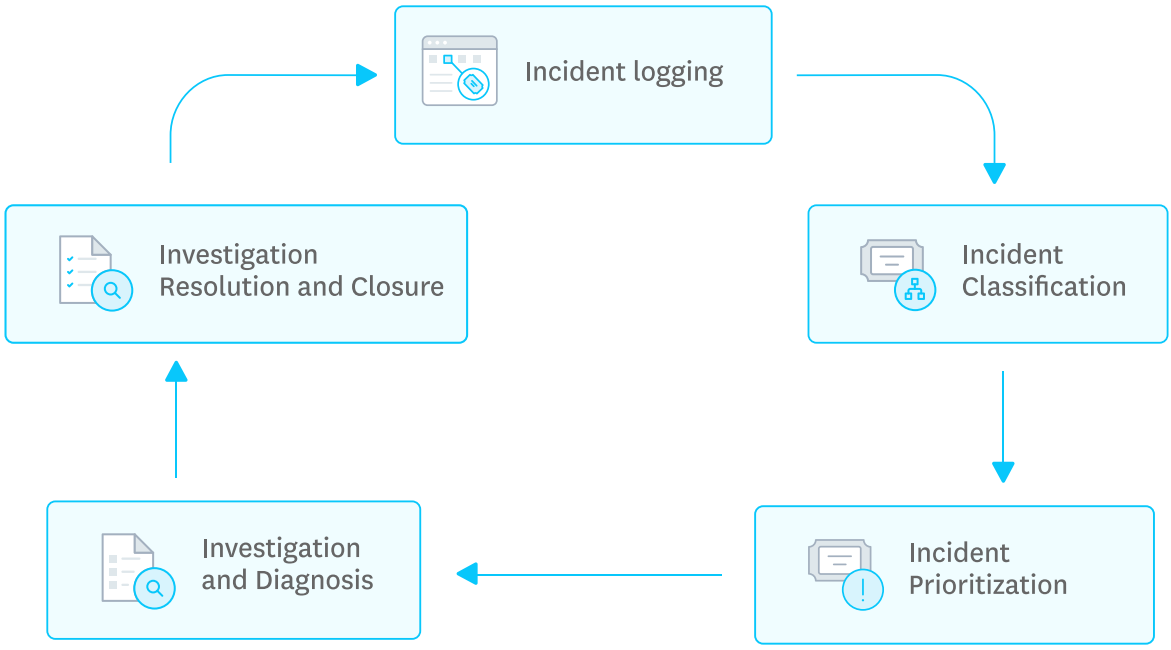
Where can Lean be implemented?

No two IT team is the same- understanding what would work and adapting Lean in accordance to a particular IT team's dynamics is crucial. Considering the ITSM process, Lean can be implemented in the following areas:

I. Incident Management

An independent survey conducted by Freshservice across 12,000 service desk found that incident management is the most commonly used module in a service desk with 92% of users.

Lean can be used improve the incident management process. Carrying out value stream mapping for the incident management will enable you to identify bottleneck, which can then be resolved. Let us take a look at the incident management process:



Incident management process flow

Incident Logging

In this step of the incident management process, the incident is either reported by the requester (end-user) or the agent reports it on their behalf.

Incident Classification

In order to identify the right group and agent with the capability to resolve the incident, it is imperative to segment the incident with an appropriate category/sub-category.

Incident Prioritization

This is one of the most important step in the incident management process. Assigning a suitable priority to the ticket will have an impact on the SLA policy and therefore addressing the business critical issues on time.

Investigation and Diagnosis

Initial analysis of an incident is carried out by the IT team when an incident is raised and a resolution is sent to the end-user (FCR). In case a resolution is not available immediately, the incident is escalated to tier II or tier III for a more detailed investigation.

Investigation Resolution and Closure

It is imperative for the IT team to resolve any incident raised as soon as possible. Communication to the end-user about the resolution and closure of the resolved ticket is very important in the incident management process.

Lean in Incident Management

Lean can be used in Incident Management process in various ways. Below are some examples of how Lean can be used.

Let us consider a L1 issue. Let us assume the resolution time for L1 issues are 60 minutes. But most of the L1 issues gets resolved after 240 minutes consistently. Then, we know that somewhere in the process, there is a delay. Value stream mapping will let us identify the bottleneck in this process.

> *If you are using a service desk tool such as Freshservice, it is much easier to trace back and do an analysis of where exactly in the process there is a delay. Based on the findings, relevant solutions can be identified.*

Consider a use case where the ticket assignment is done manually- tickets gets bottled up at this stage instead of progressing through the cycle. This causes frequent delays, proving to be a bottleneck. One solution would be to automate the ticket assignment process based on its priority and category.

2. Problem Management

The primary function of an IT team is to ensure that an organization meets its business objectives without any road blocks. More often than not, IT teams are focused on resolving issues and firefighting that they lose sight of business objectives. In other words, IT service management in most organizations are reactive and not proactive. It is difficult for IT teams to stay on top of any situation, addressing the root cause of a problem before they emerge as issues. Adopting best practices such as Lean, can go a long way in saving money and time for the IT team.

Lean in Problem Management

One of the core concepts of Lean is to continuously improve a process over and over again so there are completely no non-value adding activities present in it. Applying this concept to ITSM, one can infer that effective use of problem management will reduce incidents in the long run.

> *Also, in order to establish proactive IT service management, it is imperative that IT teams utilize problem management extensively. Conducting a root cause analysis, recording its impact and solutions are a key part of problem management.*

Creating a dedicated root cause analysis team, managing a repository of frequently occurring issues, establishing an automated system monitoring, promoting self-service extensively and establishing a process for prior notification in case of a potential emergency are some of the best practices that has to be continuously sustained.

Conclusion

In order to ensure the IT teams are able to meet the business objectives of an organization, it is crucial to adopt best practises that work. It is time for the IT teams to stop firefighting and move from reactive ITSM to proactive ITSM. Identifying and adopting best practices that work would enable you to achieve that.

> *Lean is one such best practice that would provide the IT team with pre-set goals and a clear foundation on improving the IT service management process by eliminating non-value adding activities.*

Since no two IT teams are the same- understanding what would work and adapting Lean in accordance to a particular IT team's dynamics is crucial to sustain Lean.

About Freshservice

Freshservice is a cloud-based IT service desk and IT service management (ITSM) solution that is quick to setup and easy to use and manage. Freshservice leverages ITIL best practices to enable IT organiations to focus on what's most important - exceptional service delivery and customers satisfaction. With its powerfully simple UI, Freshservice can be easily configured to support your unique business requirements and integrated with other critical business and IT systems. Are you trying to keep up with the current ITSM trends? Freshservice is on a constant mission to innovate and deliver great experience.

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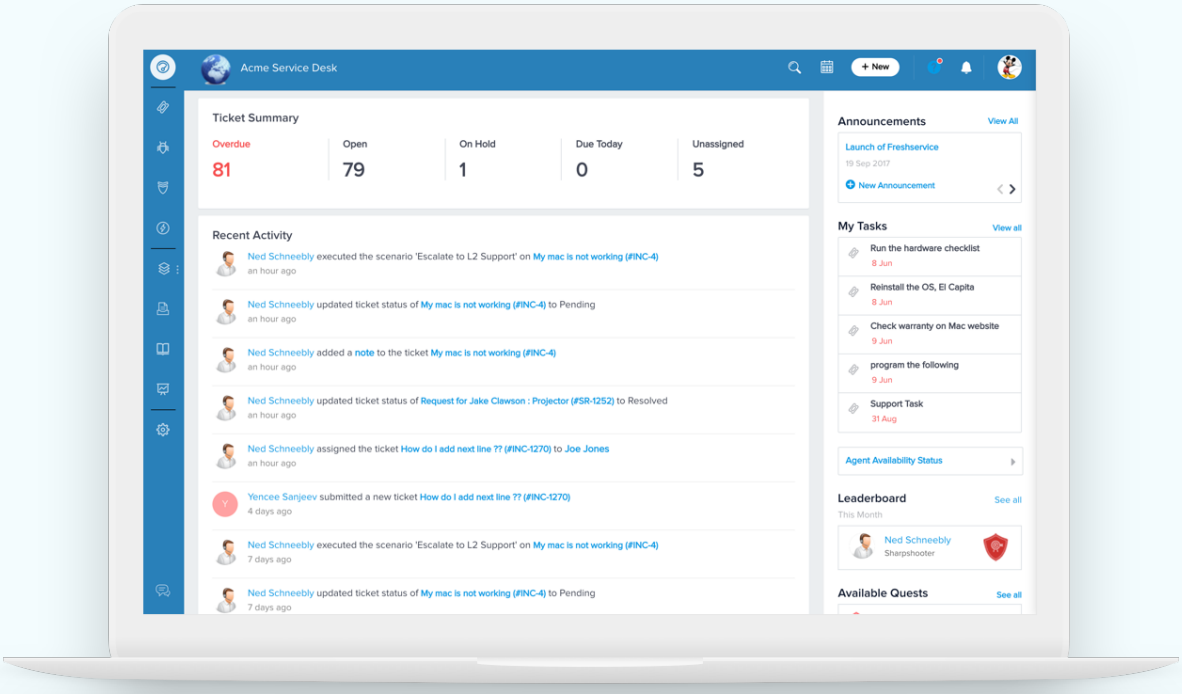

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Author: Apoorva Ravikrishnan

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