ITIL Term Paper

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In the ever-evolving fields of information technology (IT) and information assurance, unorganized and unprepared organizations need help to keep up. Organizations use frameworks to manage their IT infrastructures properly and efficiently to keep up. One such framework is the ITIL. ITIL consists of IT best practices that help organizations implement and align IT services with business missions, needs, and objectives. By examining various online articles, this paper will provide an in-depth overview of ITIL, exploring its background/history, scope, and practical implications within different industries and the cybersecurity landscape.

**Background and History of ITIL**

First, let us look at what ITIL is and a little into its history. ITIL stands for Information Technology Infrastructure Library, but today, it is just referred to as ITIL, so that is how it will be referenced throughout his paper. In the words of Axelos, the current owner of ITIL, it is “an adaptable framework for managing services within the digital era” (*What is ITIL?*). As mentioned, ITIL is an IT framework focusing on service management. However, more specifically, ITIL is a collection of five books that outline the best practices for IT service management. It is considered by many to be the standard for IT service management due to its guidance on aligning IT services with business objectives, with a focus on creating value for shareholders. This is accomplished with what is known as the ITIL service lifecycle and its five stages, which will be covered in more detail later.

Now, let us take a look at the history of ITIL. It is useful to look at the history of ITIL to help better understand it as a whole, specifically to know who created it and why it was created. ITIL was developed in the 1980s and released in 1989 by the British government’s Central Computer and Telecommunications Agency (CCTA). The CCTA created ITIL “because of the increased dependence on information technology to meet business needs” (Maymí, 2022, p.197). The CCTA recognized early on the impact information technology had and would continue to have on business functions. While the initial purpose was to improve and standardize IT best practices and processes in the government sector, other organizations quickly adopted it, similar to other IT and cybersecurity frameworks. Their response was ITIL, or what is now known as ITIL V1. Thirty books were released from the initial release until 2001, hence the word library in the name, each covering different IT best practices.

As information technologies continued to evolve and more organizations looked to ITIL as the “de facto standard of best practices for IT service management,” revisions were needed (Maymí, 2022, p.197). The first major revisions came in 2001 with the release of ITIL V2. ITIL V2 consolidated the collection of 30 books into seven main books while simultaneously making the framework more comprehensive. Two of the books, S*ervice Support* and *Service Delivery* were widely circulated and used by many organizations (Kempter, 2022). Overall, V2 was considered to be confusing, and as Digital Marketing Lead at IFS Assyst Harsh Tandon put it, “the way in which the ITIL 2 content was structured and presented was not optimal. Fundamentally, it lacked a recognizable structure, and the total body of knowledge was spread across too many volumes” (Tandon, 2022). This confusion was part of why *Service Support*and *Service Delivery* were more popular than the other books, as they were the center of focus for V2.

The next major revision was released in 2007 as ITIL V3. V3 aimed to fix the issues of V2, which resulted in the most drastic changes, where the seven books were further consolidated into five books with 26 processes. The five concepts were arranged in the ITIL Service Lifecycle and are the most notable change introduced with V3. V3 was further polished, and another, mostly similar “version” was released in 2011 and called ITIL 2011, which brings us to the most current version, ITIL V4. V4 was released in 2019 by AXELOS, who acquired ITIL in 2013 and was yet another complete revision. The main critique of V3/2011 was the lack of flexibility, so version 4 ultimately did away with the Service Lifecycle and the 26 processes. This revision allowed for a more holistic approach, allowing organizations to tailor the processes that work for them (Kempter,2022). V4 also incorporated newer technologies, but today, both V3/2011 and V4 are used across many organizations; it just depends on organizational needs.

**ITIL Scope**

Now that we have established what ITIL is and briefly explored the history of it, it is essential to understand the scope of the framework. Part of the scope was briefly mentioned when the framework’s purpose was discussed, as alignment of IT processes with business needs and objectives is part of it, but it is much more than that. ITIL’s scope consists of many elements, including principles, processes, and the service lifecycle.

At the root of ITIL are the seven guiding principles that serve as the foundation for how organizations should approach IT service management. ITIL helps to increase the efficiency and effectiveness of IT services for organizations, which is accomplished with the help of the guiding principles. The principles are: focus on value, start where you are, progress iteratively with feedback, collaborate and promote visibility, think and work holistically, keep it simple and practical, and optimize and automate. The principles are simple yet effective in driving the key ideas of ITIL. Sarah K. White and Lynn Greiner write (2022), “ITIL 4 focuses on...integrating IT into the overall business structure...(it) encourages collaboration between IT and other departments.” While these focuses may not be obvious solely based on the name of each principle, taking a deeper dive into each focus becomes more apparent (White & Greiner, 2022). For example, let us look at the “keep it simple and practical” principle. When considering IT technologies, it is often a best practice not to make something overly complex. The technology should be simple and practical for most people to understand. Keeping things simple will avoid unnecessary issues for the business that come with complexities. Simplicity and practicality also help with collaborative efforts between IT and other departments. Organizations can establish a more solid and efficient IT infrastructure by incorporating these principles.

Next in the scope of ITIL are the 26 processes that are sprinkled throughout five books/stages. These processes play a vital role in the effective management of IT services. They are designed to work within the ITIL framework to help organizations effectively address IT service management. An essential characteristic of these processes is their flexibility and scalability; organizations can tailor them to meet their needs best. Processes were introduced into ITIL in V2 but were expanded upon with V3, where more non-technical processes were addressed to improve service planning and delivery (Tandon, 2022). In V4, processes were updated to practices. Mr. Tandon writes, “Capabilities are built on a number of elements—not just processes,” so the spirit of the processes is still visible in the practices. However, a different word was chosen to better align with the intent. Similarly to the principles, properly implementing these processes is how organizations can enhance IT service management operations.

Lastly, let us discuss ITIL’s core concept, which encompasses all of the principles and processes. This concept is the ITIL service lifecycle. The service lifecycle is a holistic view of the ITIL framework. The concept was introduced in ITIL V3 to help clear up the confusion of V2 and help guide organizations through the end-to-end journey of IT services. The lifecycle consists of five stages, which were conveniently created to be the five different books for ITIL V3 and are as follows: Service Strategy, Service Design, Service Transition, Service Operation, and Continual Service Improvement. Each lifecycle stage has different subcategories, which are activities/functions or one of the 26 processes to execute and manage IT services (Simplilearn, 2022). The service lifecycle gives organizations a structured approach to aligning IT services with their business needs and new technologies. Overall, it serves as the backbone of the ITIL framework as it stands today.

By examining these core elements of ITIL, we gain a better understanding of the scope of the ITIL framework. ITIL serves to enhance IT service management through the alignment of business needs and IT services. This is accomplished with the principles, process, and the service lifecycle.

**Implications**

This section will look at the practical implications of ITIL, as it is crucial to understand how the framework is implemented and what industries it is commonly used in. As mentioned in the background and history section, ITIL was initially created for a government agency but was quickly adopted by organizations outside the government sector. We will examine what other industries use ITIL, the aspects of cybersecurity within ITIL, and my opinions on what the IT industry has done well with ITIL.

While initially developed for the UK’s government, ITIL has since become accepted and adopted by multiple industries in both private and public sectors across the globe. Sarah White and Lynn Greiner noted (2022), “the goal wasn’t to create a proprietary product that could be commercialized.” However, “it quickly became apparent that distributing these best practices would profit both public- and private-sector organizations.” This excerpt shows that ITIL just happened to work for all sectors and just how quickly different industries realized the value of implementing it. ITILS’ flexibility has allowed organizations in the finance, healthcare, manufacturing, and, of course, tech industries to enhance their IT services. Next, let us take a deeper look at the practical implications of ITIL through the examination of ITIL and cybersecurity practices.

While this paper has not properly mentioned it, ITIL can play a crucial role in strengthening an organization’s cyber defenses. With information technology being the root of ITIL, it would be impossible not to have any aspects of cybersecurity; in fact, many of the 26 processes are directly related to cybersecurity. Some processes include information security management, IT service continuity management, change management, service asset and configuration Management, and incident management. The most prevalent aspects of cybersecurity in ITIL are incident and risk management, seeing as all aspects of cybersecurity revolve around those two aspects. What ITIL does well is establish a structured approach to incident identification and response. According to Sarah White and Lynn Greiner (2022), “ITIL’s systematic approach to IT service management (ITSM) can help businesses manage risk.” This quote illustrates the effectiveness of ITIL’s structure and how it can relate to cybersecurity risk.

To close out, I wanted to discuss what the industry has done well with ITIL and could have done better. For starters, ITIL has stood the test of time with its adaptations and evolutions, thanks to its constant feedback from the IT industry and organizations that implement it. I believe that the industry’s recognition of ITIL’s importance and commitment to seeing it evolve is what the industry has done best. It could have been written off as an outdated long series of books, but the industry saw the importance and gave feedback to help make it refined and widely accepted. The industry could have done better by spreading awareness and information about it. ITIL is revered as the de facto standard, yet finding vast information without reading the books was somewhat tricky.

**Conclusion**

Based on my research, ITIL is a robust framework that effectively helps organizations implement and align IT services with business missions, needs, and objectives within the constantly evolving information technology and information assurance fields. This paper examined the background/history, scope, and practical implications of ITIL in different industries to gain insight into the framework and its relevance in the IT environment. Overall, ITIL serves as the standard for IT service management and is a valuable asset to many organizations spanning multiple industries worldwide.

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