

Technology Management

Assignment 1

Section A

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# Technology Management

Technological management and operations are intertwined with the capacity to manage projects and people. The field of technology management can legitimately be described as an undertaking that draws from several different disciplines. The fundamental objective of this initiative is to guarantee that businesses can sustain a competitive edge by successfully integrating and developing new technology. Whether it be a software or a hardware company, businesses that use complex machinery or computer systems require managers of technology who have received adequate education and training in the field. It's possible that as technology managers, you'll be responsible for everything from managing a varied workforce to managing the design and implementation of computer systems to managing the safety and quality of your company's products and services. In the context of organizations revolving around technical advancements, "technology management" might also refer to "innovation" and "entrepreneurship."

# IT Operation Management

The management of all of an organization's technological components and application requirements is what is referred to as information technology operations management, or ITOM for short. Provisioning of infrastructure, management of capacity and cost, operations relating to cost control, management of performance, and management of security are all included in ITOM. Businesses who adhere to the ITIL framework of best practices for IT Service Management can find comprehensive information regarding the ITOM process outlined in the IT Operations Control book of ITIL 2011. Under the framework, ITOM has two basic objectives: the first is to undertake routine activities necessary to enable application services; the second is to monitor IT services and infrastructure for operational purposes. Both of these objectives are important. When a company expands its IT infrastructure and the number of applications it deploys, the responsibility that falls on the shoulders of IT operations managers grows. They are ultimately accountable for ensuring that all services and apps are available to clients without interruption. Management tasks are carried out in three primary service areas to accomplish this goal.

A corporation's networking infrastructure consists of all the hardware and software required to keep efficient communication channels both within and outside the organization. These channels can be found anywhere in the company. Under this broader category are included activities such as the installation of firewalls, the management of internal phone systems, the administration of remote access networks, and the guaranteeing of network security. IT operations management incorporates a wide variety of help desk services, including incident response, event response, and request fulfillment. The scheduling and maintenance of data backups, notifying users of issues and network failures, and restricting user access to the information technology system are just some of the other responsibilities that IT operations managers are expected to carry out. IT Operations teams are responsible for managing not only the infrastructure of networks but also the endpoints of networks, such as servers and other devices. As part of their day-to-day responsibilities, IT Operations is responsible for performing various activities, including maintaining, patching, and upgrading servers. IT operations managers may be responsible for supplying users with IT assets to ensure that applications have access to the storage space they require to function effectively (desktops, laptops, tablets, and smartphones, for example).

# IT Service Management

IT workers are responsible for managing all areas of service delivery to clients as part of IT service management, often known as ITSM. It encompasses the entirety of the processes involved in conceiving of, developing, putting into action, and continuing to sustain IT services. IT Service Management is predicated on the idea that information technology should be delivered in the form of service. It is not unusual for an ITSM scenario to involve a request for a laptop computer to illustrate new hardware. You would start a recurring workflow by submitting your request through a portal and filling out a ticket with the relevant details to get things moving in the right direction. After that, the ticket would be added to the queue that the IT team uses to organize and sort incoming requests according to their level of importance. Because of the general public's frequent interactions with information technology, information technology service management is frequently misinterpreted. Staff members who work in IT service management monitor everything from laptops and servers to mission-critical software. In the field of information technology, there is a widespread notion that an appropriate strategy for ITSM should consist of the following three steps: Plan, create, and implement information technology systems. The correct technique must be carried out methodically. People can learn the strategy and stick to it if they put in the effort. Atlassian ushered in a new paradigm with its introduction.

The proper application of the concepts of service management has the potential to have a beneficial effect on the entirety of your organization. Implementing IT service management will result in increased levels of both efficiency and productivity. A systematic approach to IT service management standardizes service delivery based on budgets, resources, and results in addition to standardizing IT service delivery. The consumer experience is improved as a direct result of the reduction in both costs and risks caused by this. The following is a list of some of the benefits:

* Using success indicators to monitor whether or not the IT personnel is aligned with business priorities.
* Easing the process of working together across departments.
* Streamlining the management of projects to bring together the IT and development teams.
* Facilitating the sharing of information among IT departments and the ongoing implementation of improvements.
* Streamlining the service request process to make it more efficient.
* Customers can meet more of their requirements when using enhanced procedures and self-service options.
* A more effective reaction to major incidents, as well as protection against future occurrences of incidents with a similar profile.
* Price reductions and improvements in service quality are the cumulative effects of all of these factors.

# IT Asset Management

IT asset management (ITAM) systems connect financial, inventory, and contractual processes to assist businesses in better managing their IT assets and coming to more informed decisions about their long-term strategies. The IT service management strategy will often incorporate IT asset management as one of its components. Any software, systems, or hardware held by the company and utilized for commercial reasons is considered an asset to the corporation in the realm of information technology. A comprehensive inventory of an organization's hardware, software, and network assets is typically the first step in IT asset management. It is followed by making business decisions regarding the purchase and redistribution of IT based on the information gleaned from the inventory. IT Asset Management is a process that organizations can aid by utilizing ITAM software. These applications can identify all of the hardware, software, and network assets of an organization, as well as gather, record, and then make the information public. Some of these solutions integrate ITAM with the service desk, and information about users and their access is kept in sync with incidents and requests. Because of ITAM, the entire organization has a better understanding of the value of information technology, there is an improvement in communication and understanding between information technology and other departments, cybersecurity policies and regulatory requirements are enforced, productivity is increased through technical support, and costs associated with managing the IT environment are minimized.

"IT Asset Management" refers to a process encompassing more than simply making a list of assets. Through effective utilization of asset data, you should aim to maximize returns while simultaneously reducing risk and boosting the value of your firm. IT asset managers can cut expenses associated with software licensing and support, eliminate waste, and increase productivity by preventing the procurement of unnecessary assets and making the most of the already available resources.

## Differences between ITOM and ITSM

When discussing information technology management methods, the acronyms ITOM and ITSM are not interchangeable, even though both are used extensively. During the lifecycle of an information technology service, an organization is responsible for a variety of tasks, including planning, creating, and building, in addition to operating and bettering the service. Using an ITIL best practice framework allows for each stage of the service lifecycle to be managed in the most effective manner possible. As a result, one may argue that information technology operations management, often known as ITOM, is under the purview of IT service management. Their responsibility is to ensure that an organization's existing infrastructure and applications are operating effectively at all times. These operations are part of the "Service Operation" stage in the IT service life cycle. Recent events have shown us that IT operations are becoming an increasingly important component throughout the life cycle known as Service Operation. The service desk for the IT Operations team is responsible for a variety of tasks, including the management of incidents and events, the resolution of problems, and the fulfillment of requests. Maintaining the IT infrastructure on a day-to-day basis is one of the numerous tasks included in the job descriptions of ITOM professionals. It also falls under the purview of facilities managers. ITOM can also handle problems with user access, software programs, and other facets of technology. When it comes to IT service management, ITIL is by far the most popular framework to utilize. The IT Infrastructure Library management principles include every facet of service strategy, design, transition, operation, and ongoing service improvement. It consists of tasks usually taken care of by the service desk, but they can also be incorporated into ITOM. Information Technology Operations Management, sometimes known as ITOM, is a sub-discipline of IT Service Management that focuses on service operations.

In contrast to ITSM, which is more focused on delivering services, ITOM emphasizes the internal procedures used to manage internal operations inside an organization. People who are not in the IT industry can use IT Service Management more easily now that it is more apparent to the general population. The definitions of ITSM and ITOM show how closely related the two concepts are. Two different categories of commitments need to be managed and fulfilled daily by an organization. Therefore, silos and specialized bureaucracies are not conducive to optimal productivity or economic value levels in any occupation or service involving information technology. Managers of both ITSM and ITOM are tasked with carrying out a wide range of responsibilities simultaneously. IT Service Management and IT Operations Management are interwoven in that they rely on some of the same resources and personnel. For instance, it is difficult, if not impossible, to perform ITSM or ITOM correctly without efficient IT Asset Management. Finding all of your IT assets in an accurate and timely manner is the first step to successful IT asset management. We need to create a complete network map that includes representation for your IT team and the individuals using its services. A Configuration Management Database, often known as a CMDB, is an indispensable component of IT Service Management, IT Operations Management, and IT Asset Management. A comprehensive configuration management database can provide a "single version of the truth" in your IT environment. This "single version of the truth" can reliably and consistently inform your IT estate. These subjects will receive additional attention and analysis in forthcoming posts. In the interim, your ITSM and ITOM operations should be intimately tied to and supported by your IT infrastructure and procedures, regardless of how developed they are. Suppose these projects can be coordinated and kept that way. In that case, your company will have a stable and flexible foundation upon which to build any future efforts to extract additional economic value from its information technology investments.

# IT Managers Roles:

Every business has its method of selecting candidates for the IT manager job. It is because they frequently take on a supporting role in addition to playing a strategic role. In addition, they build a strategy for a core functional group while executing instructions from the Chief Information Officer and the senior leadership. As the head of information technology, they are in charge of creating IT strategy, setting team procedures, choosing technologies to invest in, and facilitating communication across different organizations. Their work is essential in terms of information technology and the larger organization. For instance, they may be responsible for one or more functional areas, such as software development, architecture, infrastructure, networking, or security. They may also be responsible for all of these areas combined. When working for a smaller company, you might need a few years of experience before being considered for a management position. In most cases, they need five to ten years of experience managing large teams and complex systems and environments at the enterprise level.

## IT Operations Management

The responsibility of the IT manager in IT operations management is to keep an eye on the system's functionality and the network's physical components. Taking care of the gadgets and ensuring the credentials are secure in charge of teams of information technology specialists, like technicians and system engineers. An IT operations manager is responsible for a variety of tasks, including the monitoring of network infrastructure and the troubleshooting and repair of system issues. If you want to be successful in this position, you need to have experience in managing the operation of information technology, administering networks, and protecting computer systems. If you can handle multiple tasks at once and are knowledgeable about the regulations governing the privacy of personal information, we would be very interested in speaking with you. They are ultimately accountable for assuring the security, consistency, and dependability of the information technology systems—maintenance and performance improvement of the company's regional networks and servers. Take responsibility for your own devices and the passwords you use. Ensure that both the backup data and the system are secure (e.g., user authorization, firewalls). Installs, updates, and configurations of hardware and software must be managed. Provide suggestions regarding how the functionality of the system might be enhanced. Address the concerns that have been made concerning the technical and engineering aspects. Make it a priority to check that data handling, transport, and processing is carried out in line with all applicable laws and company regulations. Assisting stakeholders through the use of a help desk is recommended. Manage the costs and budgets of the information technology systems. Maintain an accurate record of all software licenses and vendor contracts, including those with telecommunications companies, software development platforms, and password managers. Organize and implement some IT policies and procedures.

## IT Service Management

Clusters of service delivery policies similar to these can be found in this area. The IT Service Manager ensures that service requirements are outlined in documentation and then put into practice (once the service is in the live environment). In addition to that, it refers to the knowledge of IT organizations. The IT Service Manager will try to offer the processes required to deliver the managed services successfully. Therefore, IT service managers must guarantee that roles and duties, as well as the implementation, execution, and improvisation of the numerous processes they are in charge of, are crystal clear. The provision of the services will require a significant amount of available resources. The IT Service Manager ensures that all of the company's information technology services are effectively handled to fulfill a business requirement (for instance: contractual commitment toward the customers). It is implied that the terms of the Service Level Agreement have been met because no efforts have been made to put out the fire. The IT Service Manager is accountable for various tasks and responsibilities. The first and most important requirement for the IT Service Manager is to be familiar with the performance of the IT organization. In addition, upper-level management desires an overview of the performance of the service.

Therefore, the corporation's top executives need to be informed regarding whatever suggestions for enhancement are currently being formulated. As a direct result of this, it is expected of IT service managers to produce reports as a means of satisfying these requirements. An IT organization's problems may be made much more difficult by introducing brand-new services, technologies, and staff members. The IT Service Manager is responsible for ensuring that all pertinent information is communicated and shared (for instance, information that is required to determine or support the service, reports, amplification, etc.) and the relevant communication tools are available.