

**Technology Management**

**Assignment 1**

**Submitted To: Sir Saad Saleem**

**Submitted By: Usman Ahmed**

**22-10080**

# Technology Management

# Technology management and operations go hand in hand with the ability to manage projects and people. The field of technical management can rightly be described as an enterprise derived from several different disciplines. The underlying goal of this initiative is to enable companies to maintain their competitive advantage through the successful integration and development of new technologies. Any company with complex machines and computer systems, whether software or hardware, needs technical managers who are properly educated and trained in the field. Technology As her manager, she could be responsible for everything from managing a diverse workforce, to managing the design and implementation of computer systems, to managing the security and quality of the company's products and services. In the context of organizations that revolve around technological advancement, "technology management" can also refer to "innovation" and "entrepreneurship."

# IT Operation Management

The management of all technical components and application requirements of an organization is called Information Technology Operations Management, or ITOM for short. Organizations following the ITIL framework of best practices for IT service management can find comprehensive information about the ITOM process described in the ITIL 2011 IT Operations Control Book. Within the framework of frameworks, ITOM has two basic purposes. The first is to perform the routine activities necessary to activate application services. The second is the monitoring of IT services and infrastructure for operational purposes. Both goals are equally important. As organizations expand their IT infrastructures and deploy more applications, more responsibilities fall on the shoulders of IT operations managers. You are ultimately responsible for ensuring that all Services and Apps are available to your customers without interruption. A company's network infrastructure consists of all the hardware and software necessary to maintain efficient communication channels within and outside the company. These channels can be found company-wide. This broader category includes activities such as installing firewalls, managing internal phone systems, managing remote access networks, and ensuring network security. IT operations management includes various helpdesk services such as incident response, event response, and request fulfillment. Scheduling and maintaining data backups, notifying users of problems and network outages, and restricting user access to information technology systems are just a few of the other tasks expected of IT operations managers. IT operations teams are responsible for managing not only the network infrastructure, but also network endpoints such as servers and other devices. IT operations are responsible for a variety of activities, such as server maintenance, patching, and upgrades, as part of their day-to-day operations. IT operations administrators may be responsible for provisioning IT resources to users so that they have access to the storage space (desktops, laptops, tablets, smartphones, etc.) that applications need to function effectively.

# IT Service Management

IT staff are responsible for managing all aspects of customer service delivery as part of IT service management, often referred to as ITSM. This includes all processes involved in designing, developing, implementing and maintaining IT services. IT service management is based on the idea that information technology should be delivered in the form of services. ITSM scenarios often include a laptop computer requirement to account for new hardware/software. Start a regular workflow by submitting a request through the portal and filling out a ticket with relevant details to keep things moving in the right direction. Tickets are then added to a queue, which the IT team uses to organize and sort incoming requests by severity. IT service management is often misunderstood because the public interacts frequently with information technology. Employees in IT service management monitor everything from laptops and servers to mission-critical software. There is a common belief in the information technology field that a good ITSM strategy should consist of three steps: planning, building, and implementing an information technology system. Good technique should be performed methodically. With effort, people can learn strategies and stick to them. Atlassian ushered in a new paradigm with its launch.  
Appropriate application of service management concepts can have a positive impact on the entire organization. Implementing IT service management leads to increased efficiency and productivity. A systematic approach to IT service management standardizes IT service delivery, as well as service delivery based on budget, resources, and performance. The consumer experience is improved as a direct result of the cost and risk savings it brings. Below is a list of some benefits.  
• Use success metrics to monitor IT staff alignment with business priorities.  
• Facilitate cross-departmental collaboration.  
• Streamline project management and connect IT and development teams.  
• Facilitate the exchange of information and the implementation of continuous improvement among IT departments.

• Streamline the service request process to make it more efficient.

• Customers can **better** meet their **needs** **with** **advanced** procedures and self-service options.  
• **Respond** more **effectively** to major **incidents** **and** **protect** against future incidents with a similar profile.  
• **Lower** **prices** and **better** **quality** **of** service are the cumulative **effect** of all these factors.

# IT Asset Management

IT asset management (ITAM) systems connect financial, inventory, and **contracting** processes to **help** **organizations** better **manage** their IT assets and **make** more informed decisions about long-term **strategy.** **increase.** **An** IT service management strategy often **includes** IT asset management as one of its components. Any software, **systems** or hardware **owned** by **us** and **used** for commercial **purposes** is considered **our** information **technology** **assets.** A comprehensive inventory of an **organization's** hardware, software, and network **resources** is **usually** the first step in IT asset management. **This** is followed by business decisions regarding **IT** **purchases** and **redeployments** based on the information **obtained** from the inventory. IT **asset** **management** is a process that **an** **organization** can **support** **using** ITAM software. These applications can identify all of **an** **organization's** hardware, software, and network **resources** **and** **collect,** record, and **publish** **information.** Some of these solutions integrate ITAM **and** service **desks,** **where** information about users and their access is **synchronized** with incidents and requests. **ITAM** **enables** the entire organization **to** better **understand** the value of information technology, **improve** communication and understanding between information technology and other departments, **enforce** cybersecurity policies and regulatory **requirements,** **and** **improve** productivity through technical **support.** **improved** and **reduced** **costs.** **Minimize** **the** **overhead** associated with managing **your** IT **environment.**  
"IT Asset Management" **means** more than **just** **creating** a list of assets. **Effective** **use** of asset **data** should aim to maximize **revenue** while reducing risk and **increasing** **business** **value.** **By** **avoiding** **acquisition** **of** **unnecessary** **resources** **and** **maximizing** the **use** of **resources** **already** **available,** IT asset managers can **reduce** **costs** associated with software licensing and support, eliminate **waste** and increase **productivity.**

### Differences between ITOM and ITSM

When discussing IT management practices, the acronyms ITOM and ITSM are incompatible, but both are commonly used. During the lifecycle of an IT service, organizations are responsible for various tasks such as planning, building, as well as operating and improving the service. ITIL's best practices framework helps you manage each phase of the service lifecycle as effectively as possible. As a result, IT operations management, often known as ITOM, can be argued to fall within the scope of IT service management. Your responsibility is to ensure that your organization's existing infrastructure and applications are always working effectively. These operations are part of the service operations phase of the IT service lifecycle. Recent events show that IT operations are becoming an increasingly important component of the overall lifecycle known as service operations. The IT operations team's service desk is responsible for a variety of tasks, including incident and event management, problem resolution, and request fulfillment. Routine maintenance of IT infrastructure is one of many tasks included in the job profile of an ITOM professional. It is also included in the authority of the facility manager. ITOM can also address issues related to user access, software programs, and other aspects of technology. When it comes to IT service management, ITIL is the most popular framework to use. Principles of IT Infrastructure Library Management include all aspects of service strategy, design, migration, operations, and continuous service improvement. It typically consists of tasks handled by a service desk but can also be integrated into ITOM. Information Technology Operations Management, also known as ITOM, is a subfield of IT Service Management that focuses on service operations. Unlike ITSM, which focuses more on service delivery, ITOM focuses on the internal procedures used to manage internal operations within an organization. IT service management is now more transparent to the general public and therefore easier to use for those outside the IT industry. The definitions of ITSM and ITOM show how closely the two concepts are related. Organizations must manage and fulfill two distinct categories of ITOM and ITSM. Therefore, silos and specialized bureaucracies do not contribute to optimal levels of productivity or economic value in any profession or service related to information technology. ITSM and ITOM managers are tasked with carrying out a wide range of responsibilities simultaneously. IT service management and IT operations management are intertwined in that they share some of the same resources and staff. For example, it would be difficult, if not impossible, to get ITSM and ITOM done right without efficient IT asset management. Accurate and timely locating all IT assets is the first step to successful IT asset management. You should create a complete network map with representations of your IT team and the people who use their services. A configuration management database, also known as CMDB, is an integral part of IT service management, IT operations management, and IT asset management. A comprehensive configuration management database can provide a “single version of truth” for your IT environment. This “single truth” provides reliable and consistent information for your IT inventory. These topics will be further highlighted and analyzed in future posts. ITSM and ITOM operations, on the other hand, must be tightly connected and supported by IT infrastructure and processes, regardless of how mature they are. Assuming these projects can be adjusted and kept that way. In this case, your company will have a stable and flexible foundation on which to build all future efforts to derive more profits from your enterprise.

IT Managers Roles:

**Each** **company** has its **own** method of selecting candidates for IT manager **jobs.** **In** addition to **their** strategic **function,** **they** **often** **have** **ancillary** **roles.** In addition, **they** **develop** **strategies** for core functional **groups** while executing **the** **directives** **of** the Chief Information Officer and **Senior** **Management.** As information **technology** **leaders,** they are **responsible** **for** creating **the company’s** IT strategy, **defining** team procedures, **selecting** technologies to invest in, and facilitating communication **between** different organizations. **Your** **job** is essential in **relation** **to** information technology and larger **organizations.** For **example,** they may be responsible for one or more functional **areas** such as software development, architecture, infrastructure, networking, or security. **You** **can** also be responsible for all these areas **together.** **If** **you** **work** for a smaller company, you **may** need **several** years of experience before **considering** a **managerial** position. In most cases, **they** **need** **5-10** years of experience to manage large teams **or** complex **enterprises** systems.

### IT Operations Management

The **IT** **manager's** responsibility in IT operations management is to **monitor** **system** functionality and the physical **components** of the **network.** **Their team** of **IT** specialists, **including** technicians and system **engineers,** **take** **care** **of** **gadgets** **and** **make** **sure** **your** **credentials** **are** **secure.** **The** IT **Operations** **Manager** is responsible for a variety of **duties** including **monitoring** the network **infrastructure,** troubleshooting and **fixing** system issues. **Success** in this **position** **requires** experience in **operating** information technology, **managing** networks, and **securing** computer systems. If you can handle multiple tasks **simultaneously** and are **familiar** **with** the regulations **regarding** personal **data** **protection,** companies would **love** **to** **hear** **from** you. They are ultimately **responsible** for **ensuring** the security, **consistency** and **reliability** of **IT** **systems** **and** **maintaining** **and** **improving** the performance of the company's regional networks and servers**.** **They** **need** **to** **manage** hardware and software **installations,** **updates,** **and** **configurations.** **Suggestions** **on** how **to** **improve** the functionality of the **system.** Address concerns **raised** **regarding** technical aspects. They must make sure, a**s** a **matter** **of** **priority,** that **the** handling, **transfer** and processing **of** **your** **data** **complies** with all applicable laws and company regulations. **They have to maintain** **helpdesks** **to** **support** the **stakeholders.** Manage **information** **technology** **system** costs and **budgets.** Maintain accurate **records** of all software licenses and vendor **agreements,** including **agreements** with **carriers,** software development platforms, and password managers. Organize and implement **several** IT policies and procedures.

### IT Service Management

The IT service manager ensures that the service requirements are outlined in the documentation and (once the service is deployed in the live environment) is put into action. Furthermore, it refers to the knowledge of the IT organization. The IT Service Manager seeks to provide the processes necessary to successfully deliver her managed services. As such, IT service managers must ensure that their roles and responsibilities are clear, as well as the implementation, execution, and improvisation of the many processes they are responsible for. Providing a service requires a large amount of available resources. The IT Service Manager ensures that all company IT services are effectively managed to meet business needs, such as contractual obligations to customers. Since no firefighting activity took place, the terms of the Service Level Agreement are considered to have been met. IT Service Managers have different tasks and responsibilities. The first and most important requirement for an IT service manager is familiarity with the capabilities of the IT organization. Additionally, upper management would like an overview of how the service is performing.  
Therefore, it is necessary to report the improvement plan currently being formulated to the top of the group. As a direct result, IT service managers are expected to produce reports that meet these needs. The IT organization's problems can be greatly complicated by the introduction of entirely new services, technologies, and people. IT Service Managers are responsible for ensuring that all relevant information (such as information required for service determination or support, reporting, enhancement, etc.) is communicated and shared and appropriate communication tools are available.

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.