

Operations Management, as well as Financial Management and Service Management, is an integral component of ITIL and ISO/IEC 20000 best practices.

This document will provide a foundation for organizations to understand and prepare for implementing best practice processes associated with the management, delivery, and support of communication and technology services. Operations Management encompasses the suite of processes that focus on sustaining business continuity and ensuring sufficient availability and appropriate capacity of all hardware, software, and personnel resources. Operations Management is an integral facet of the internationally accepted best practice framework defined by the Information Technology Infrastructure Library (ITIL) and the International Organization for Standardization International Electro technical Commission (ISO/IEC 20000). This document outlines lessons learned to help organizations implement an effective and appropriate Operations Management program.

Concepts and Definitions

The foundation of Operations Management is sensible and logistical planning.

Operations Management focuses on ensuring a legitimate economic balance between supply and demand without adversely affecting customer satisfaction and business operations. Based on the capabilities and mission of the organization, Operations Management may include up to three essential disciplines:

Availability Management - The processes involved in the design, implementation, and continued performance measurements to make sure there is sufficient availability of all hardware, software, and personnel resources.

Capacity Management – The processes that determine the most effective use of all resources by analyzing statistics that certify a legitimate balance of cost against supply versus demand.

Continuity Management – The processes that help confirm that the required supported services can be recovered following a catastrophic interruption, within the required and agreed timescales to sustain the minimum business requirements.

Rightsizing is Always Better Than Oversizing

Operations Management involves a true economic balance between addressing actual business requirements and organizational desires.

The key to implementing and sustaining an effective Operations Management program is to avoid careless and costly logistical decisions that do not justify a true economic balance of customer satisfaction to business requirements. The following careless decisions should be avoided:

1. The best way to avoid capacity problems is to over engineer your data center and communications infrastructure
2. Purchase hot standby kits for all deployed hardware resources
3. Staff your personnel resources to accommodate the periods of highest demand

An effective Operations Management program continually adjusts and accommodates an ever-increasing array of evolving business requirements. The common denominator to every facet of the Operations Management program is finite capital and operational funding. Over-purchasing technology or maintaining too many staff can adversely affect the organization's ability to procure new technologies in a timely manner or maintain proper levels of training. An efficient and proactive Operations Management program relies on accurate statistical analysis of business support operations, which are cataloged and measured against established Key Performance Indicators (KPIs).

Some examples of support operations include, but are not limited to:

- **Inventory Management** – The procurement, licensing, or leasing of hardware and software to support the lifecycle deployment of services.
- **Workforce Management** – The technical personnel and training required to support the timely provisioning, upgrade, replacement, and resolution of services.
- **Infrastructure Management** – The physical elements of the communications infrastructure such as cable plants and cross-connections to network provisioning devices that facilitate access to enterprise services.
- **Vendor Management** – The licensing or leasing of services from commercial providers including telecommunication carriers, hosted technology service providers, and warranty repair agencies.
- **Location Management** – The facilities required to ensure secure and environmental safekeeping of all provisioned services, supporting elements of the infrastructure, and enterprise services.

Common Business Challenges

Implementing and sustaining an Operations Management program can be justified by understanding that the alternative has a direct adverse impact on the organization's ability to properly perform business.

An organization will recognize sustained benefits from one or more aspects of an Operations Management program if it can relate to any of the common business challenges outlined below:

- Inability to quickly ascertain the status of all hardware, software, and personnel resources
- Incomplete or insufficient monitoring to ensure all hardware, software, and personnel resources are cost justified
- Inability to properly match supply against sustained demand
- Lack of methods or tools to accurately forecast capacity requirements
- Business operations are not globally prioritized to minimize impact of catastrophic incidents
- Business continuity is not considered a competitive advantage and is regarded as a reactive measure
- Government and/or corporate regulatory requirements are not well-known or understood
- Activities are not automatically journalized, preventing legitimate planning, procurement, and execution

Conducting a Self Assessment

The key to starting any initiative is understanding organizational goals and being able to measure the return on investment (ROI).

The table below provides assistance to help organizations assess the effectiveness of their respective Operations Management program.

Maturity Level	Common Characteristics of a Financial Management Program
0 – Absence	Procurement of resources is justified based on individual impact rather than overall corporate value.
1 – Initiation	Assignment of hardware, software, and personnel resources is managed reactively. There is an insufficient audit trail to determine optimum cost effective levels of resource availability. There are no measurements or monitoring in accordance to service level agreements to ensure agreed levels of availability, reliability, and maintainability.
2 – Awareness	Disparate technologies and processes prevent accurate correlation of resources to support of transactions. There is insufficient governance on how resources are used to support high priority urgent activities.
3 – Control	The roles, responsibilities, and authorizations that support the processes are defined and most often manually enforced. Key Performance Indicators (KPIs) are established to measure the effectiveness of the program and guide its continued improvement. Resources are not tuned or optimized to maximize resource use.
4 – Integration	Integrated technologies are employed to leverage efficiencies via automation. Processes that support the provisioning and resolution of service disruptions are consistent and repeatable. Levels of quality delivery and control are prevalent. There is regular, formal communication between support personnel and management who are working to support different processes. Key Performance Indicators (KPIs) are established to measure inter-process effectiveness. Quality and performance metrics are shared between processes.
5 – Optimization	The processes are recognized as critical enablers to improve the effectiveness of the business and are directly linked to corporate objectives. Assessments are used to drive innovation and improve organizational effectiveness. Management is made aware of performance via automated delivery of performance reports.

Setting the Wheels in Motion

The ability to sustain an efficient and effective Operations Management program comes as a natural derivative to a mature Financial Management program.

A legitimate documented repository of the provisioned services and related distributed assets is essential to developing an Operations Management program. Organizations interested in championing an effective Operations Management program should start by completing the initial objectives associated with a Financial Management program.

Organizations should start with a pilot program that focuses on one of the aspects of Operations Management that were previously defined and then continue to improve the effectiveness and spectrum of the program as incremental benefits are realized.

Measuring Success

The ability to establish milestones of success will enable a growing program that is accepted by the entire organization.

The key to achieving success is establishing SMART objectives. The purpose of the SMART framework is to define the immediate priorities of the organization and make sure the implementation is properly aligned with the corporate mission. Each initiative to improve the Operations Management program should have clearly defined objectives. SMART objectives satisfy the following criteria:

1. Specific to implementation milestones
2. Measurable against value achieved
3. Appropriate to the customer's requirements
4. Realistic to substantiate ROI and time-frame
5. Time-bound to establish when and how

Some good examples of SMART objectives for starting a Financial Management program include the ability to:

- Reduce hardware and software procurement costs by 10%
- Provide immediate insight to the availability and utilization of all hardware, software, and personnel resources
- Provide statistical reports that can accurately project capacity requirements through sound analysis of the support operations
- Justify that the procurement of all hardware and software aligned with corporate priorities
- Reduce maintenance and operational support costs associated with maintaining disparate technologies