Prístupy k riadeniu služieb informačných technológií

Approaches to IT Service Management

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Abstract

The article deals with approaches to information technology service management. It focuses on Information Technology Infrastructure Library (ITIL) and Control Objects for IT related Technology (COBIT), which are the most expanded frameworks in IT Service Management. Because there is confusion in IT organizations concerning these frameworks, the article deals with main features of ITIL and COBIT, with strengths and weakness. It also highlights the latest version of ITIL. In order to meet business objectives of organizations delivering IT services, the article compared combination of these two frameworks.

Keywords
service, IT service, IT Service Management, ITIL, COBIT

Introduction

IT organizations are under increasing pressure to meet the business goals of their companies. Compliance requires strong corporate governance capabilities that are demonstrable to outside auditors. Because IT plays such a major role in business processes, the IT organization not only creates complexity for the business, but at the same time, provides the means to demonstrate this compliance.

Organizations rely on guidelines such as the IT Infrastructure Library (ITIL) and Control Objectives for Information and related Technology (COBIT) to help understand and address these challenges.

ITIL and COBIT can enable organizations to achieve three objectives:

§ Establish proven best practice IT service management processes to manage IT from a business perspective and achieve business goals, including that of compliance.

§ Put in place clear process goals, based on the organization's business goals, and provide a means of measuring progress against them.

§ Ensure effective IT governance and control at the process level, and enable IT to demonstrate that it meets or exceeds the requirements set forth by government or external regulations. [6]

There is, however, confusion in IT organizations concerning these frameworks. Some think they are two alternate approaches to the same goal, and others think they are mutually exclusive. Actually, they are highly complementary, and together provide greater value than using just one or the other. **COBIT outlines what you need to do to meet these challenges and ITIL shows you how to get there.**

Approaches to IT Service Management
COBIT

Control Objects for IT related Technology is a framework and a knowledge base for IT processes and their management. The framework is built with reference to existing standards and practices. It is described as a management tool rather than a definitive standard. This enables IT personnel, business people, and audit and control specialists to relate to COBIT easily.

COBIT was developed from the Committee of Sponsoring Organizations of the Treadway Commission-Internal Control Integrated Framework (COSO), the original ISACA Control Objectives, and over 50 IT standards and best practices. COBIT bridges the gap between business control models and IT best practices and offers a model for IT Governance.
COBIT is now considered the de facto standard for IT Governance and IT controls. [4]
IT control definition, testing and progress measurement are task categories that are natural COBIT strengths. The COBIT model is very specific in its definition of the processes and the auditable controls that need to be in place to ensure reliable and predictable IT processes.
The processes defined in COBIT are grouped into four separate domains that align with the IT implementation cycle. They are:

- Planning and Organization.
- Acquisition and Implementation.
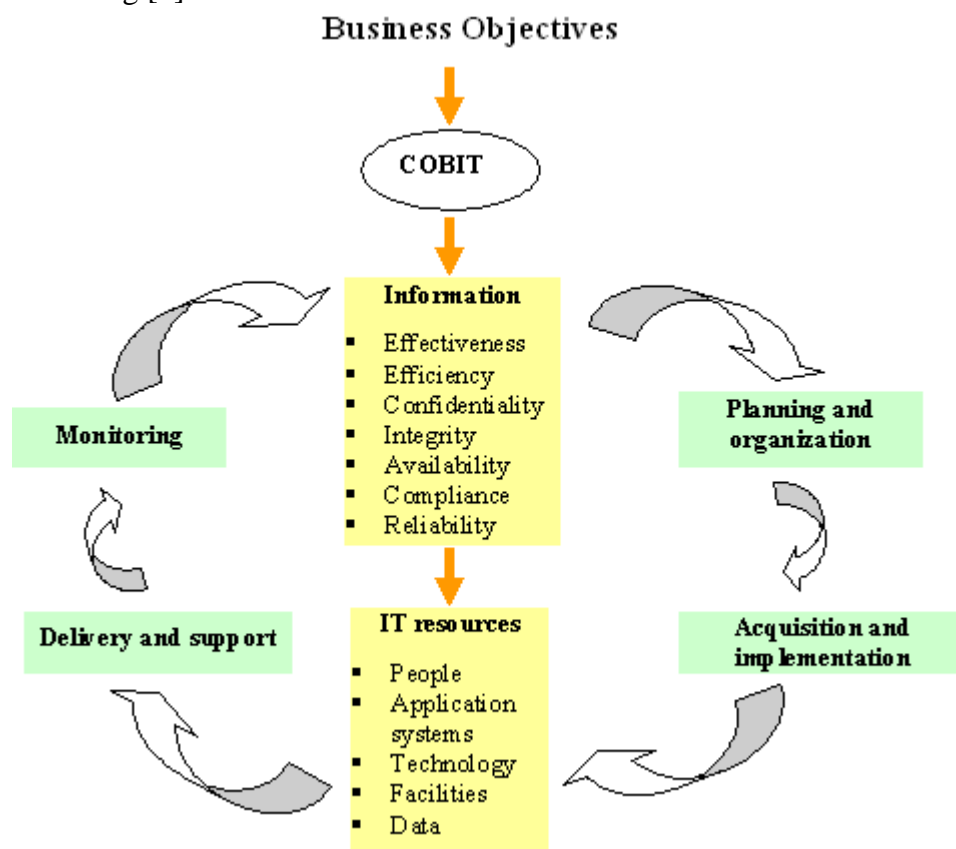- Delivery and Support.
- Monitoring.[5]

Figure 1 The COBIT model. [5]

ITIL
ITIL is the short form of Information Technology Infrastructure Library. The "Infrastructure" in ITIL includes all hardware, software, processes, tools and even roles used in the delivery of IT Services to the business. It is a collection of best practises in IT Service Management (ITSM) providing a framework which can be utilised in any organization to improve capabilities and service management. Originally it was released by the UK, Office Government Commerce (OGC) in the late 80s.
The ITIL also defines a set of customary operation management measures and practices that enable the business to handle an IT operation and associated infrastructure.

In other words, ITIL is a framework of best practice guidance in Information Technology Service Management (ITSM). It describes processes, functions and structures that support most areas of IT Service Management, mostly from the viewpoint of the Service Provider.

ITIL can be adapted and applied to suit the circumstances of a particular provider, customer or implementation, depending on various factors such as size, culture, existing management systems, organizational structure and the nature of the business.

ITIL (version 3) is based on the service lifecycle approach. ITIL does not set in stone every action required on a day-to-day basis because this is something that will vary from organization to organization.

Being a framework and not a „cook book" that requires the exact ingredients, ITIL provides the outline and models that specify the goals, general activities, inputs and outputs of the processes that can be incorporated and generally used in varying degrees of maturity in most organizations.

ITIL provides a proven method for planning and implementing common processes, roles and activities with appropriate reference to each other that defines the lines of communication between these processes.

More importantly ITIL provides a common language that is an essential ingredient in the successful implementation of any improvement programme. [7]

ITIL gives a stronger focus on business benefit and the continual improvement of IT services during the IT lifecycle.

It comprises five stages:
- Service Strategy: creating the set of services that help achieve business objectives.
- Service Design: designing services, from technical and business perspective.
- Service Transition: how to change live production infrastructure, implementing the needed services.
- Service Operation: day-to-day IT business, operating. A place to start if you are new to ITIL.
- Continual Service Improvement: Evaluating and improving services in support of business goals. [10]

The five stages are represented in the following diagram, with Service Strategy at its core and Continual Process Improvement enveloping the remainder.
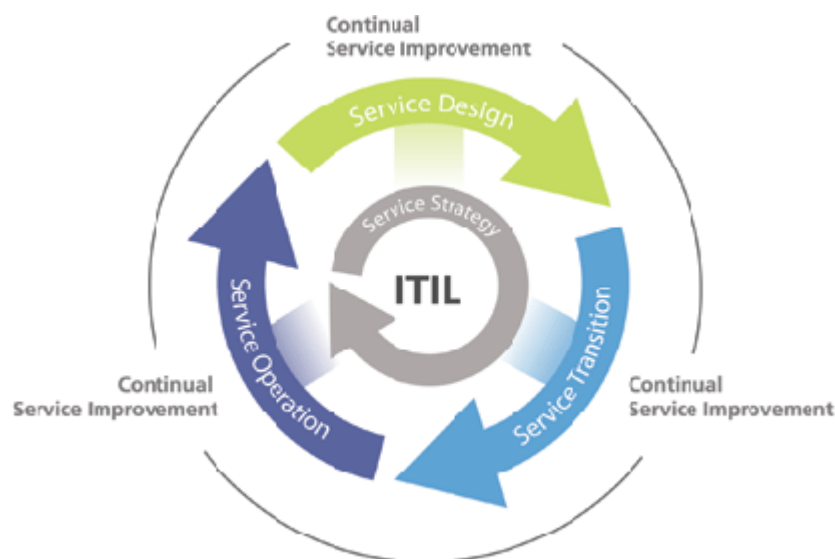

Figure 2 ITIL Service Lifecycle. [10]

The benefits of using an ITIL framework to supply IT services include:
- reduction in cost,
- increase in quality and hence improved services,
- a more professional approach to IT which leads to greater customer satisfaction,
- adoption of standards,
- greater productivity,
- better use of skills and capabilities,
- service delivery improvements which can lead to quality accreditation through ITIL specification or ISO 20000 recognition.

Highlights of ITIL version 3
- ITIL is aligned exclusively towards business usage.
- Focus is primarily placed on the Service Life Cycle - and only on the processes as a second priority.
- ITIL is the basis, and is thereby a support for the fulfilment of the compliance requirements.
- The basis for a Balanced Scorecard is created with ITIL v3.
- Quality management on the basis of the Deming Quality Cycle places the learning organization at the centre of interest.
- ITIL v3 has been coordinated with the ISO/IEC 20000 standard.
- Agile and adjustable Service Design.
- Assistance with the management of Service providers.
- Improved measurability and traceability of real added values.

ITIL vs. COBIT
COBIT and ITIL are more complementary than they are competitive.
COBIT focuses on the definition, implementation, auditing, measurement and improvement of controls for specific processes that span the entire IT implementation life cycle. As such, it is an excellent reference model for IT governance across the entire implementation life cycle.
The primary focus of ITIL is to provide best practice definitions and criteria for operations management.
If the goal is improving the quality and measurability of IT governance across the entire networked application implementation life cycle or implementing a control system for improved regulatory compliance, COBIT would be a more effective choice.
On the other hand, if the objective is to continuously improve IT operations efficiency and IT customer service quality, ITIL would be the better bet. [8]
Comparison between these two approaches is in the following table 1.

Table 1:   Comparison between ITIL and COBIT approach for managing IT services

	COBIT	ITIL
Function	Mapping IT process	Mapping IT service level management
Area	4 process and 34 domain	5 main processes
Issuer	ISACA, ITGI	OGC
Implementation	Information system audit	Manage service level
Consultant	Accounting firm, IT consulting firm	IT consulting firm

As we can see from the table, ITIL is registered trade mark of the OGC (The Office of government Commerce), which is the government organization of the United Kingdom.

COBIT is registered trade mark of the ISACA (Information System Control Standard) non-profit organization and ITGI (The IT Governance Institute). [6]

ITIL pertains to IT service management whereas COBIT pertains to security i.e. ITIL has a narrower focus than COBIT but they do overlap in some areas. ITIL addresses IT service delivery. COBIT addresses this as well, but in less detail.

ITIL has some guidelines for service management and service delivery processes. Not complete processes, and not for all areas of IT and certainly not for all areas of the company. COBIT are the control objectives which you can use to see if the processes are followed.

ITIL is part of the foundation of the COBIT model, which defines control objectives for IT in support of business processes.

ITIL is about providing guidelines as to what should be done and steps to trying to get best practices in place and COBIT is more about proving and establishing a set of objectives to show control. It's more of an audit and measurement tool to determine if things were done right.

ITIL is strong on delivery and support processes. It describes how to structure operational processes but *is weak on* security controls and processes.

COBIT is focused on controls and metrics. It also lacks a security component but provides a more global view of IT processes at the IT organization management principles than ITIL.

COBIT processes are focused on business requirements, and provide guidance in determining what is sufficient to meet these requirements. *ITIL defines best practice processes for ITSM and shows how to get there*. It focuses on method and defines a more comprehensive set of processes than COBIT, providing a roadmap for building processes. With the combination of ITIL and COBIT, IT can meet business objectives and thus delivering higher quality business services at lower costs. [1]

Conclusion

This article was created to support the Institutional project *"IT Service Management and its influence on postal services"* to support projects *KEGA* and *VEGA*.

Abstrakt

Článok sa zaoberá prístupmi ku riadeniu služieb informačných technológií. Zameriava sa na ITIL (Information Technology Infrastructure Library) a COBIT (The Control Objectives for Information and related Technology), ktoré sú najviac rozšírené rámce pre riadenie služieb informačných technológií (IT Service Management). Pretože pre IT organizácie vznikajú nejasnosti ohľadom týchto rámcov, článok sa zaoberá hlavnými črtami ITIL a COBIT ich silnými a slabými stránkami. Taktiež kladie dôraz na najnovšiu verziu ITIL. V záujme dosiahnutia obchodných cieľov organizácií poskytujúcich IT služby, článok predstavuje kombináciu týchto dvoch rámcov.

Kľúčové slová

IT služba, riadenie služieb informačných technológií, ITIL, COBIT

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