ITIL IT Infrastructure Library Overview

Vocabulary

- ◆Incident any event which is not part of the standard operation of a service and which causes or may cause an interruption to or reduction in the quality of that service
- Problem The unknown root cause of one or more incidents
- ◆Error an incident or problem for which the root cause is known and for which a temporary workaround or a permanent alternative has been identified

Vocabulary - 2

- OGC Office of Government Commerce (OGC)
- BS 15000 Specification for IT Service Management
- PD0005 A Code of Practice for IT Service Management
- ◆PRINCE2 Projects in Controlled Environments Version 2 (PRINCE2)
- Customer Senior managers who commission, pay for and own the IT Services
- User people who use the services on a dayto-day basis

Vocabulary - 3

◆Definitive Copy – Master Library component

Why ITIL?

- Organisations are increasingly dependent upon IT to satisfy their corporate aims and meet their business needs
 - This growing dependency leads to growing needs for quality IT services – quality that is matched to business needs and user requirements as they emerge
- ◆The authors of ITIL have tried to introduce "Engineering" think and practices into the IT world

Why ITIL? - 2

- ◆IT Service Management is concerned with delivering and supporting IT services that are appropriate to the business requirements / objectives of the organisation
- ◆IT service providers must continually strive to improve the quality of their service, while at the same time trying to reduce the costs or, at a minimum, maintain costs at the current level

Why ITIL? - 3

- ◆ITIL provides a comprehensive, consistent and coherent set of best practices for IT Service Management processes, promoting a quality approach to achieving business effectiveness and efficiency in the use of information systems
- ◆ITIL processes are intended to be implemented so that they underpin, but do not dictate, the business processes of an organisation



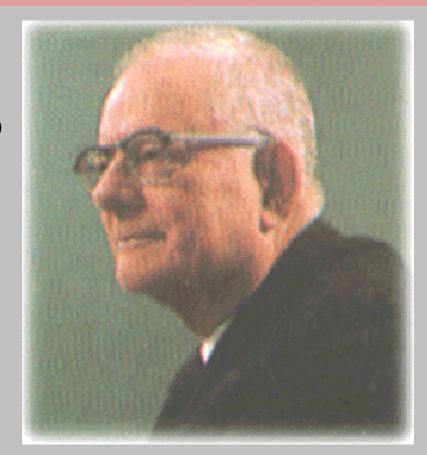
◆Based on the CMMI Framework, CMMI Models are tailored to assist an organization in aligning the application of the model with its business objectives



- ◆ For a focus on Quality Management to be successful, it must be tied to the organization's business objectives:
 - What are the organization's highest priorities?
 - What business consequences have resulted from weak or ineffective focus on quality management functions?
 - What action is being taken to correct the cause?
 - Objectives
 Output
 How can a focus on Quality Management support the organization's business objectives

Helping The Business

◆Process improvement should be done to help the business not for its own sake.



ITIL Background

- Developed in the late 1980s, the IT Infrastructure Library (ITIL) has become the world-wide de facto standard in Service Management
- Starting as a guide for UK government, the framework has proved to be useful to organisations in all sectors
- ◆ITIL has been adopted by many companies as the basis for Service Management, and for consultancy, education and software tools support

ITIL Background - 2

- ◆The IT Infrastructure Library documents industry best practice guidance
- ◆ITIL is a framework that describes the goals, general activities, inputs and outputs of the various Service Management processes, which can be incorporated within IT organisations
- ◆The CMMI is a framework that organizes CMMI components, including common elements of the current CMMI models, their appraisal methods and their training materials



- In the past, many IT organisations were internally focused and concentrated on technical issues
- These days, businesses have high expectations of the quality of services
- ◆This means that for IT organisations to live up to these expectations, they need to concentrate on service quality and a more customer-oriented approach
- ◆It means doing these things at the right price
- In short, it means managing IT as a business



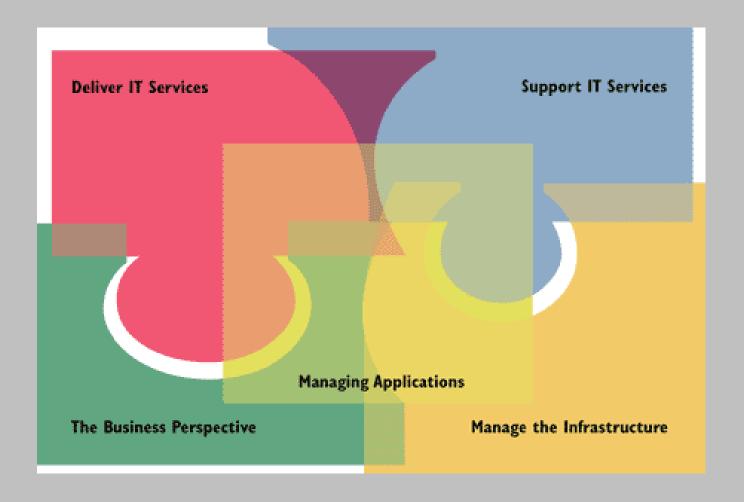
- ◆ITIL focuses on both tactical and operational level
 - Tactical processes are centered on the relationships between the IT organisation and their Customers
 - Service Delivery is partially concerned with setting up agreements and monitoring the targets within these agreements. (SAM – ISM)
 - On the operational level, the Service Support processes can be viewed as responding to the changes needed in, and any failures in, the services laid down in these agreements (SAM – ISM)



- ◆On both the tactical and operational levels there is a strong relationship with quality systems such as ISO 9000 or CMMI and a total quality framework such as European Foundation for Quality Management (EFQM) or Baldridge and even project management systems such as PMI or Prince2
- ◆ITIL supports these quality systems by providing defined processes and best practices for the management of IT Services but it must be remembered that there needs to be on-going review of the quality of processes aligned with business requirements.

The IT Infrastructure Library

Jigsaw Diagram



Jigsaw Diagram - 2

◆ The major elements of ITIL can be compared to overlapping jigsaw puzzle pieces (or perhaps better as tectonic plates), some of which have a precise fit, and some of which overlap or do not fit together accurately



- ◆ The Business Perspective covers a range of issues concerned with understanding and improving IT service provision, as an integral part of an overall business requirement for high quality IS management. These issues include:
 - Business Continuity Management
 - Partnerships and Outsourcing
 - Surviving change
 - Transformation of business practice through radical change

Service Delivery

- Service Delivery looks at what service the business requires of the provider in order to provide adequate support to its business customers
- ◆ To provide the necessary support Service Delivery is broken down into the following topics:
 - Capacity Management
 - Financial Management for IT Services
 - Availability Management
 - Service Level Management
 - ♦IT Service Continuity Management.



- Service Support is concerned with ensuring that the User has access to the appropriate services to support its business functions
- Issues discussed under Service Support are:
 - Service Desk
 - Incident Management
 - Problem Management
 - Configuration Management
 - Change Management
 - Release Management



- ◆ICT Infrastructure Management includes:
 - Network Service Management
 - Operations Management
 - Management of Local Processors
 - Computer Installation and Acceptance
 - Systems Management



- ◆Applications Management embraces the software development lifecycle expanding the issues touched upon in Software Lifecycle Support and Testing of IT Service
- ◆Applications Management expands on the issues of business change with emphasis on clear requirement definition and implementation of the solution to meet business needs → CMMI Requirements Development and Technical Solution with Requirements Management



- All the processes described in ITIL_relate to each other – Example – Life-cycle of an "Incident"
 - A User calls the Service Desk to report response difficulties with the on-line service
 - The Incident Management process deals with Incident
 - The Problem Management process investigates underlying cause and calls in Capacity Management to assist in this process
 - Service Level Management is alerted that the SLA has been breached
 - Request for Change (RFC) raised if appropriate
 - The Change Management process co-ordinates the Request for Change (RFC)
 - The IT Financial Management process assists with the business case cost justification for any upgrade



- The IT Service Continuity process gets involved in the Change Management process to ensure recovery is possible onto current back-up configuration
- The Release Management process controls the implementation of the Change by rolling out replacement hardware and software. Release Management updates Configuration Management with details of new Releases and versions
- The Availability Management process is involved in considering the hardware upgrade to ensure that it can meet the required availability and reliability levels.
- The Configuration Management process ensures the Configuration Management Database (CMDB) information is updated throughout the process



- Customer Generally senior managers (CEO, CTO, CFO, COO) who commission, pay for and own the IT Services
 - The primary point of contact for Customers is either the Service Level Manager or the Business Relationship Manager
- Users Those people who use the services on a dayto-day basis
 - ♦ The primary point of contact for Users is the Service Desk
- Users and Customers have related but different needs
 - Users may demand high availability
 - Customers look for value for money at different levels of availability

Summary

- ◆ITIL is written mainly from an in-house service provider's perspective, but it is generally relevant to all other methods of service provision
- ◆ITIL is applicable to those involved in outsourced service provision or working in partnerships.

Summary - 2

- Business managers can use ITIL in understanding and establishing best practice IT services and support
- Managers from supplier organisations should also find ITIL relevant when setting up agreements for the delivery and support of services