



ITIL V3 : Introduction and Overview

Dr. Ir. Yeffry Handoko Putra, M.T
Head Department of
Magister Information System (MIS)
Universitas Komputer Indonesia

Agenda for the Session



- **What is ITIL?**
 - **What about v3?**
 - **Key Concepts**
 - **Service Management & Delivery**
 - **The Service Lifecycle**
 - **The Five Stages of the lifecycle**
 - **ITIL Roles**
 - **Functions and Processes**
 - **Further Learning**
 - **Accreditation**
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What is ITIL?



- **Systematic approach to high quality IT service delivery**
 - **Documented best practice for IT Service Management**
 - **Provides common language with well-defined terms**
 - **Developed in 1980s by what is now The Office of Government Commerce**
 - **itSMF also involved in maintaining best practice documentation in ITIL**
 - itSMF is global, independent, not-for-profit
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What about v3?



- **ITIL started in 80s.**
 - 40 publications!
 - **v2 came along in 2000-2002**
 - Still Large and complex
 - 8 Books
 - Talks about what you should do
 - **v3 in 2007**
 - Much simplified and rationalised to 5 books
 - Much clearer guidance on how to provide service
 - Easier, more modular accreditation paths
 - Keeps tactical and operational guidance
 - Gives more prominence to strategic ITIL guidance relevant to senior staff
 - Aligned with ISO20000 standard for service management
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Key Concepts



- **Service Level**
 - Measured and reported achievement against one or more service level targets
 - E.g.
 - Red = 1 hour response 24/7
 - Amber = 4 hour response 8/5
 - Green = Next business day
 - **Service Level Agreement**
 - Written and negotiated agreement between Service Provider and Customer documenting agreed service levels and costs
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Key Concepts



- **Configuration Management System (CMS)**
 - Tools and databases to manage IT service provider's configuration data
 - Contains Configuration Management Database (CMDB)
 - Records hardware, software, documentation and anything else important to IT provision
 - **Release**
 - Collection of hardware, software, documentation, processes or other things require to implement one or more approved changes to IT Services
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Key Concepts



- **Incident**
 - Unplanned interruption to an IT service or an unplanned reduction in its quality
 - **Work-around**
 - Reducing or eliminating the impact of an incident without resolving it
 - **Problem**
 - Unknown underlying cause of one or more incidents
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4 Ps of Service Management



- ❖ **People – skills, training, communication**
 - ❖ **Processes – actions, activities, changes, goals**
 - ❖ **Products – tools, monitor, measure, improve**
 - ❖ **Partners – specialist suppliers**
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Service Delivery Strategies



Strategy	Features
In-sourcing	All parts internal
Out-sourcing	External resources for specific and defined areas (e.g. Contract cleaners)
Co-Sourcing	Mixture of internal and external resources
Knowledge Process Outsourcing (domain-based business expertise)	Outsourcing of particular processes, with additional expertise from provider
Application Outsourcing	External hosting on shared computers – applications on demand (e.g. Survey Monkey, Meet-o-matic)
Business Process Outsourcing	Outsourcing of specific processes e.g. HR, Library Circulation, Payroll
Partnership/Multi-sourcing	Sharing service provision over the lifecycle with two or more organisations (e.g. Shared IT Corpus/Oriel)

The Service Lifecycle



- **Service Strategy**
 - Strategy generation
 - Financial management
 - Service portfolio management
 - Demand management
 - **Service Design**
 - Capacity, Availability, Info Security Management
 - Service level & Supplier Management
 - **Service Transition**
 - Planning & Support
 - Release & Deployment
 - Asset & Config management
 - Change management
 - Knowledge Management
 - **Service Operation**
 - Problem & Incident management
 - Request fulfilment
 - Event & Access management
 - **Continual Service Improvement**
 - Service measurement & reporting
 - 7-step improvement process
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How the Lifecycle stages fit together



Service Strategy



- **What are we going to provide?**
 - **Can we afford it?**
 - **Can we provide enough of it?**
 - **How do we gain competitive advantage?**
 - **Perspective**
 - Vision, mission and strategic goals
 - **Position**
 - **Plan**
 - **Pattern**
 - Must fit organisational culture
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Service Strategy has four activities



Define the Market



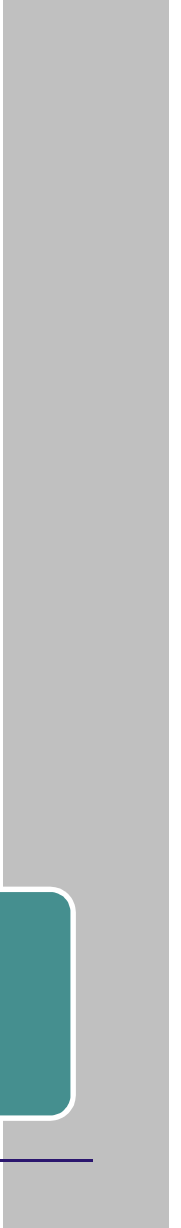
Develop the Offerings



Develop Strategic Assets



Prepare for Execution



Service Assets



- **Resources**
 - Things you buy or pay for
 - IT Infrastructure, people, money
 - Tangible Assets
 - **Capabilities**
 - Things you grow
 - Ability to carry out an activity
 - Intangible assets
 - Transform resources into Services
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Service Portfolio Management



- **Prioritises and manages investments and resource allocation**
 - **Proposed services are properly assessed**
 - Business Case
 - **Existing Services Assessed. Outcomes:**
 - Replace
 - Rationalise
 - Renew
 - Retire
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Demand Management



- ❖ Ensures we don't waste money with excess capacity
 - ❖ Ensures we have enough capacity to meet demand at agreed quality
 - ❖ Patterns of Business Activity to be considered
 - E.g. Economy 7 electricity, Congestion Charging
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Service Design



- **How are we going to provide it?**
- **How are we going to build it?**
- **How are we going to test it?**
- **How are we going to deploy it?**

Holistic approach to determine the impact of change introduction on the existing services and management processes

Processes in Service Design



- ❖ **Availability Management**
 - ❖ **Capacity Management**
 - ❖ **ITSCM (disaster recovery)**
 - ❖ **Supplier Management**
 - ❖ **Service Level Management**
 - ❖ **Information Security Management**
 - ❖ **Service Catalogue Management**
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Service Catalogue

Business Process A

Business Process B

Business Process C

Business Service Catalogue

Service 1

Service 2

Service 3

Service 4

Service 5

Service 6

Technical Service Catalogue

Hardware

Software

Support

Applications

Databases

Capability

Keeps service information away from business information
Provides accurate and consistent information enabling
service-focussed working

Service Level Management



- **Service Level Agreement**
 - Operational Level Agreements
 - Internal
 - Underpinning Contracts
 - External Organisation
 - Supplier Management
 - Can be an annexe to a contract
 - Should be clear and fair and written in easy-to-understand, unambiguous language
 - **Success of SLM (KPIs)**
 - How many services have SLAs?
 - How does the number of breaches of SLA change over time (we hope it reduces!)?
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Things you might find in an SLA



Service
Description

Hours of
operation

User Response
times

Incident
Response
times

Resolution
times

Availability &
Continuity
targets

Customer
Responsibilities

Critical
operational
periods

Change
Response
Times

Types of SLA



❖ Service-based

- All customers get same deal for same services

❖ Customer-based

- Different customers get different deal (and different cost)

❖ Multi-level

- These involve corporate, customer and service levels and avoid repetition



Right Capacity, Right Time, Right Cost!



- ❖ **This is capacity management**
- ❖ **Balances Cost against Capacity so minimises costs while maintaining quality of service**

Is it available?



- **Ensure that IT services matches or exceeds agreed targets**
 - **Lots of Acronyms**
 - Mean Time Between Service Incidents
 - Mean Time Between Failures
 - Mean Time to Restore Service
 - **Resilience increases availability**
 - Service can remain functional even though one or more of its components have failed
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ITSCM – what?



- ❖ **IT Service Continuity Management**
 - ❖ **Ensures resumption of services within agreed timescale**
 - ❖ **Business Impact Analysis informs decisions about resources**
 - E.g. Stock Exchange can't afford 5 minutes downtime but 2 hours downtime probably wont badly affect a departmental accounts office or a college bursary
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Standby for liftoff...



❖ Cold

- Accommodation and environment ready but no IT equipment

❖ Warm

- As cold plus backup IT equipment to receive data

❖ Hot

- Full duplexing, redundancy and failover

Information Security Management



❖ Confidentiality

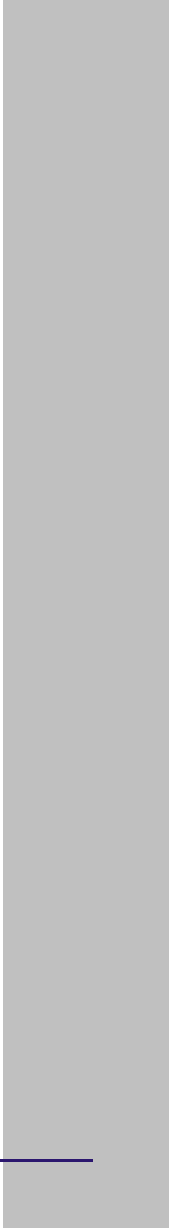
- Making sure only those authorised can see data

❖ Integrity

- Making sure the data is accurate and not corrupted

❖ Availability

- Making sure data is supplied when it is requested



Service Transition



- ❖ **Build**
 - ❖ **Deployment**
 - ❖ **Testing**
 - ❖ **User acceptance**
 - ❖ **Bed-in**
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Good service transition



- **Set customer expectations**
 - **Enable release integration**
 - **Reduce performance variation**
 - **Document and reduce known errors**
 - **Minimise risk**
 - **Ensure proper use of services**
 - **Some things excluded**
 - Swapping failed device
 - Adding new user
 - Installing standard software
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Knowledge management



- ❖ **Vital to enabling the right information to be provided at the right place and the right time to the right person to enable informed decision**
 - ❖ **Stops data being locked away with individuals**
 - ❖ **Obvious organisational advantage**
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Data-Information- Knowledge-Wisdom



Wisdom cannot be assisted by technology
– it only comes with experience!

Service Knowledge Information
Management System is crucial to retaining
this extremely valuable information

Service Asset and Configuration



- ❖ **Managing these properly is key**
 - ❖ **Provides Logical Model of Infrastructure and Accurate Configuration information**
 - ❖ **Controls assets**
 - ❖ **Minimised costs**
 - ❖ **Enables proper change and release management**
 - ❖ **Speeds incident and problem resolution**
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Configuration Management System



Service
Management
KB

Asset and
Configuration
Info

Change Data

Release Data

Application
Data

Document

Definitive
Media Library

Configuration
Management
DB

Painting the Forth Bridge...



- ❖ **A Baseline is a “last known good configuration”**
 - ❖ **But the CMS will always be a “work in progress” and probably always out of date. But still worth having**
 - ❖ **Current configuration will always be the most recent baseline plus any implemented approved changes**
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Change Management – or what we all get wrong!



- **Respond to customers changing business requirements**
 - **Respond to business and IT requests for change that will align the services with the business needs**
 - **Roles**
 - Change Manager
 - Change Authority
 - Change Advisory Board (CAB)
 - Emergency CAB (ECAB)
 - **80% of service interruption is caused by operator error or poor change control (Gartner)**
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Change Types



❖ Normal

- Non-urgent, requires approval

❖ Standard

- Non-urgent, follows established path, no approval needed

❖ Emergency

- Requires approval but too urgent for normal procedure

Change Advisory Board



- **Change Manager (VITAL)**
 - **One or more of**
 - Customer/User
 - User Manager
 - Developer/Maintainer
 - Expert/Consultant
 - Contractor
 - **CAB considers the 7 Rs**
 - Who RAISED?, REASON, RETURN, RISKS, RESOURCES, RESPONSIBLE, RELATIONSHIPS to other changes
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Release Management



- **Release is a collection of authorised and tested changes ready for deployment**
 - **A rollout introduces a release into the live environment**
 - **Full Release**
 - e.g. Office 2007
 - **Delta (partial) release**
 - e.g. Windows Update
 - **Package**
 - e.g. Windows Service Pack
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Phased or Big Bang?



- ❖ **Phased release is less painful but more work**
 - ❖ **Deploy can be manual or automatic**
 - ❖ **Automatic can be push or pull**
 - ❖ **Release Manager will produce a release policy**
 - ❖ **Release MUST be tested and NOT by the developer or the change instigator**
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Service Operation

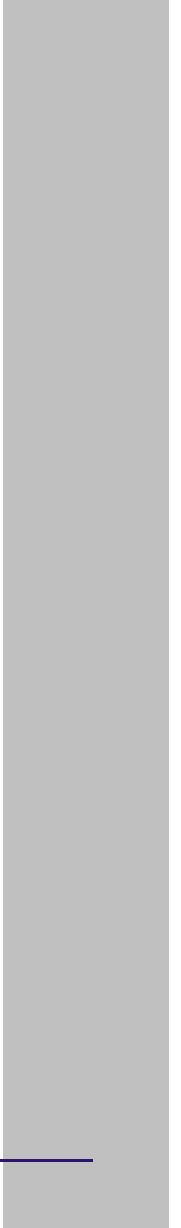


- ❖ **Maintenance**
- ❖ **Management**
- ❖ **Realises Strategic Objectives and is where the Value is seen**

Processes in Service Operation



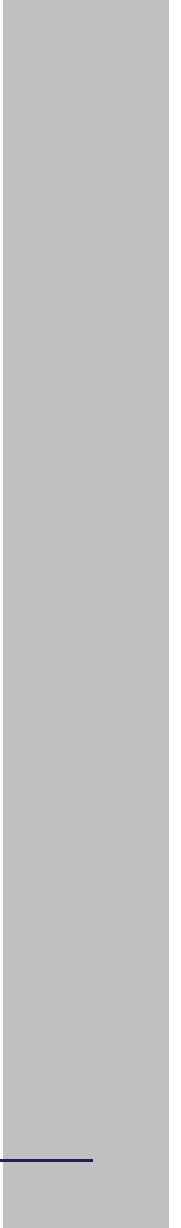
- ❖ **Incident Management**
- ❖ **Problem Management**
- ❖ **Event Management**
- ❖ **Request Fulfilment**
- ❖ **Access Management**



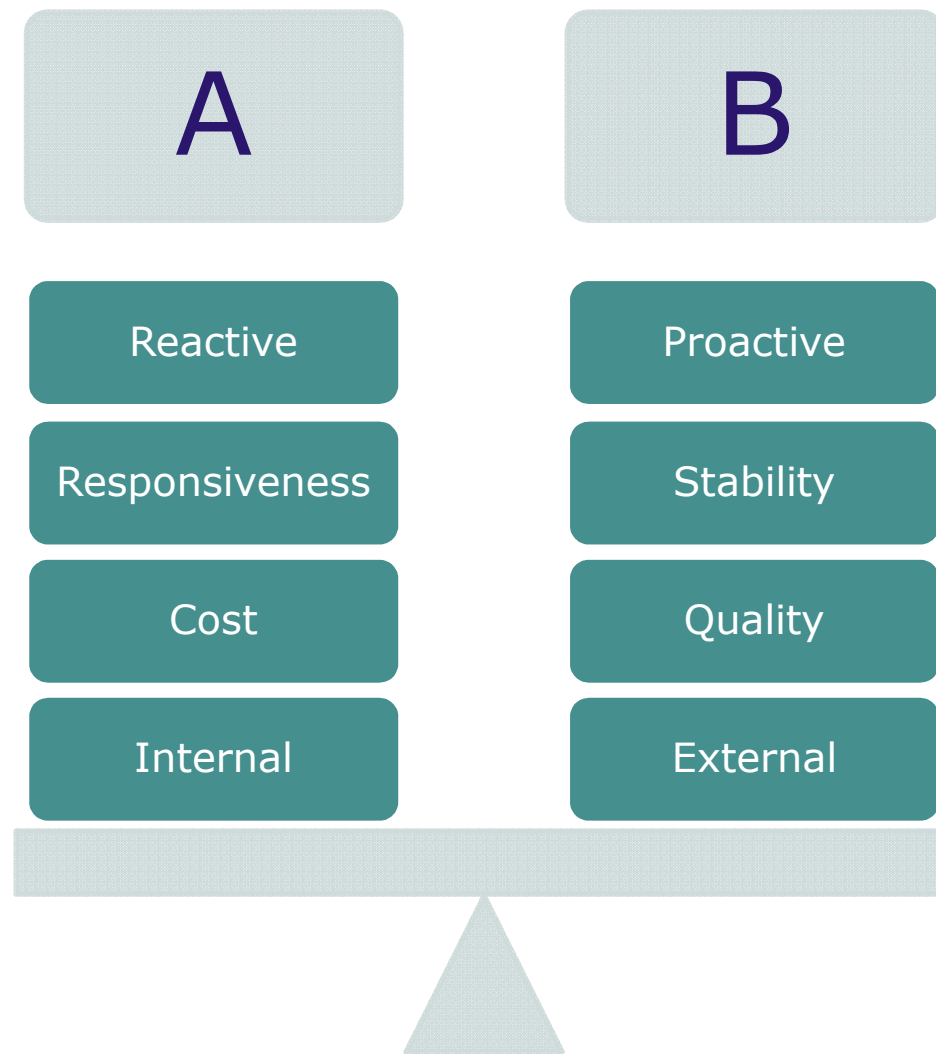
Functions in Service Operation



- ❖ **Service Desk**
- ❖ **Technical Management**
- ❖ **IT Operations Management**
- ❖ **Applications Management**



Service Operation Balances



Incident Management



- **Deals with unplanned interruptions to IT Services or reductions in their quality**
 - **Failure of a configuration item that has not impacted a service is also an incident (e.g. Disk in RAID failure)**
 - **Reported by:**
 - Users
 - Technical Staff
 - Monitoring Tools
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Event Management



❖ 3 Types of events

- Information
- Warning
- Exception

❖ Can we give examples?

❖ Need to make sense of events and have appropriate control actions planned and documented

Request Fulfilment



- ❖ **Information, advice or a standard change**
- ❖ **Should not be classed as Incidents or Changes**
- ❖ **Can we give more examples?**

Problem Management



- **Aims to prevent problems and resulting incidents**
 - **Minimises impact of unavoidable incidents**
 - **Eliminates recurring incidents**
 - **Proactive Problem Management**
 - Identifies areas of potential weakness
 - Identifies workarounds
 - **Reactive Problem Management**
 - Identifies underlying causes of incidents
 - Identifies changes to prevent recurrence
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Access Management



❖ **Right things for right users at right time**

❖ **Concepts**

- Access
 - Identity (Authentication, AuthN)
 - Rights (Authorisation, AuthZ)
 - Service Group
 - Directory
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Service Desk



- **Local, Central or Virtual**
 - **Examples?**
 - **Single point of contact**
 - **Skills for operators**
 - Customer Focus
 - Articulate
 - Interpersonal Skills (patient!)
 - Understand Business
 - Methodical/Analytical
 - Technical knowledge
 - Multi-lingual
 - **Service desk often seen as the bottom of the pile**
 - Bust most visible to customers so important to get right!
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Continual Service Improvement



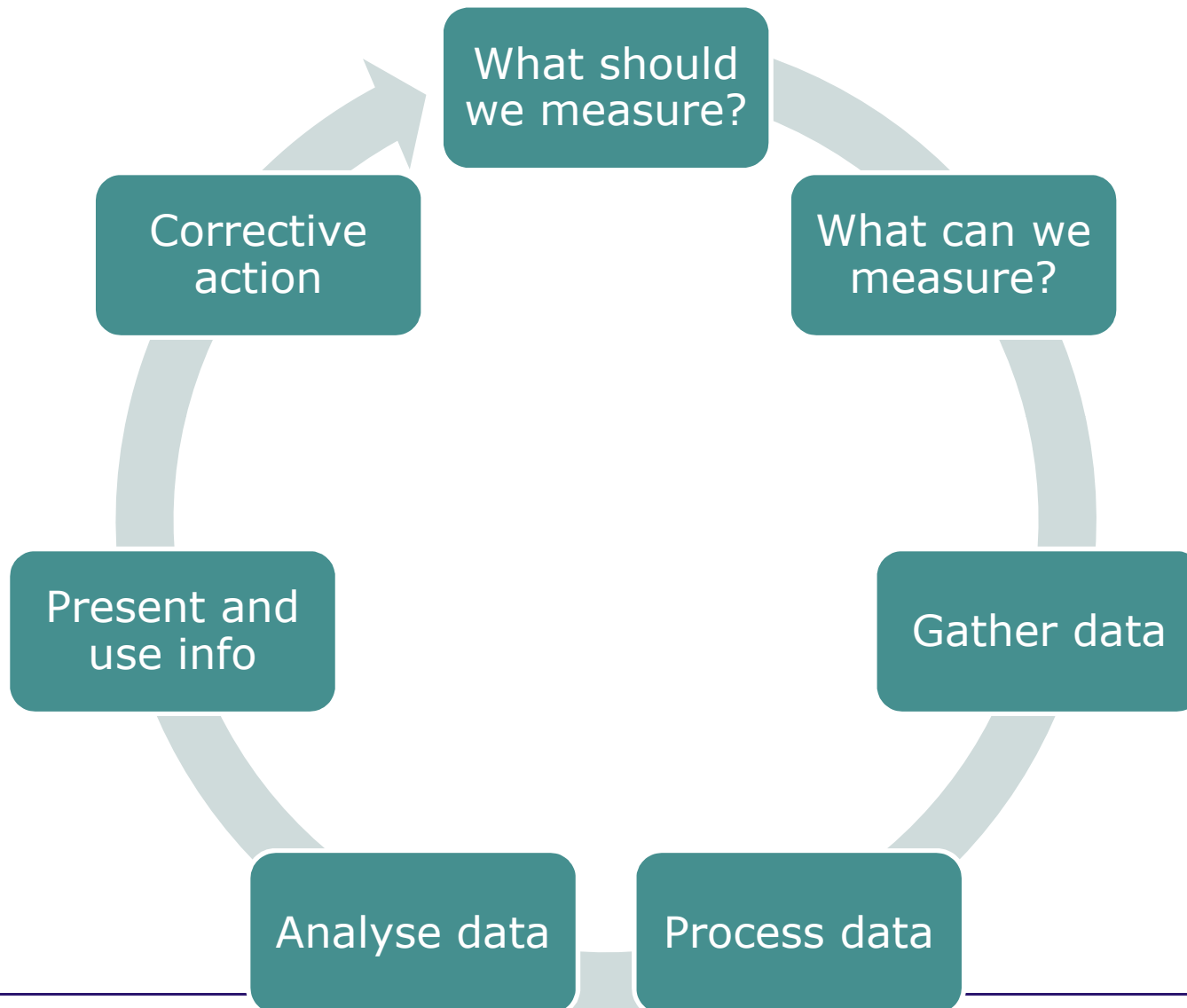
- ❖ **Focus on Process owners and Service Owners**
 - ❖ **Ensures that service management processes continue to support the business**
 - ❖ **Monitor and enhance Service Level Achievements**
 - ❖ **Plan – do –check – act (Deming)**
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Service Measurement



- **Technology (components, MTBF etc)**
 - **Process (KPIs - Critical Success Factors)**
 - **Service (End-to end, e.g. Customer Satisfaction)**
 - **Why?**
 - Validation – Soundness of decisions
 - Direction – of future activities
 - Justify – provide factual evidence
 - Intervene – when changes or corrections are needed
-

7 Steps to Improvement



ITIL Roles



- **Process Owner**
 - Ensures Fit for Purpose
 - **Process Manager**
 - Monitors and Reports on Process
 - **Service Owner**
 - Accountable for Delivery
 - **Service Manager**
 - Responsible for initiation, transition and maintenance. Lifecycle!
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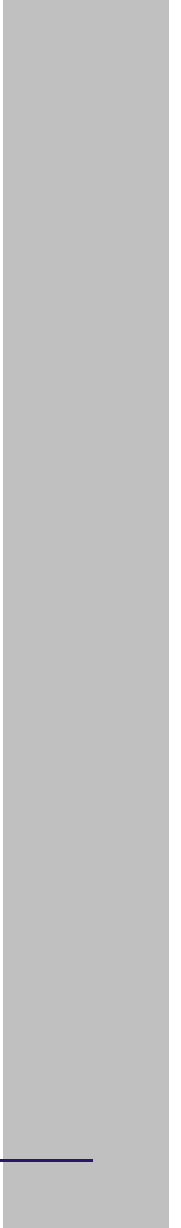
More Roles



❖ **Business Relationship Manager**

❖ **Service Asset & Configuration**

- Service Asset Manager
- Service Knowledge Manager
- Configuration Manager
- Configuration Analyst
- Configuration Librarian
- CMS tools administrator



Functions and Processes



- **Process**
 - Structured set of activities designed to accomplish a defined objective
 - Inputs & Outputs
 - Measurable
 - e.g. ??
 - **Function**
 - Team or group of people and tools they use to carry out one or more processes or activities
 - Own practices and knowledge body
 - e.g. ??
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Further Learning



- **Do a 3-day course**
 - **We're running one here 30th Mar – 1st April**
 - **Many training companies run these courses**
 - **ITSMF provides the full books**
 - **Internet forums and Groups**
 - **Linkedin Group**
 - **FacebookGroup**
 - **Both quite active**
 - **Video:**
<http://cf.ilxgroup.com/itilv3pres/main.html>
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Accreditation

- Today's seminar is not accredited
- 3 days gives the foundation level
- APM Group manages accreditation and certification
 - BCS/ISEB is accredited by APM

