# Master's Thesis

Productization of Services and Human Resource Management

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Author: Laukkanen, Jussi

Supervisor: Professor Hämmäinen, Heikki Instructor: M.Sc. (Tech) Marmo, Saara

Location: Helsinki University of Technology

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## **Background and Objectives**

## **Basis**

→ Service provider's hierarchic organization structure and customer specific operation processes

## Vision

 Managed and efficient service operations combined to enlargement of company based on organic growth and business acquisitions

## Development Idea

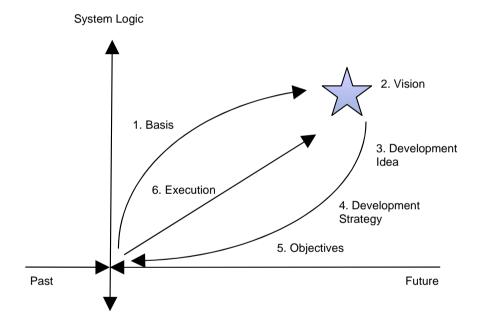
To enhance service operations company realized a need for tools to manage human resources and knowledge of personnel

## **Development Strategy**

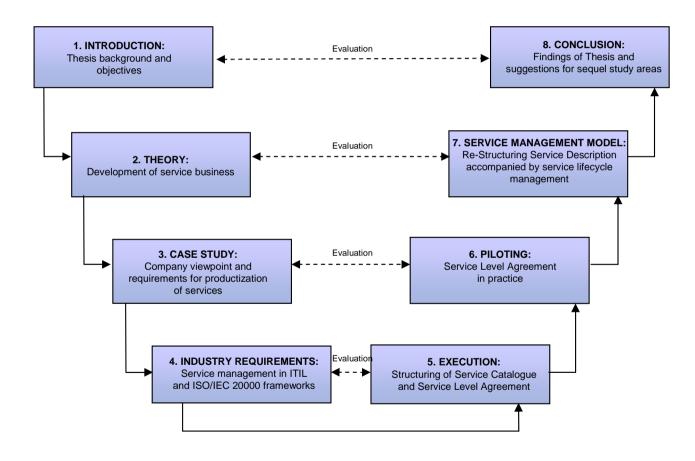
→ As a prerequisite for development of operational tools company decided to define its services and operational needs based on managed services

# Work Objectives

→ To define service management model for modern service provider's business requirements

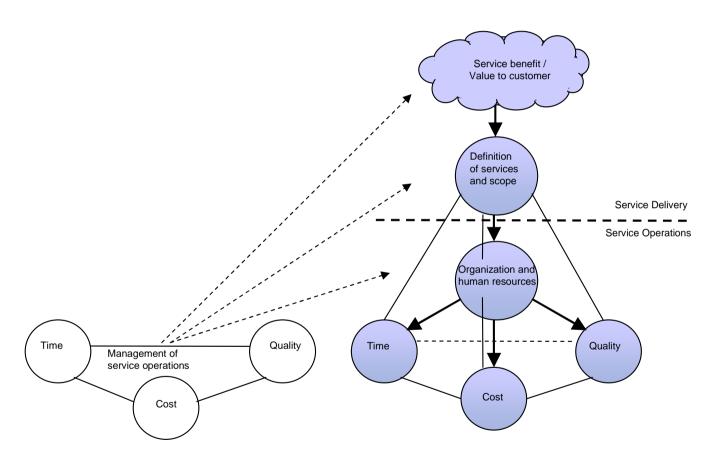


Suorce with adjustment: Normann, R. 2001. *Reframing Business – When the Map Changes the Landscape*. John Wiley & Sons, LTD. p.225.



## From Theory to Practice

- → Theory of development of service business
- Case study of company viewpoint and need for service development
- → Investigation of industry requirements by ITIL and ISO/IEC 20000 frameworks based on findings by case study
- → Structuring of Service Catalogue and Service Level Agreement
- → Piloting of Service Level Agreement
- → Re-structuring Service Description based on findings by piloting
- → Service Management Model



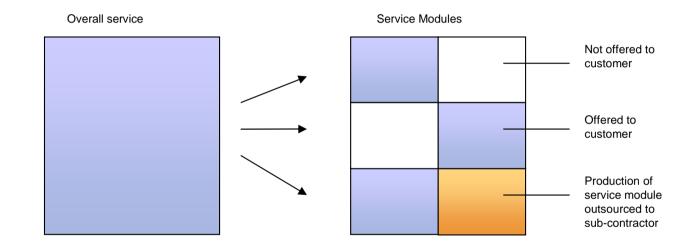
Source with adjustment: Turner, J. R. 1999. *The Handbook of Project-Based Management*, Second Edition. McGraw-Hill. p.8

# Theory Framework

- → Understanding of customer needs and valuation of services
- Service Structure based on service valuation by customers
- → Definition of operational human resources and organization based on services
- → Management of service operations and cost-efficiency

## Modular Service Structure

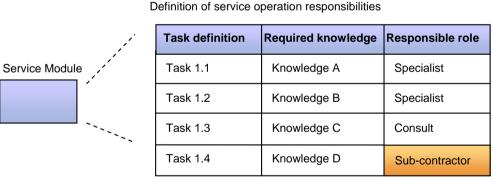
- Overall Services divided to service modules
- Definition of individual service modules
- → Structuring of service packages by combining service modules
- → Enable creation of value-networks by multiple service providers and easier use of sub-contractors

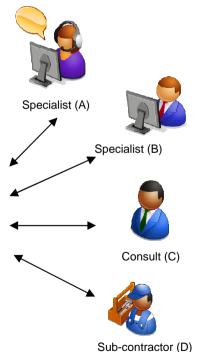


# Impact on Human Resource Management

# Human Resources Management of Service Operations

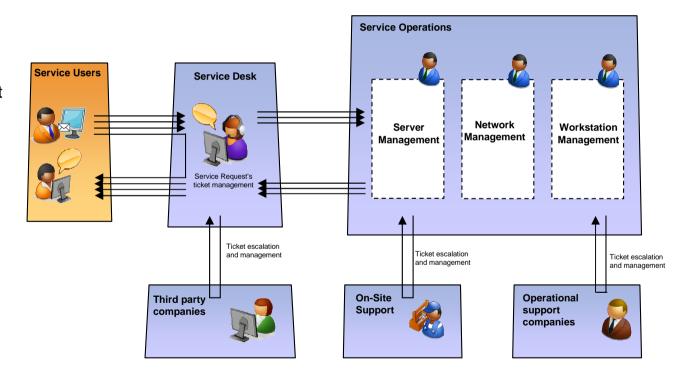
- → Combination of service operation tasks and personnel roles
- → Definition of personnel knowledge based on service operation requirements
- → Understanding of company's human resource capacity
- → Role based allocation of resources

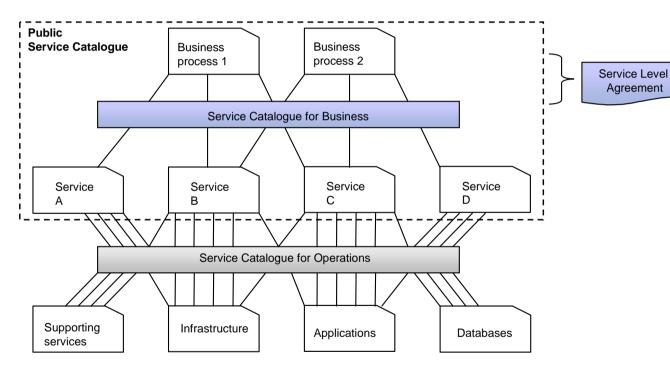




## **Business Model and Challenges**

- → Heterogenic customer environment and different customer requirements
- → Allocation of optimal human resources to right places
- Objective to achieve centralized management of service support by Service Desk
- → Operational stakeholders' challenge is to understand agreed service scope with customer within service agreement
- Higher service level requirements by customers due to competition
- → Need for service specific operation measurement and reporting to enhance financial efficiency
- Industry requirements to implement service processes based on ITL and ISO/IEC 20000





Source with adjustment: ITIL V3. 2007. Service Design, v.3. TSO – The Stationery Office. p.62

# Service Level Management

- → A Service Catalogue defines services which are currently offered to customers
- → Mutual understanding and definition of service scope is a requirement for defining an agreement of service levels
- → Internal descriptions of services for operational purposes

# Service Level Agreement

- → Defines agreed service levels between customer and service provider
- → ITIL and ISO/IEC 20000 define suggestions for structure of a Service Level Agreement

# Structuring of Service Catalogue and Service Level Agreement

### SERVICE CATALOGUE

#### SERVICE DESK SERVICES

- Service Desk Service
- Call Center Service
- Access Management
- User Support

#### SERVER AND CAPACITY SERVICES

- Server Monitoring
- Server Management
- SQL Database Monitoring
- SQL Database Management
- Backup Service
- Server Capacity Service
- Disk Space service
- Citrix Monitoring and Management
- Active Directory Monitoring and Management
- Exchange Mail Service Monitoring and Management
- Server Maintenance

#### **NETWORK SERVICES**

- Network Monitoring and Management
- Network Virus Control
- Firewall Device Monitoring and Management
- VPN Device Monitoring and Management
- Network Device Maintenance

#### **WORKSTATION SERVICES**

- Workstation Management
- Workstation Installation
- Security Patch Distribution
- Workstation Lifecycle Service
- Workstation Device Maintenance
- Recycling Service for Workstations

#### PRINTER SERVICES

- Printer Device Installation
- Printer Monitoring and Management
- Printer Device Maintenance

#### **MOBILE SERVICES**

- Mobile Office, Intellisync Mobile Suite (Wireless Email)
- Mobile Device System Management

#### **APPLICATION SERVICES**

- TTMi Application Management
- SAP Application Management

#### LICENSE SERVICES

Haltia Licence Management Service

#### SPECIALIST SERVICES

- Account Manager Service
- IT Manager Service

## Service Catalogue

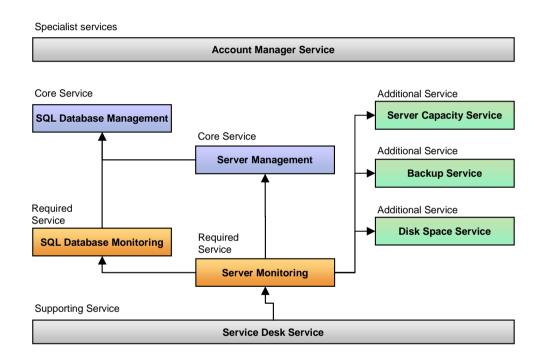
- → Structure and definition of the overall Service Catalogue by case study company
- → Definition of services in co-operation with service specific specialists and responsible managers
- → Objective was to build the Service Catalogue in a language which target customers can understand

# Service Level Agreement

- Prerequisite for defining services was to develop common document format
- → ITIL and ISO/IEC 20000 models were used in development of general SLA format
- → Final role of a Service Level Agreement document in company's overall contract structure had not yet been defined at time

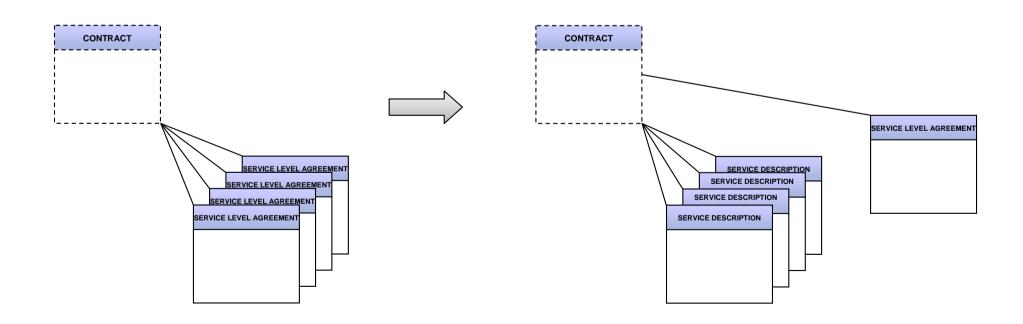
# Piloting by an Offering

- → 7 pieces of services from Server and Capacity Services
- → Services chosen for piloting were all defined by the new Service Level Agreement format
- Offering enabled company to pilot the new document format without finalizing overall contract structure
- The Service Level Agreement supported modular service structure and each individual document defined module's attributes such as service description, service levels, prices and service targets



# Service Description and Service Level Agreement divided to separate documents

- → General service definitions and customer specific definitions were divided to separate documents based on findings of piloting
- → Agreed service levels and pricing was decided to manage in a customer specific Service Level Agreement

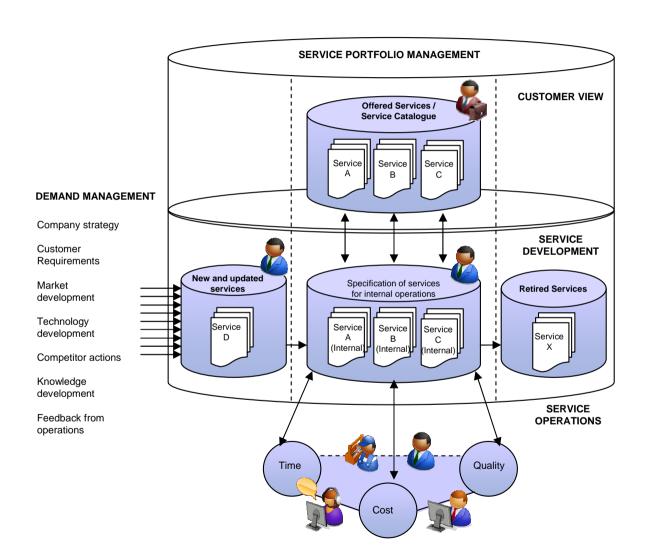


## Service Description

# **Service Description**

- Common document to all customers
- Service Description presents available options for possible service levels
- Service Descriptions' version management must be defined
- → Each service has to have named responsible service managers along with defined process for document updates

# SERVICE DESCRIPTION CONTENT 1 INTRODUCTION 1.1 Service Introduction..... 1.2 Relations to other Services..... 2 SERVICE CONTENT 2.1 < Service Part 1 >..... 2.2 < Service Part 2 >..... 2.3 < Service Part 3 >..... 2.4 < Service Option 4 >..... 2.2 Scope Restrictions..... 2.3 Task Specification..... 3 SERVICE LEVELS 3.1 Service Hours..... 3.2 Priority Categorization..... 3.3 Service Classes..... 3.4 Service Availability..... 3.5 Workload Limits..... 3.6 Service Measuring and Reporting..... 3.7 Exceptions to Service Levels.....



# Service Management Model

- Sales function use the Service Catalogue to present available services to customers
- Development and updates to the Service Descriptions and internal specifications are managed by defined processes
- Service portfolio and structure of services is updated along with chosen service strategy
- Service operations produce agreed services based on internal specifications

## Findings of the Thesis

## Results

- → Service Management Model, Model to manage service portfolio and service catalogue, categorization of services with relation to service operations
- Service Description,
   Common format for all services
   within service catalogue. Separate
   Service Level Agreement defines
   agreed service levels and prices

## **Observations**

- → To restructure company's overall service catalogue requires decision and strong commitment from company directors combined with realized need to change by real case examples
- → The structure of a service description has to be very simple and clear to enable its use as a fixed format in definition of all services within service catalogue by several writers.

# Sequel Study Areas

- Modular Service Catalogue and management of service cost, prices and financial profit
- → Service manager's role and responsibilities in service operation management and development
- → Effect of changes in customer needs and requirements relative to service provider's service strategy

## Enfo to outsource its on-site support and hardware maintenance service in customer premises to Relacom

Enfo Oyj, Press Release 31st January 2008

Outsourcing on-site support services provided in client premises is connected with Enfo's new modular service structure and new business model.

"Our solution to this is a modular service structure, an IT toolbox that provides well though-out and mutually compatible service modules that can be used to build an entity matching the client's needs", says Osmo Wilska, Director of Information Technology Services at Enfo.

## Otava-Kuvalehdet outsource Service Desk and Workstation services to Enfo

Enfo Oyj, Press Release 6st May 2008

"We are proud that our modular product and service structure interested them", says Osmo Wilska, Director of Information Technology Services at Enfo.

## Destia concentrates on its core business and outsource all ICT service processes to Enfo

Enfo Oyi, Press Release 13st May 2008

"New contract is very significant to Enfo by all measurements and creates strong growth to Enfo's Business in Finland", says Arto Herranen, Managing Director of Enfo.

