Challenges in Implementing IT Service Management Systems
ICONS 2012 Conference

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Agenda

- Introduction
- Research Settings
- Challenges in Implementing IT Service Management Systems
- Conclusion
1. Introduction

Location of University of Eastern Finland

Kuopio and Joensuu
1. Introduction

• **Keys to IT Service Management and Effective Transition of Services (KÍSMET)** is a research project funded by TEKES ERDF and industrial partners.

• The goal of the KISMET is to
  1. Examine the transition of IT services and service management processes
  2. Enhance the knowledge sharing on IT service management procedures, methods and concepts both in IT service provider organizations and IT customer organizations
  3. Provide organizations a discussion forum to share experiences in IT service management

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**RESULTS**

- Process descriptions
- Master’s theses
- Research papers
- Templates for ITSM records
- Reports
- Metrics

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**ITSM workshops and trainings**
1. Introduction

Service Desk cases
- Incidents
- Software Failures
- Hardware Failures
- Service Requests

Incidents
- Software Failures
- Hardware Failures
- Service Requests

Service Desk Incident Management

Service Requests
- Workarounds & Permanent Solutions
- Problems
- Problem Control
- Error Control
- Proactive PM

Service Request Management

IT Services
- Server services
- Desktop services
- Network services
- Service desk services
- Application services

Solution

IT Services
- Server services
- Desktop services
- Network services
- Service desk services
- Application services

Solutions

Service Desk cases
- Incidents
- Software Failures
- Hardware Failures
- Service Requests

Service Request Management

Release Packages

Release Management

Configuration Management

CMDB

Application Development
- Third Party providers

Figure: IT service management in practice
1. Introduction

• Many IT service provider organizations have difficulties in implementing IT service management processes.

• Expected benefits: cost savings €€€€€ in IT support, increased customer satisfaction, faster resolution of requests, more customers due to certified processes.

IT Infrastructure Library v2

ISO/IEC 20 000

IT Infrastructure Library v3
2. Research Methods

Keys to IT Service Management Excellence Technique (KISMET) model

1. Create a process improvement infrastructure
2. Perform a process assessment
3. Plan process improvement actions
4. Improve/Implement the process
5. Deploy and introduce the process
6. Evaluate process improvement
7. Continuous process improvement

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**Case Study Method**

- **Documentation** (process descriptions, service catalogue)
- **Archives** (incident, problem, RFC and service request records)
- **Interviews/discussions** (discussions in work meetings, coffee table discussions, process manager interviews)
- **Participative observation** (field visits, process improvement meetings and workshops)
- **Physical artefacts** (Service desk tools, intranet)
3. Challenges in Implementing IT Service Management Systems

• Three case studies on Implementing IT Service Management Systems
  – Tieto Finland, Energy
  – Finnish Tax Administration
  – Istekki

• Case organizations are members of the KISMET project
3.1. Tieto Finland, Energy

- Case type: IT service provider
- Number of employees: 17000 in Tieto Corporation
- Improvement target:
  - Incident & Release management
  - Service level management
- Core business:
  - Provide customer data management and billing solutions for energy companies
3.1.1. IT service management tool
3.1.2 Challenges

- Priorization of incidents does not work
- Lack of Service Level Agreements
- Information sharing on delayed incident resolutions
- High number of open incidents
- Poor transparency of the second-line support and the third-line support activities

We don’t have enough resources to fix all the open cases. Could a customer prioritize cases?

How to provide customers more detailed information about the progress of the resolution?
3.1.3. Solutions

• Priorization of incidents
  • Solution: Clarify rules how to use priority coding system. Discuss the priority codes with customers. Monitor that the rules are followed.

• Lack of Service Level Agreements
  • Solution: Implement SLA rules and conduct a SLA pilot with one customer

Example: Priority Level Med. reaction time
  • SLA Warning alert 3 hours
  • SLA Breach alert 4 hours
3.2. Finnish Tax Administration

• Case type: Government agency
• Number of employees: 5700
• Improvement target:
  – Service desk and incident management
  – Problem management
• Core business:
  – We will ensure the tax revenue by providing proactive guidance and good service as well as by conducting credible tax control.
  – Our customers can contribute to their tax issues with as little cost and inconvenience as possible.
3.2.1. IT service management tool

- **Customer**: Jokela, Kristo
- **Service**: Support request, phone
- **Contact channel**: Yhteydenottotapa, Puhein Mus
- **Reason for contact**: Yhteydenoton syy
- **Status**: 10 - Uusi
- **Failure start time**: <tyhja>
- **Failure end time**: <tyhja>
- **Call back time**: <tyhja>
- **Reported by**: Raportoija, Jäntti, Marko
- **Closure code**: Ryhmä
- **Group**: KTUKI Palvelupiste
- **Advise**: Aktiivinen?
- **Summary**: Mielen sofi-uhdehavana saa näkyviin vastaavan puheluiden numerot jalkakateen?
- **Description**: Hei. Mielen sofi-uhdehavana saa näkyviin vastaavan puheluiden numerot jalkakateen? Scittajaluetteloon on tyhja, vaikka vastattu puheluta otti.

2.3.2012
3.2.2. Challenges

- Lack of Configuration Management Database (CMDB).
- Classification of support requests difficult for customers.
- The interface between incident management and problem management.
- Identification of repeating incidents from the service desk system.
3.2.3 Solutions

- Lack of Configuration Management Database (CMDB).
- Solution: Create classification schema for configuration items. Validate classification with real service desk cases.

*Family:* Application – *Class:* Tax application – *Name:* Tax card in web
3.2.2. Solutions

• Interface between incident management and problem management + Identification of repeating incidents

• Solution: Design and deploy the problem record.
3.3. Istekki

• Case type: IT service provider
• Number of employees: 170
• Improvement target:
  – Incident management
  – Change management
• Core business:
  – ICT services (IT maintenance and support services, server and data center services, network and telecommunication services, ICT acquisition services, IT consulting, project and introduction services)
  – Healthcare technology services

Customers of Istekki

Kuopio City

Northern Savo Healthcare District

Culture and freetime technical infrastructure

Healthcare application services
Emergency center information systems

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Culture and freetime technical infrastructure

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### 3.3.1. IT service management tool

#### Customer
- User
- Organization

#### Service request
- Title
- Description

<table>
<thead>
<tr>
<th>Class</th>
<th>Impact</th>
<th>Status</th>
<th>Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Incident</td>
<td>Interrupts work</td>
<td>Work in progress</td>
<td>Application failure</td>
</tr>
</tbody>
</table>

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#### CI type

Configuration items

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2.3.2012
3.3.2. Challenges

- No reports implemented for change management
- Evaluation of changes is not visible
- Incidents may remain unresolved for several months
- Employees do not understand the difference between incidents, service requests and problems
3.3.3. Solutions

• **No reports implemented for change management**
  • Solution: Implement the following change management reports
    – Number of change requests (by service area)
    – Number of major changes
    – Change throughput time

• **Evaluation of changes is not visible**
  • Solution: Add new datafields to the change record in the ITSM tool
    – Reason for change as a separate field
    – Post-implementation review of change
4. Conclusion

• Lessons learnt from three cases:
  – **Use real examples in ITSM trainings** Collect 10 concrete examples of each ITIL concept (incident, service request, problem, RFC)
  – **Classification**: Pay attention to classification of support requests
    • Service area: Application services
    • Configuration item: Application – Tax applications - Tax card in web
    • Support request type: Incident
  – **Proactive support**: Aim at proactive IT service support (problem management is the key) instead of reactive one
  – **Prioritization**: Check whether priority rules are followed on 1st, 2nd and 3rd support levels and prepare for SLAs
Thank you!!!

Questions, comments?

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