Improving Service Management in IT Operations

Stewart Wan
HK Science and Technology Parks Corporation
Today’s Agenda

- Introduction
- Framework Review
- Implementation of ITSM in Science Park
- Service Outsourcing Consideration
- The Service Impact Analysis Architecture
- Conclusions and Further Work

itSMF 2008
24 January 2008
Introduction

The Corporation

- Hong Kong Science and Technology Parks Corporation
- Statutory body under the Government
- Managing Industrial Estates, InnoCentre, and Science Park

The Science Park

- Science Park is located at Pak Shek Kok, Shatin
- Occupies 22 ha land, provides 330,000 sqm GFA
- R&D offices and laboratories with supporting infrastructure and facilities
- Case of ITSM implementation in Science Park IT operations
Introduction
Our Tenants - Our Customers

Introduction

187 Companies
Around 5,000 people
doing R&D in Science Park
Framework Review

- ISO/IEC 20000 IT Service Management
- IT Infrastructure Library (ITIL)
  - Service Support set – day-to-day operational support
  - Service Delivery set – long-term planning and improvement
- Enhanced Telecom Operation Map (eTOM)
  - the most widely used and accepted standard for business process in the telecom industry
  - an enterprise process framework to guide the management of key processes within a telecom enterprise
- Common Objectives for Business Information-related Technology (COBIT)
  - IT Governance framework
  - specify mechanism to specify, monitor and measure IT performance
Implementation of ITSM

- ITIL was adopted as the reference model for formulating ITSM process modules
- Software aiding tools since 2005
- Implemented according to the operational environment
- Combined together some of the activities in ITIL for better efficiency in workflow arrangement in practical adoption
- Three years of quantitative analysis using operational data were used to present the effect on ITSM adoption
Captures and provides historical and real-time performance data
Quantifies the specifics in KPIs, service level, capacity, availability, and response
Observations

2002 2004 2006 present

- Analyse three years data in service performance
- Improved performance after adopting ITSM management tools in 2005

Service Target Improvement

Performance

- Without Management Tools (Period: January 2004 to January 2005)
- With Management Tools (Period: February 2005 to December 2006)

During the implementation of ITSM management tools in 2005, there was a noticeable improvement in service performance. The data analysis shows a steady increase in performance from January 2004 to December 2006, with a clear distinction between the periods with and without management tools. The learning period was observed from January 2004 to July 2005, followed by an optimizing phase until December 2006.
Outsourcing Considerations

Conflict of Interest
- vendor-neutral service provider is not easy to find
- procurement of new equipment will be done by a third party during the course of vendor selection

Standardization of Processes and Measurement
- the native elements in ITSM
- minimize the service impact due to human resource turnover and rotation or skill transfer during transition period of the change of service provider contract

Owner of the Tools
- procure or build your own ITSM tools. Do not include ITSM tools by subscription under the service outsourcing contract
- minimize data conversion, maintain historical intelligences
How to Improve Further

This is not the end of the journey in ITSM

IT resource probing tools e.g. Tivoli Netview, Tivoli Enterprise Console, HP Openview, etc.

MIBs in resource probing are service agnostic

To transform resource-oriented to service-oriented management, mapping resource-event with service-event is essential

Understand the relationships between business and IT resources is critical
There is a gap between layers of business process and IT services. This is an active research area in the industry to minimize this gap in order to have a business-driven IT services to help the organizational business functions.

FCAPS: fault, configuration, accounting, performance, security management functional areas
Mapping of Business Services

Service Impact Analysis

Service MIB is required
The Architecture

Service Impact Analysis

Event correlation technique:
case based reasoning (CBR),
rule based reasoning (RBR),
etc.

Hybrid reasoning approach
- CBR and RBR
3 Dimensions Mapping

Service Impact Analysis

- BCP: Business criticality
- IBM TEC: Network/systems alerts
- Application DB: User activities

Service Impact Analysis

- Criticality Level
- Severity Level
- User Level

Notifications

- With the considerations of
  - Business
  - User
  - Alert Severity
Screen Dumps of ITSM Portal
Conclusions and Further Work

- ITSM is a tool to facilitate the achievement of service-oriented IT management goals.
- Depending on the organizational culture, service focus, management decisions, and manual operation practices, the ITSM process modules could be setup differently from one another.
- The live performance data demonstrated the success of ITSM implementation in Science Park IT operations.
- ITSM can be treated as one of the outsourcing management tools for governing the service operator’s performance.
- The service impact analysis architecture demonstrated the concept of business aligned service management.
Conclusions and Further Work

ITSM is not a one-off activity or short-term strategy, the transformation might take years for a single process.

Such initiative can only be successful with the support of employees and an understanding for ITSM processes.

Our service provider was accredited ISO 20000. Science Park is one of their pilot sites for ITSM.
Take a Ride in Science Park
Thank you

Hong Kong Science Park

URL: www.hkstp.org
Email: stewart.wan@hkstp.org