Why Management Information Matters For IT Process Improvement

Pink Elephant White Paper
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1 Introduction

1.1 Objective

The objective of this document is to provide guidelines for the development of Management Information supporting the ITIL operational processes. Using this document as a common reference point will help to ensure a consistent approach to the development of supporting Management Information.

1.2 Scope Of The Document

The initial scope of this document was to provide a deliverable as a part of the implementation project for "Incident & Problem Management." However, portions of this document contain information about the relevance of quality Management Information for the strategic alignment of IT and its customers.

2 Developing & Measuring Quality Processes & Services

Defining quality has been an illusive goal for countless organizations that have made strides to improve their business processes and services. The challenge behind this goal is that quality is a subjective term, which has a different meaning for each organization that makes an effort to define it. By realizing the subjective nature of the term quality, we can make a simple statement that has a profound impact on the way businesses operate.

Quality = Fit for purpose!

By accepting this statement and applying the principal that quality is defined by an understanding of what activities, targets, and measures are acceptable at a given point in time we are forced to ask two important questions.

1. How is fit for purpose defined?
2. How is fit for purpose maintained?

The Information Technology Infrastructure Library (ITIL) provides an industry best-practice framework methodology for developing and managing IT business processes. An integral part of this framework is the management of process quality and efficiency. Each process has been developed according to Dr. Deming's model of quality improvement, which advocates that business processes are implemented and evaluated in the following manner.

1. Phase 1: Plan (Up-front development and definition of a fit for purpose business process)
2. Phase 2: Do (Implementation or embedding of the process within the organization)
3. Phase 3: Check (Evaluation and measurement of process quality targets and indicators)
4. Phase 4: Act (Development and execution of process improvement plans dictated by metrics and business drivers)

The question of fit for purpose is defined by "planning." Through activities driven by Service Level Management, customer demands for service are evaluated and boiled down into requirements through the iterative process of evaluating feasibility and cost. Once service requirements are established, qualitative and quantitative indicators can be established for each process activity. These indicators are the negotiated basis for the business and IT understanding of fit for purpose. Once these quality and performance indicators are understood and agreed to, they can be recorded in a Service Level Agreement or Contract.
Fit for purpose is maintained by monitoring the process and service performance through the “check” phase. By monitoring the process or service performance against the indicators developed in the planning phase and evaluating changing business requirements, IT can understand areas for improvement or increased service requirements. ITIL places an emphasis on this monitoring and measuring of performance indicators by listing Management Information as an activity of each process.

3 Management Information

Timely, accurate, and reliable Management Information is a critical success factor for the management and control of the IT infrastructure. IT needs to have an awareness of:

1. How are processes and services being experienced and perceived by its customers
2. What strategic decisions can be formulated or supported by historical data
3. Where are infrastructure adjustments required in order to align with business and customer objectives

In order to understand what to measure, an organization needs to understand why it measures.

To Validate
Management Information provides validation for strategic decisions and projects. IT Management wishes to understand if decisions that have been made historically can be validated through the production of Management Information.

To Direct
By setting process and service goals we can determine what activities, inputs, and outputs should be in place at the right quality, quantity, cost, location, and time to achieve the stated goals. By setting targets or quality norms for each activity, an organization can develop metrics to indicate process bottlenecks to direct improvement activities.

For Example: Incident Management

<table>
<thead>
<tr>
<th>Activities</th>
<th>Metrics</th>
<th>Quality Norms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acceptance, Recording &amp; Classification (Category, Impact, Urgency)</td>
<td># of incidents reported, by category and priority</td>
<td>Recorded accurately and completely</td>
</tr>
<tr>
<td>Resolve Incident</td>
<td># of incidents, time to resolve based on priority</td>
<td>Priority One incidents resolved within SLA timeframe 90% of time.</td>
</tr>
<tr>
<td>Assign to Support Groups</td>
<td># of incidents escalated to support groups</td>
<td>Resolution rate of 80% at first level</td>
</tr>
<tr>
<td>Is Incident Warranty Hardware Related?</td>
<td># of incidents by category and support partner</td>
<td>Support Activity should be seamless and transparent to end customer</td>
</tr>
<tr>
<td>Is Incident Software / Application related?</td>
<td># of incidents by category and support partner</td>
<td></td>
</tr>
<tr>
<td>Initiate Multi-User Support</td>
<td># of incidents by category and priority</td>
<td>Fewer than 5% of incidents require Multi-user intervention</td>
</tr>
<tr>
<td>Monitor Incident and Report on Reclassification of Significant Impact Incidents</td>
<td># of incidents that breach time thresholds</td>
<td>Response times meet SLA 80% of the time</td>
</tr>
</tbody>
</table>
To Justify
Management Information is developed to justify a course of action such as the removal of an unstable infrastructure Configuration Item, or the application of additional resources.

To Intervene
Management Information is produced to indicate areas for intervention and alternatives to a given course of action.

Management Information provides an understanding of the following areas:
- Fulfillment or underachievement of performance indicators
- Service Improvement Plans
- Makes it possible to exercise control:

  Strategically
  - Impact of Incidents, Problems, and Changes on the business objectives
  - Sound strategic decisions for IT infrastructure and service provision
  - Understanding of ability to absorb high volume of changes

  Technically
  - Success of the Incident, Problem, and Change solutions
  - Reports on measurement points and performance indicators differentiated by categorization provide a picture of infrastructure health and stability

  Organizationally
  - Scope and impact of consequences on people and resources in the organization
  - Components involved
  - People and resources
  - Processes and procedures
  - Costing of IT services by category

3.1 Historical Data versus Questionable Data

Management Information is largely based on the collection and mining of historical data. People, processes, and systems within the IT infrastructure produce this data on a daily basis. On the basis of this data, Management Information is produced which directs change and facilitates strategic decisions. These changes and strategic decisions are based on the fact that the data on which it stands is reliable, consistent, and accurate. The fact is that if an organization produces compromised data through the use of bad processes and systems, the information that is captured for historical reference is not trustworthy and can be termed or viewed as Questionable versus Historical data.

<table>
<thead>
<tr>
<th>Yesterday</th>
<th>Today 24 Hours</th>
<th>Tomorrow</th>
</tr>
</thead>
<tbody>
<tr>
<td>Historical Data</td>
<td>People</td>
<td>Change &amp; Strategic Decision</td>
</tr>
<tr>
<td></td>
<td>Process</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Technology</td>
<td></td>
</tr>
</tbody>
</table>

Historical or Questionable
3.2 Common Problems Without Management Information

The following list of problems is symptomatic of an organization that does not produce regular, relevant, and accurate management reports:

- Unclear direction or focus for improvement actions
- Limited ability to make qualified and quantified strategic decisions
- Dissatisfaction with IT provision by the business
- A significant amount of complaints about IT service provision on the part of the hands on users of IT
- Lack of communication and understanding between customers of IT service provision and IT providers
- Expenditures on the IT infrastructure are excessive or felt to be excessive on the part of the business
- Costs for IT service provision lack justification and cannot easily be tied to benefits for the business
- Poor perceived availability of IT services
- The IT provider’s responsiveness to required changes in the IT infrastructure not in line with business objectives
- IT projects are delivered late and over budget
- The business feels that provision of IT is out of control

4 Management Information

Special consideration should be given when deciding the Management Information for each of the ITIL processes. When selecting the activities to report on within a given process, concentration on the top three or four metrics will help to establish a baseline of information without overwhelming the target audiences or reporting processes. A set of measurements for any particular process needs to be balanced so that when looked at collectively a vision of quality can be established.

Want To Learn More?


Learn how to re-engineer and improve IT business processes to increase efficiency and reduce costs in your IT department. You’ll receive numerous sample documents covering topics such as process implementation strategy, role definitions and process models. These documents – plus the valuable exercises conducted throughout the course – will put you on the path to successfully implementing the ITIL best practice framework.

http://www2.pinkelephant.com/redirect.asp?page=ddpna&id=pl66na