

Realizing Value Creation with ITIL®

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I Introduction

One of the major features of ITIL® *1 V3 is that it places its emphasis on “value creation.” I believe its approach whereby IT service management contributes to customers’ value creation breaks free from the conventional model of fixed system operation and offers a chance to make major improvements in IT services. In this article, I give my personal views regarding methods for putting value creation into practice by utilizing the ITIL® framework effectively.

II Conditions and Issues for Value Creation

In this chapter I set forth the necessary conditions for creating value with ITIL®, then enumerate the issues concerning the individual conditions.

1 Three requirements for value creation

First I would like to think theoretically about the conditions for “providing value to customers through services” in line with the approach of ITIL® V3. I think that the necessary conditions are the three following ones:

- the service must be useful
- it must be possible to deliver the useful service to customers
- it must be possible to take effective corrective action in line with changes in the value and/or the results of the service delivery

I think one may assume that when these three conditions are satisfied, value will be created and provided on a continuous basis. In this article, I will rank these as the “three requirements for value creation”, and explain from the perspective of each of them.

2 Requirement 1: *the service must be useful*

1) Content of the requirement

With ITIL® V3, “value” is made up of “utility” and “warranty.” Looking first at utility, it will of course not be meaningful to deliver a service that is low in utility. Also, the value will preferably be “SMART”^{*2}, so that customers will recognize the value. The “M” in SMART stands for Measurable and is particularly important; the KGI^{*3} and KPI^{*4} are prescribed for evaluating value.

2) Issues with the current situation

With the ITIL® V3 lifecycle, value creation is carried out in the stage of Service Operation (abbreviated to “SO” below) where the service is available. The applicable activities for measuring the value that is created in the SO stage are considered to be monitoring the KPIs and gathering and analyzing the data as part of service level management (abbreviated to “SLM” below).

But speaking from my own experience, I feel there are very few cases where, in the actual field of operation, “utility” for business is included in the SLA (Service Level Agreement) or subjected to management. I list the typical features of an SLA below.

- Management items specialized for system availability, capacity and performance have high relative importance or account for almost all the items. (Examples: percentage availability, system’s CPU or memory, disk’s percentage utilization)
- The contents of periodic reports assume a work report-like status. (Examples: failure reports, number of failures, number of changes released, state of system resource performance)
- Consequently, the association between report contents and the value created is not clear.

Is such situation a problem? I guess that not a few people among those involved in IT service management would feel as follows:

- “SLA contents and business value are usually considered separately.”
- “Business value is calculated separately from SLA and reported to a business unit.”
- “For IT, it suffices to report IT performance results only.”

In that case, however, some of the conditions for value creation via service management will not be satisfied. But above all, today’s business is closely bound up with IT services – in particular, consumer business via the internet and information-telecommunications business, exemplified by cell phones, are now integrated with IT. Given that fact, it is neither efficient nor effective to evaluate the performance of IT separately from business that it is integrated with. IT cannot necessarily assure achievement of the KGI/KPIs for business, but IT should at least provide comprehensive information to the business for analysis. I will make supplementary remarks on this point as countermeasures for the issues in Chapter III.

3 Requirement 2: *it must be possible to deliver the useful service to customers*

1) Content of the requirement

“Being possible to deliver the useful service to customers” corresponds to the “warranty” that is another of the constituent elements of “value” in ITIL® V3. This implies assurance that the service satisfies the requirement, and specifically refers to availability, capacity, continuity, information security, and the like. Even when a service possessing utility has been defined, it cannot be transmitted adequately to the customer unless there is warranty. As I have already mentioned, normally it can be said to be quite ordinary for management items to be determined from such perspective in SLA.

2) Issues with the current situation

In many cases, this requirement is incorporated into the contents of ordinary SLA and managed as such. In terms of its association with Requirement 1 “the service must be useful”, the issue for this condition can be stated as: there are times when excessive requirements are expected of “warranty” compared with utility for business, and in some cases the converse may be true. Nevertheless, one quite commonly observes cases where the more important for business IT services are, the more stringent requirements are set for availability, continuity and security. Thus, compared with the issues for Requirement 1, this requirement can be said to pose few problems.

4 Requirement 3: it must be possible to take effective corrective action in line with the KPI/KGI results and/or changes in the value

1) Content of the requirement

After a service becomes available, it is fully probable that the value expected of it will change due to changes in the market or business. And even without such external changes, cause analysis and action are likely to be required in cases where, for example, KGIs or KPIs cannot be achieved. Or in cases where a KGI (e.g. 30% increase in retail sales) is achieved but the KPI (50% increase in visitors to shops) is not, the KPI selected or the value set for it will probably be inappropriate and corrective action will accordingly be required.

2) Issue with the current situation

The issue for Requirement 3 can be stated as follows: cases where the utility for business is managed in SLM are hardly common, and so there are even fewer cases where the state of progress with such value is fed back to the business side through SLM. Generally, the business requirements and cost effectiveness for an IT service are carefully determined when it is first planned, and the design and testing in order to achieve those requirements are implemented subsequently (an example is the adoption of the V-model*5 for IT development). But only in a few cases is it gauged whether an IT service is making business contributions as envisaged after it has begun. (I cannot cite a single such case in large-scale manufacturing from my own experience.) As a result, the return on investment with regard to the IT service will not necessarily be checked, and if it ends up falling short of expectations, there will be a risk of losing the profits and/or advantages that could have been obtained if improvements had been made.

III Practicing SLM that Leads to Value Creation

The issues for the “three requirements for value creation” that I set forth in the previous chapter are the following:

Issue 1: Cases where business value (particularly utility) is not managed in SLM are common.

Issue 2: Cases where performance, issues and countermeasures are not fed back to the business side through SLM in the operational stage of service are common.

In this chapter I will first write about measures for resolving these issues, then I will explain how those measures should be made to conform to the SLM processes of ITIL® V3.

1 Measures for the issues with the Three Requirements for Value Creation

1) Issue 1: Utility for business is not managed

With the ITIL® V3 lifecycle, investment in the service with the largest value according to the enterprise strategy is determined in the Service Strategy (abbreviated to “SS” below) stage. Note that a number of frameworks for handling “how to create value (utility)” from a business perspective have existed since before ITIL® V3 was created. Examples of the main such frameworks include Balanced ScoreCard*6 (abbreviated to “BSC” below) and Strategic Capability Network*7 (abbreviated to “SCN” below). These existing frameworks have been applied to large numbers of cases, and the content of ITIL® SS can be seen to have incorporated BSC in some respects. In Fig. 1 I give an example of value analysis defined using SCN. Fig. 1 shows a partial example pertaining to delivery, concerning how to realize the value “increasing customer satisfaction”, to which I have added examples of KPIs as “capability for realizing value.”

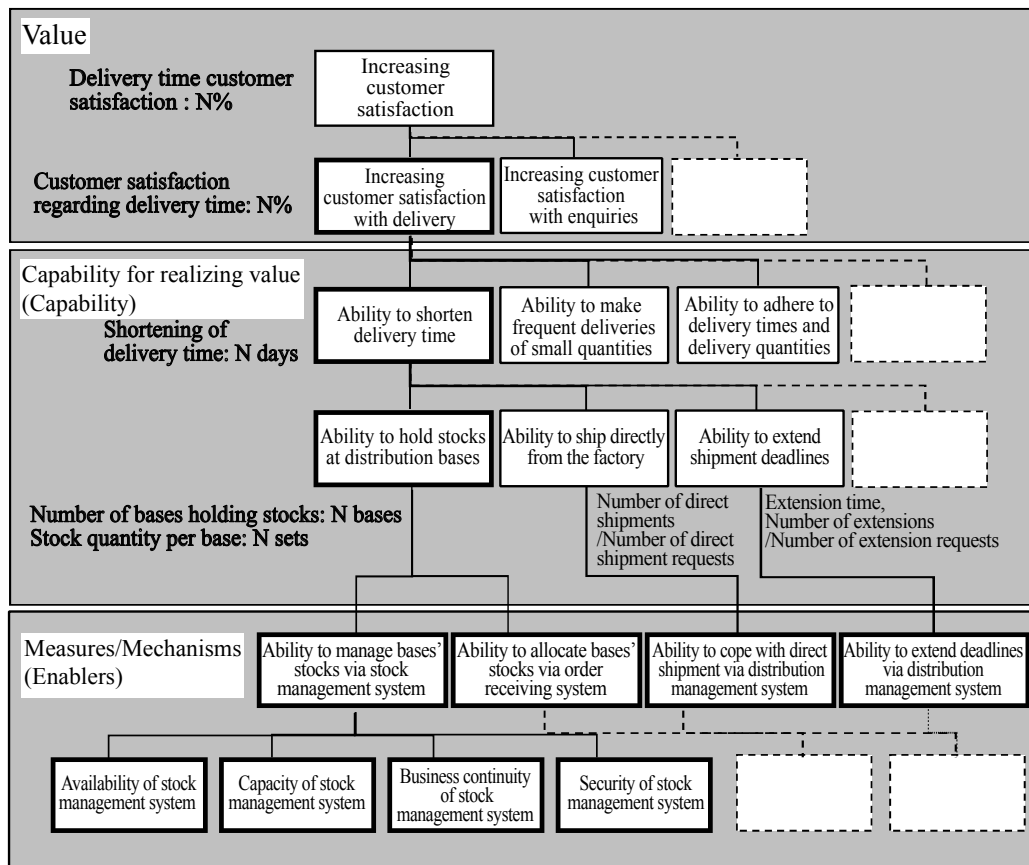


Fig. 1 Example of SCN-based analysis of value realization methods in manufacturing

By using such methods, it is possible to determine clearly the association between the capabilities that will realize value or the association between a capability and a measure/mechanism. Such analysis should be implemented, and the KPIs set, in the period from service planning until SLA formulation, and they should be subjects of monitoring after service delivery begins. The countermeasures for the issues are the following:

- The value (particularly utility) must be determined as KGI/KPIs from the perspective of the business.
- The KGI/KPIs must satisfy the SMART conditions.
- The owners of the KGI/KPIs must be determined.

These may be called “formulating utility KGI/KPIs.” The table below gives an example list of KGI/KPIs and owners.

Table 1 Example KGI/KPI list

No	KGI/KPI	Owner	KGI/KPI	Set value	Notes
1	Increase customer satisfaction	Director of marketing	Customer satisfaction	N% increase	
2	Increase customer satisfaction with delivery times	Director of distribution	Customer satisfaction with delivery times	N% increase	
3	Increase customer satisfaction with enquiries	Service desk chief	Customer satisfaction with enquiries	N% increase	
4	Ability to make frequent deliveries of small quantities	Director of distribution	Number of deliveries Delivery quantity/Deliveries	N deliveries N sets/Deliveries	
5	Ability to adhere to delivery times and delivery quantities	Director of production management	Delivery time adherence rate Delivery quantity adherence rate	N% N%	
6	Ability to hold stocks at distribution bases	Director of distribution	Number of bases managed Stock quantity/Base	N bases N items/Number of bases	
7	Ability to ship directly from the factory	Director of distribution	Number of direct shipment requests Number of direct shipments /Number of requests	N requests N shipments/Number of requests	
8	Ability to extend shipment deadlines	Distribution personnel at each base	Extension time that was possible Number of extensions /Number of extension requests	Time N extensions/Number of requests	

2) Issue 2: Feedback of KGI/KPI to business

Issue 2 was that “cases where KPI performance, issues and countermeasures are not fed back to the business side through SLM in the operational stage of service are common.” Likely countermeasures are the following:

- The KGI/KPI for business must be included in service level periodic reports.
- Periodic service level reports must be made to all the KGI/KPI owners.
- Each KGI/KPI owner must be responsible for taking corrective measures if the KPI that he/she manages does not achieve the target.
- The validities of the KGI/KPI and of the value set for it must be periodically reviewed.

Even where business results are not reported via SLM, they will presumably be provided to the relevant stakeholders by some means or other. However, even with a fairly partial analysis of value realization such as in Fig. 1, the stakeholders straddle multiple departments (marketing, production management, and service desk in that example). And usually when business targets of one kind or another are set, they will often be targets other than the “Increase customer satisfaction” in the example, such as sales expansion, cost reduction or other financial targets, or shortening of turnaround time, improvement of quality, etc. Thus, measures for value realization are likely to be multiple, wide-ranging, and associated with one another. Given that, it may be said to be preferable to evaluate and analyze achievement of the whole set of KPIs across the organization, and formulate countermeasures, rather than dealing with individual targets in individual departments. To that end also, reporting to the KPI owners, as a part of SLM, will be indispensable.

Also, nowadays business and IT services are closely interlinked, and with services such as stock trading over the internet and online sales, business and IT services have already become integrated. In view of such state of affairs, IT-related high-level KPIs should be reported and analyzed alongside business-side KPIs.

Taking such ideas further, it will be still more preferable to implement systematic responses so as to periodically evaluate/correct excess or deficiency in the service level. For example, a KPI Review Board (abbreviated to “KRB” below) composed of service level managers/owners, KGI/KPI owners and high-level management will be set up, which will formulate processes for evaluating the KIP achievement situation and studying measures for its improvement, thereby enabling powerful implementation of continual service improvement. These measures may be termed “systematic evaluation of and action for KGI/KPIs.”

2 Putting value creation processes into practice

Building on the countermeasures for the issues for the “three requirements for value Creation”, in this section I will write about how to make them conform to the SLM processes set forth in ITIL® V3. Specifically I will set out the points to be considered in terms of activities, deliverables and roles, with the aim of putting value creation into practice.

1) SLM activities for value creation

The SLM process activities in ITIL® V3 can be thought of along the lines of the PDCA cycle. I have set out the SLM and value creation activities for each stage of that cycle in Table 2 below.

The two countermeasures described in the preceding section are positioned as activities carried out during SLM Plan stage. Of the two, the “formulating business KGI/KPI” countermeasure will be drawn up in outline during the Service Strategy stage of ITIL® V3 and determined in detail during SLA formulation. As a part of the other countermeasure, “systematic evaluation of and action for KGI/KPIs”, it will be necessary to state the evaluation/action subprocesses during SLA formulation and obtain the stakeholders’ agreement to them.

The subsequent activities will be implemented after formulation of SLA. Their content will consist of measuring

and reporting on the KPI/KGIs formulated, together with implementing improvement activities in accordance with predetermined evaluation subprocesses.

Table 2 SLM activities for value creation

Cycle stage	SLM activity	Activities added for value creation
PLAN	Determine service requirements and formulate SLR*8 and SLA	Set business KGI/KPIs, validate them, and formulate them in detail Formulate processes for systematic evaluation of and action for KGI/KPIs
DO	Measure service performance	Measure and record business KGI/KPIs
CHECK	Evaluate KGI/KPI reports and formulate improvement measures	Report on business KGI/KPIs Analyze and evaluate; frame, deliberate and approve improvement measures
ACTION	Implement improvement measures	Implement improvement measures and report results

2) Deliverables necessary for value creation

The table below sets out the deliverables that will be necessary for value creation in each phase, in addition to the SLM outputs set forth in ITIL® V3.

Table 3 Deliverables necessary in order to maximize value creation

Cycle stage in SLM process	Deliverables	Content
PLAN	List of KGI/KPIs and owners	List of KGI/KPIs relating to value and the owners of each (see Table 1)
	Report specification containing KGI/KPIs	Determine specifications for contents of SLM report and how it is to be submitted
	Subprocesses for KPI Review Board (KRB)	State and agree on the KRB’s membership (roles) and evaluation of and action in response to the report, as processes
DO	KPI measurement values (logs)	Measure and record KPIs during service delivery
CHECK	KGI/KPI measurement report	Submit service report to KRB
ACTION	KRB meeting minutes	Minutes of KRB meetings
	KRB issue management chart	Chart of issues and improvement measures managed by KRB

3) Roles necessary for value creation

The main roles mentioned in ITIL® are process managers, process owners, customers, and so forth. But in order to aim for maximization of value creation, these roles will preferably be further broken down and concretized. With PRM-IT*9, which is IBM’s IT service management framework, the following SLM-related roles are additionally defined:

- Customer liaison – responsible for advising customers and formulating SLR
- Service level analyst – analyzes reports, makes reports on achievement evaluation, and gives advice on improvement measures
- Service level administrator – carries out monitoring of service situation

Besides these, I think that the “customers” role should be broken down and that KGI and KPI owners should be selected. The KGI/KPI owners will each be responsible for implementing improvement measures based on the evaluation results for their own KGI/KPI.

Also, although the “customer liaison” – that is, provider-side technician who liaises with the customers – carries out SLR formulation under PRM-IT, I believe that a business analyst-style role is additionally needed here in order to formulate the KPIs from the business perspective. Table 4 sets forth these considerations in the form of a RACI matrix*10.

IV Concluding Remarks – How to Aim for Even Larger Value Creation

In this article, I have written about measures for setting KGI/KPIs from the business perspective and feeding back their results to the business through SLM processes. A wide range of studies are being undertaken, principally using the V-model, on “how to create systems that match requirements” with ordinary software development techniques and architecture techniques. But little emphasis is being placed on debate about “how to tie the results of implemented services into subsequent planning” as a software design-development technique. Accordingly, the continual service improvement approach of ITIL® seems likely to prove useful.

Also, when attempting to maximize value (utility), one should try for overall optimization from the perspective of the enterprise/organization, instead of carrying out business analysis for individual services. Enterprise architecture is certainly in such a position. Given that, I believe the systematic KPI evaluation and action by a KRB that I have put forward in this article will, by being incorporated into the enterprise’s or organization’s long-term plans and activities, be able to further boost value creation.

Table 4 RACI matrix of stakeholders for value creation

Activity for value creation	Customers (KGI/KPI owners)	Customer liaison (serving also as business analyst)	Service level analyst	Process manager	Process administrator
Validation and detailing of business KGI/KPIs	CI	CI	R	A	-
Formulation of processes for systematic evaluation of business KGI/KPIs	I	I	R	A	-
Measurement of business KGI/KPIs	-	-	-	I	AR
Implementation of evaluation	I	C	R	A	C
Formulation of improvement measures	R	R	R	AR	I
Implementation of improvement measures and reporting of results	AR	C	C	R	-

Key: R = responsible, A = accountable (unique person for each activity),
C = consulted, I = informed.

*1 ITIL® is a registered trade mark of the Cabinet Office.

*2 SMART stands for Specific, Measurable, Achievable, Result-Oriented and Time-Bound. It is the traits that targets should have, when setting them.

*3 KGI stands for Key Goal Indicator. It is the concept at a higher level than KPI.

*4 KPI stands for Key Performance Indicator.

*5 V-model is a method for IT development. It is expressed as a conceptual diagram taking the form of a letter V, with the left side showing the system specifications and the right side the flow of testing. It is intended to handle and verify the series of specifications and tests.

*6 BSC stands for Balanced ScoreCard, a framework for formulating management strategy and evaluating its implementation. With BSC, the strategy of an enterprise or organization is evaluated or formulated from four perspectives: Financial, Customer, Internal business processes, and Innovation and learning.

*7 SCN stands for Strategic Capability Network, a method for formulating an enterprise’s or organization’s strategy. It associates and analyzes the value provided, the capabilities that realize the value, and the enablers that support the capabilities, so as to visualize management strategy.

*8 SLR stands for Service Level Requirement.

*9 PRM-IT stands for Process Reference Model for IT, an IT service management modeling system that expands ITIL®.

*10 RACI matrix: A matrix that sets out the roles of stakeholders. The acronym RACI stands for “Responsible” (person), “Accountable” (person – one for each activity), (person to be) “Consulted”, and (person to be) “Informed.”



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