KIKUCHI Noriko, OKU Kazuya, KURATA Yoji

Abstract

In order to deal effectively with changes in the business environment, a review of the management mechanism itself is necessary. A solution to this issue might be to promote "standardization of the business process and of IT" and to optimize the management system by means of "IT, without owing it." This paper introduces a service for achieving this solution called the "Business Model Consulting Service." This is a compilation of our experience with NEC's own management system technique reforms, and its application to the "cloud-oriented accounting service" by which the global accounting system environment built by NEC can be shared with users.

Keywords

standardization, IT, without owing it, BPR, BPM, total optimization code standardization, global rollout

1. Introduction

Following the globalization of markets and competitive environments, diversification of customer needs and acceleration of the global standardization of accounting procedures, etc., the environments surrounding enterprises are changing rapidly. On the other hand, enterprises are often in the position that their current business processes and IT infrastructures cannot deal with such changes and they thereby find it hard to effectively support their internal company management systems. Examples of this would be the cases of facing up to issues such as reduced flexibility due to the use of increasingly complex business processes and their systems, deterioration in efficiency due to partial optimization per operation or per region, and as a result of enhancements to internal governance procedures.

The requisite orientation of reform for overcoming these issues may be to standardize the business processes, rules and IT systems that have tended to vary between businesses as simply as possible and to establish a suitable platform to support ongoing improvements. With regard to IT, it may also be necessary to use it as a service to enable reductions in system introduction/administration costs and to focus on core competence with the help of "IT, without owing it."

At NEC, we have collected the experiences of our own management system reforms into techniques for advancing the standardization of businesses and the global deployment of reforms and we are able to provide these as the Business Model

Consulting service (BMC service) (Fig. 1). In addition, we have also applied the BMC technique to the business accounting area and have developed the "cloud-oriented accounting service," which is provided jointly with the system environment.

2. Positioning of the Service

In contrast to NEC's three cloud-orientation service models provided for implementing "IT, without owing it" including the customized, consortium center and SaaS models, the BMC service realizes the business process management to enable customer solutions of management/business issues. The BMC service standardizes businesses in order to maximize the effects of the service provided by NEC, and the resulting reduction of customizations enables rapid system introduction and cost reductions. With the customized model of the cloudoriented service, we are able to apply BMC to an entire enterprise group. On the other hand, in the case of the consortium center model service, with which specific multiple enterprises share a system we can examine adjustments of the BMC to be matched to the consortium center standard model. This strategy enables the speedy implementation of a cloud environment system.

The service providing an accounting business environment for the consortium center model is the "cloud-oriented accounting service." This service assumes an enhancement of functions per consortium center. With the SaaS model service by which multiple enterprises uniformly utilize applications prepared in advance, it is required to effectively match BMC to the standard model. Important effects can be expected if this model can be applied properly to the target business area. Fig. 2 shows the business process management approach.

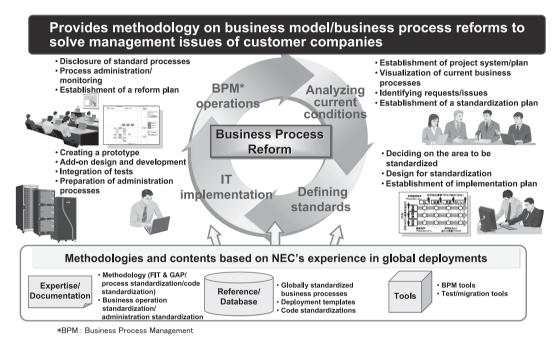


Fig. 1 Business Model Consulting service.

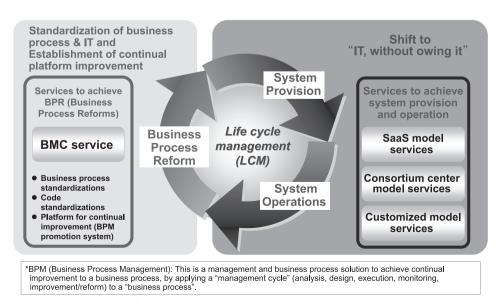


Fig. 2 Business process management approach.

3. Features of the BMC Service

The Business Model Consulting service promotes business process management for the solution of customer management/business issues. What is important in business process management is to establish a PDCA mechanism to ensure continual BPM (Business Process Management) for realizing an effective business strategy, without the reforms becoming a transient event. The BMC service establishes a platform enabling continual improvements to the business process based on linkages between the business process and the BPM promotion system. It thereby standardizes the business process/rules and establishes a platform for continual improvement in order to implement an overall optimization mechanism that is consistent from planning of strategy to introducing a demanding IT system. The result is a reduction in wasteful coordination and man hours as well as cost reduction and improvements in the speeding up of business procedures. Fig. 3 shows the concept of creating a platform for continual reform.

The three main features of the BMC service are as described below.

(1) Standardization of Business Processes and Management Data

The first feature is the standardization of business processes and management data to be shared among users. In NEC's management system reforms of the sales business, for example, we standardized more than 100 business process operations into 22 classifications and succeeded in improving business efficiency and compliance measures as well as in enhancing compliance measures. As our methodology we set techniques for defining the standard process and for obtaining agreement between organizations and between

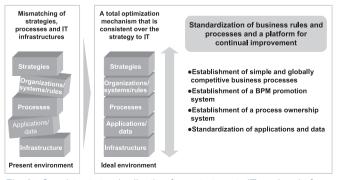


Fig. 3 Consistent standardization from strategy to IT, and a platform for continual improvement.

linked tasks.

In a large number of enterprises, the business flow for the same task varies between sectors and organizations and this has resulted in delays in business efficiency improvement or in the development of different business systems for each task. However, the standardization of business systems, rules and processes is recognized as a critical management topic in the enhancement of global/group management procedures. If the same value chain can be applied regardless of region, the cost competitiveness and time differences of regions can be connected to business values. In addition, if operations can be standardized between different sectors or organizations, it will lead directly to a concentration of operations and improvements in internal governance efficiency. From the viewpoint of IT costs, this strategy also contributes to TCO reduction by making the system slimmer and by improving its ease of maintenance.

(2) BPM for Establishing Continual Improvement

The second feature of BMC is that it is based on the concept/techniques of BPM of establishing continual improvement instead of transient reform. In the context of alert and agile management, it is indispensable to continually improve the business process and the roles of organizations by responding to changes in the business environment and strategy.

The objective of the present management system reform is to create mechanisms for organized, continual improvements in deciding the method or allotment of work desirable for the enterprise group. Also targeted is their deployment to the departments via education, monitoring of enforcement status and performance in order to facilitate improvements to characteristic inadequacies and the sharing of excellent business processes with other departments or enterprises. The BMC service compiles procedures and applies inventiveness to the system, rules and tools in order to promote the above system objectives.

(3) Positive Use of BPM Tools

The third feature is the positive use of BPM tools. By using BPM tools, we try exhaustively to establish a comprehensive standard model to cover all processes from business flow to system flow and even for standard transactions, which are the target flows to be adopted for the globally standardized models. Ongoing tasks such as unification and the abstraction of notations for making assets continually reusable regardless of organizations (e.g. expressing departments in terms of their essential functions instead of by their titles) are important criteria of the modeling work.

4. Configuration of BPM Service

With the BMC service, the targets including the establishment of a roadmap of the proposed reforms, standardization of business processes and codes and their global deployments are defined into five service menus as shown in **Fig. 4**.

Descriptions of the five service menus are given below.

(1) BPM Maturity Assessment

The maturity of BPM is assessed from the four viewpoints of strategy, design, implementation and evaluation/management. The BPM maturity assessment makes it possible to clarify the orientation of reforms and of the roadmap for the establishment of the BPM promotion system.

(2) Business Process Management

To succeed with the business process management, it is required to establish "process standardization techniques" in order to optimally advance both the business process management and "BPM promotion system" aimed at supporting promotion of the "process standardization techniques." **Fig. 5** shows how to advance the business process management based on the "process standardization technique."

The process model design standardizes each basic function into a model by considering specific process characteristics. For example, in the case of the sales function, standardization perspectives include; 1) elimination of the organizational elements from the analyzed process; 2) standardization of the product elements by re-defining the sold items according to their product characteristics; 3) standardization of customer elements by grouping the tasks if they can be regarded as being identical from the viewpoint of process, even those that have been classified according to customer-based characteristics and so on. Relevant points

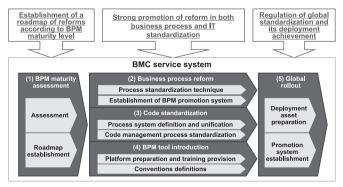


Fig. 4 BMC service system and related points.

are that; 1) since this domain involves frequent additions/ changes of business procedures, the standardization should be capable of dealing with changes; 2) the scenario should be made executable by combining standard process operations even when the sales patterns and methods differ and; 3) as a result, an easy-to-understand structure is required by simplifying and modularizing the process operations. Subsequent to the standardization model being set based on the above, it is assessed again from the business perspective in order to see whether or not it adversely affects the enterprise and its validity is checked so that suitability at the total enterprise level is obtained.

The "BPM promotion system" is the system for maintaining the standard process of the entire group. This approach necessitates authorizations for decision-making at the standard process level and a mechanism for assuming responsibility for applying continual improvements. These are respectively the process owner system and the BPM support organization. A process owner is appointed at each level in the hierarchy of global, regional and local layers and of the roles/authorizations, meetings organization and KPI (Key Performance Indicators). BPM support organizations monitor if they are being maintained and managed properly. This BMP promotion system helps establish an effective platform for the continual improvement of competitive, simple business processes. Fig. 6 shows how process standardization techniques and the BPM promotion system support business process management.

(3) Code Standardization

Standardization of codes and their administration tasks make data linkages smooth and render business and management events visible in a timely manner. What is important in the code standardization is to create a code ownership system to enhance the maintenance and control of the code management system at the same time as standardizing the system and the administration management processes of codes and their management information.

(4) BPM Tool Introduction

BPM tools are used in turning the current status or projected images into a model and applying it to an IT system. These tools make it possible to clarify the business flow structure visually so that the issues to be solved for improving the management efficiency can be discovered and solved. Not only do they allow the business flow or results to be shared but they also allow information regarding the business load to be identified. The use of BPM tools improves the work efficiency and allows the results achieved to be

shared, reused and deployed smoothly inside as well as outside Japan.

(5) Global Rollout

In order to deploy the business/IT reforms efficiently and effectively among domestic and overseas bases, it is important to advance deployment by clearly defining the global deployment standards. In other words, while examining the

planned strategies, it is necessary to clarify the elements to be standardized and the standard model for each of these elements while attempting coordination of elements such as organizations/systems & rules, processes, applications/data and IT infrastructures. Defining standard models as global templates enables efficient, quick deployment. Fig. 7 shows the approach based on the global templates.

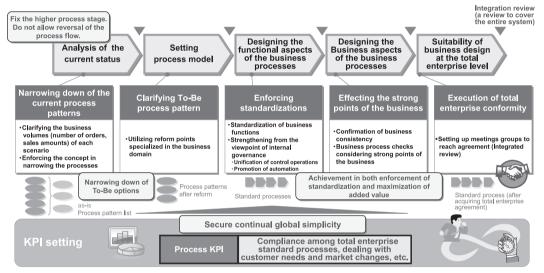


Fig. 5 Outline of process standardization techniques.

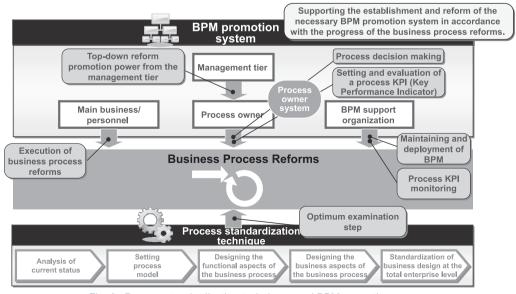


Fig. 6 Process standardization techniques and BPM promotion system.

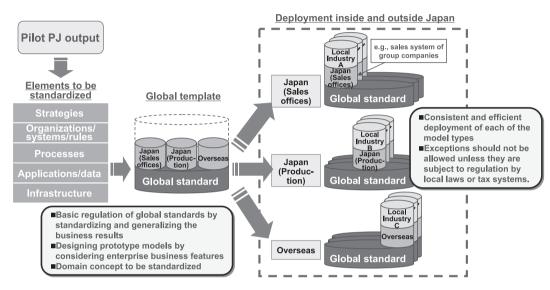


Fig. 7 Approach for deployment based on global templates.

5. Cloud-Oriented Accounting Service

5.1 What is a Cloud-oriented Accounting Service?

The "cloud-oriented accounting service" is the implementation of a Business Model Consultancy service by targeting the accounting function. It offers a shared data center, various platforms and a global accounting system environment for use by multiple enterprises. This service was created as a part of the management system reforms of NEC (**Fig. 8**).

Environmental complications surrounding enterprises are causing difficulties for globally deployed enterprises in speedily identifying their overall situations. In particular, some enterprises that have been expanding their business via M&A often have problems in identifying the business process of each group firm. Needless to say, this leads to an inability to unify specific business processes inside the group. In addition, enterprises are also faced with the necessity of complying with accounting standards such as IFRS and with internal governance issues. The cloud-oriented accounting service is provided within the concept of a simple business process and in the context of global competitiveness, real-time linked management and a shared management platform internal to the group. These concepts are shown as the reform issues in Fig. 9.

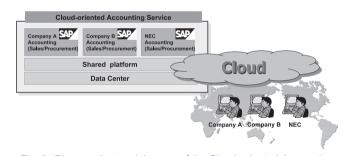


Fig. 8 Diagram that explains use of the Cloud-oriented Accounting Service.

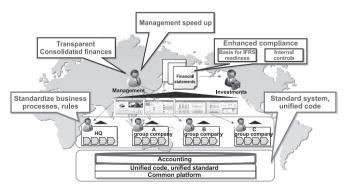


Fig. 9 Reform issues of the Cloud-oriented Accounting Service.

5.2 Cloud-oriented Accounting Service Enforcement

In the use of the cloud-oriented accounting service, the key to low-cost, speedy introductions and the implementation of simple business processes lies in how to match the user's processes to the provided business model.

For the cloud-oriented accounting service, we have defined accounting operations that have been developed based on our own management system reforms at NEC and of cases adopted by other advanced enterprises as their standard model. The standard model covers compliance to new modifications such as IFRS as well as to viewpoints adopted in the Finance & Accounting Skill Standards of the Japanese Ministry of Economics, Trade and Industry. The reform points, business rules, business flow and business manuals matching the standard model are also available. If the customer businesses can be aligned to the standard model, it is possible to quickly introduce the service at a low cost.

The introduction begins specifically with a fit/gap analysis comparing the customer's enterprise group policy and the pol-

icy/reform points of the standard model. The business processes and functions of each firm are investigated based on the standard model, and business process operations that are not found in the standard model are recorded as local operations. The results of the surveys of each firm are totaled in order to examine application possibilities as the standard model for the group. The local business process operations are also examined to assess the possibility for application of the standard model. The application of the standard model is decided by defining criteria such as "business processes that should comply with international standards," "business processes involved in the management index (visualization)" and "business process that utilize the system functions." Fig. 10 shows the concept of process standardization.

Individual business process operations are applied by utilizing templates for major examination points that have been prepared based on the experiences gained in NEC's management system reforms. The set business processes are subjected to KPI setting and are secured continually by establishing the "BPM promotion system."

- Confirm if the standard business process defined as a model is already implemented in the enterprise (for each firm).
- The results of a survey of each firm are combined in order to examine the possibility of the standard business process model being suitably applied in the group company.

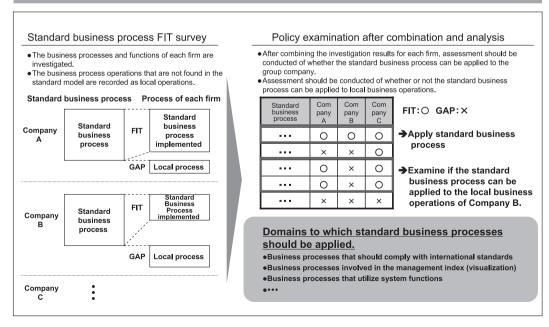


Fig. 10 Concept of process standardization.

6. Conclusion

Standardization of business systems is a concept that is easily stated but which is hard to achieve. It takes time to change something that has already been established, such as the traditions of an enterprise, complicated modes of business, the governance situation or relationships with customers. Even more so, a continual review of standardized items is hard to maintain unless it is defined into a mechanism. The "promotion of standardizations of business systems and IT" and IT, without owing it" are the assets of the in-house management system reforms practiced at NEC. We should be delighted if the BMC service is able to effectively serve the desired reforms and innovations of our customers.

Authors' Profiles

KIKUCHI Noriko

Group Manager Consulting Business Division Manufacturing and Process Industries Solutions Operations Unit

OKU Kazuya

Group Manager Consulting Business Division Manufacturing and Process Industries Solutions Operations Unit

KURATA Yoji

General Manager Consulting Business Division Manufacturing and Process Industries Solutions Operations Unit