

GUIDED BY LEARNING ORGANIZATION TO PRACTICE A BUSINESS PROCESS REENGINEERING FOR AN ENTERPRISE

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ABSTRACT

Guided by the theory of Learning Organization (LO), an experiment of BPR (Business Process Reengineering) with developing an IT (Information Technology) was made. In the paper the relations between IT (Information Technology) and BPR, BPR and LO, the methodology of BPR and role of IT in BPR have been studied. The paper includes three sections. The first part is an introduction to the background and recent development of BPR. The second part explores the framework of our study. The last part is a BPR case study.

I. INTRODUCTION

With the development of economic reform and adjustment of the economy, the enterprise in China, particularly these large or medium size engaging in industry are facing severe challenges as well as great hope. In the past decades, the buying-selling activities were arranged by government and now they have to carry full duty on its management. This is a great change to enterprises and their managers. Facing this change, an enterprise with pyramid and overlapped organizational structure and very low efficiency should be in an awkward predicament. Where is the way for these enterprises to get rid of the deadlock? Up to late 80s', people realized that factors of human, organization and management are more important than technical factors. Yankee Group Report 1986 was the first study that realized this problem. The study showed that only no more than 25%'s difficulty lay in technology. The rest were all related to human, organization, plan and management. Another study in 1990 proved that the factors of human and organization were the most important. The author believes that Learning Organization (LO) might help prevent from falling into the pitfalls. And the essences of the thoughts of Lean Production, Agile Manufacturing, Concurrent Engineering and some other new concepts and new ideas should be absorbed and integrated to guide the reforming and the reengineering of the enterprises.

II. REENGINEERING THE ENTERPRISES

BPR is a primary way to improve the productivity, reduce cost and enhance competitive competence of an enterprises. BPR is both the product of information era marked with advanced IT and an essential revolution of management thinking, method and technology. The development of information technology which based on computer and communication pushes the BPR to come. Through BPR the company will be radically changed from task-functional type to a process-oriented management-intellectual one.

Over the past two decades, a great deal of human and material resources have been invested in developing IT for its application in the firms and enterprises in China, but they were usually not successful. In spite of the appearance of using computers in the departments of accounting, warehouse, sale etc. to replace the old way by hand to deal with the routine affairs and statistics in some firms of this country. But the obsolete relations of the department are still unchanged. In this case, in fact, partially using the IT in the firms hasn't played an important role in reducing cost, increasing productivity and

enhancing their market competitive competence. In some cases, these projects have caused new troubles and increased cost and budget inequalities. We have considered and studied these issues and problems, and intended to understand why an advanced technology could not bring out virtuous effects in the firms? The key point is the organizational structures, business process flows and management model of the firms and enterprises have kept the old while introducing new IT.

Before long, guided by the thought of LO, we, together with an enterprise group performed a practice combining BPR with new IT. The enterprise group owns many manufacturing factories and produces a variety of products. The followings are how the LO theory guided our work and the description of our working framework, methodology used in the project and our experiences.

III. THE THOUGHT OF LEARNING ORGANIZATION

LO which is characterized by systems thinking provides principles and disciplines of shared vision, common mental model, team working and personal mastery, etc., a way to move the pitfalls. LO now is a popular term in management science and organizational theory. Under the influence of M.I.T., many world-wide famous corporation have introduced the mechanism of learning to build a learning organization. FORTUNE magazine said that the most successful company is the organization named as learning organization which is some kind of excellent adaptive company. The reason that LO has so much influence is that the learning mechanism can improve organizational flexibility.

(1), Systems thinking and BPR

Corporation is a complicated system. It includes many links, such as supply, production, sale, human resource, technology, financial and strategy, and so on. The links interact each other. But, because people are limited in fragment mental model, this link of organic relation is cut down. For example, product designers disregard marketing surveys, after producing the product, salesmen find themselves stuck with a low-quality product that does not meet customer requirements. The product gets sent back and departments start blaming each other. This process constantly repeats itself.

Thinking of BPR is the revolutionary production organization philosophy to change the fragmentation of company's basic function. But a "hardware" BPR cannot get to the target. People who involve management must regard their common vision, the production and marketing by systems thinking. Otherwise, it is very difficult to get to their goal. Without systems thinking, reprocessing the working procedure solely could not improve the behavior of an enterprise. Systems thinking is the premise of reengineering and procedure management.

(2), Organizational learning is the process by which they become aware of the qualities, patterns, and consequences of their own experiences, and develop mental models to understand these experiences. Learning organizations discover what is effective by reframing their own experiences and learning from that process. Learning organization are self-aware, introspective organizations that constantly scan their environments.

IV. The Framework Guided by LO on BPR in a Large Enterprise Group

Learning from the new ideas, new concepts and new theories, we worked out principles for guiding our work, and the procedures and steps of the process of project.

1, The principles guiding our works are as follows.

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(1). The disciplines of systems thinking, common vision and share mental model should be used to guide our whole work and project. (2), Facing the competitive environment, an enterprise should orient all of its work to the needs of market and customers.(3). Most of existing companies organized in the traditional "pyramid" fashion hierarchically-structured should be reformed toward a flatter, more horizontal mode.(4). Identifying core-processes and organizing around processes not tasks.(5). Minimizing the subdivision of workflows and non-value-added links and activities.(6). Well organizing and relying on organizational learning and teamwork, from top leaders down to front-line employees.(7). Integrating technological and managerial activities as close as possible.

2, Framework of a large enterprise's BPR

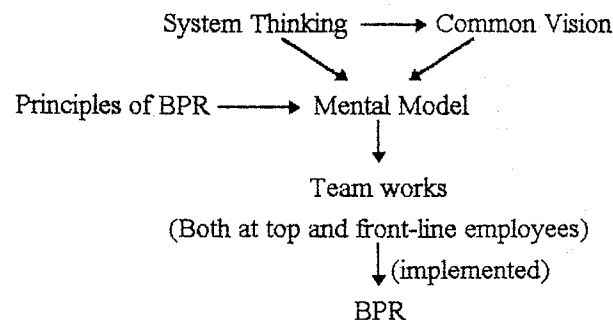


Figure 1 Guided by LO to implement a BPR

V. An implementation of an enterprise's BPR

The followings are the main working steps and experiences of our project.

(1). Organizing a leading team at top level of the enterprise

A leading team consisted of the CEO and other managers as a key should be organized guided by LO in order to determine strategic goal and integrate the thinking of process-oriented. The fulfilling of this goal needs all departments', instead of some departments', efforts. So a leading group should be set up to work out specific targets, plans, and working steps. With the progress of the project, the team is expanded, and then divided into several special groups. Our practice showed that this step is the key and organizational guarantee for the successful development of BPR and IT.

BPR is oriented to business process. It is related to many departments and plants within the enterprise group, and it even included some units not belonging to the enterprise group. During the process of redesigning and performing, generally, the old rule system is fundamentally broken, and a new organization and management model are needed to set up. Without the leading and support from the top decision maker, there is no way to approach the goal. With regard to IT relating to the development of the information system with a certain company strategic goal is both pressing and challenging. It removes the man-made obstacles in the developing process.

(2). Other main business processes being reengineered or redesigned

1). The business processes of redesigning should be identified. We analyzed and graphed several core processes by which the enterprise group deals with the routine affairs. Generally, it is impossible to redesign and reengineer all the core processes at the same time. We chose the processes according to the following three principles. The first is to look for the bottle-neck, the steps at where problems occur frequently. The second is to choose the processes having the greatest influence on company's strategic goal. The third is the feasibility, which means to choose the process most possibly to get the expected effects.

After repeated discussion within working team, we finally defined the product flow as the main clue, taking the whole process, including inventory, shipment, sales contract and market feedback, as the objects of BPR.

2), Restudying the original business process

The original and existing processes should be analyzed with systems thinking, from top to down, detailing layer upon layer. We drew every step of the existing processes, and identified its functions, its cost and occupied time. We asked ourselves why we should do so? Can we cancel and amalgamate some likes or replace it with another way? Focusing on these, we considered the following questions in the process of analysis.

How to get market information and demand tendency as soon as possible and how to produce the products suitable to market demand? How to deliver the finished products to consumers? How to delete all the unnecessary steps and delays of the processes? How to control the inventories in order to minimize the cost?

Such an analysis process, in fact, conceives a new business process flow and a new model of the information system to serve the process.

3). Designing the new business process by IT

New process flows are designed and created with the IT according to the principles and stated above. The main features of the new design are described as follows:

- a). A concentrated department of sales and market within the enterprises group is established;
- b). A network of retail and market information is set up.
- c). We solved the problems in data communication between computers in different places.

The project is basically finished, the results is nice and accepted by the enterprise group.

VI. CONCLUSIONS

It proved that the framework thought and guideline of the project are correct and very helpful for BPR. The theory of learning organization played a great role in our whole project. Through the case study, it is shown that the combining and mutual promotion of BPR and IT are very helpful to the enterprise reform. BPR demands enterprise managers' originality. The operators have to break the existing tradition and redesign and reengineer new models of business process. IT can support BPR, it can be used to create models quickly and to simulate, test and assess both for the existing business processes and the new business flows under designing. Our precious experience is only under the guide of Learning Organization and the support of information technology can a new designed business process bring a great change in fundamental performance to the enterprises.

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