

A Methodological Analysis of IT Planning and Demand of Corporate Informationization System *

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Abstract: Through the analysis of problems in corporate informationization system, the paper puts forward solution of IT planning and processing optimization in this regard toward the co-existence of multiple systems, information isolation phenomena, and the communication between and among information systems. This method is supposed to have solved successfully such problems in the corporate application as obtaining of demands and promotion of information system performance.

Key words: IT planning, process optimization, software system structure, BPR/BPI

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1 Introduction

Corporate information application refers to the informationized solution and application created and set for business enterprises and megasize corporations, which is characteristic of complex structure and involved with manifold external resources, densely clustered businesses, large amounts of data, numbers of users and especially high security. For this purpose, corporate informationization requires not only mighty power, but also the satisfaction of future business modulation, hence ready to grading and maintenance.

With the expansion of network technology, phenomenon like "information isolation" and "IT black hole" drives people to the deep understanding that IT systematical application is virtually the reformation project of corporate administration, and that only when the application comes in combination with business process reengineering, optimization and innovation, IT systems can be assured of successful application and prime results. Whereas, for most corporations, how to make efficient IT strategies and plans, how to select suitable applied software products and how to achieve systems like ERP, CRM and CPC? All these are of great importance in the application of corporate informationization.

2 Steps and methods in the realization of IT planning

Frequent phenomena met in the practice of corporate informationization can be listed as: the information system is available, yet the business processing doesn't

run smoothly; each unit has its IT system, yet the communication between doesn't function well; large amount of investment is put into IT construction, yet the effect can't make a good match with the fees over-spent and plans delayed; due to the poor IT projects, the system updating fail to catch up with the changes in business; the system cannot offer users rising demands for information service; after all these twists and turns, more and more advanced domestic corporations have taken up the tool of "IT Planning and Processing Optimization".

IT Planning, in a wide sense, refers to Information System Strategic Planning (abbreviated as ISSP) and Information Technology Strategic Planning inclusively. The former means: on the basis of deep and thorough study of the development prospect, business strategies and administration of the enterprise, work out the logical relationship between the information system's prospect, organization, and components as to realize Business Strategic Planning (abbreviated as BSP), while the latter means: based on the IS, work out arrangements and plans for the supporting hardware, software and technological means of the information system's component parts; in short, dwells mainly upon the T (i.e. Technology) affairs.

In our opinion, IT planning consultation is to assure the corporate IT capital investment of the prime return on a high level of strategic consideration, which, in practice, is often divided into multiple stages and steps according to the concrete projects.

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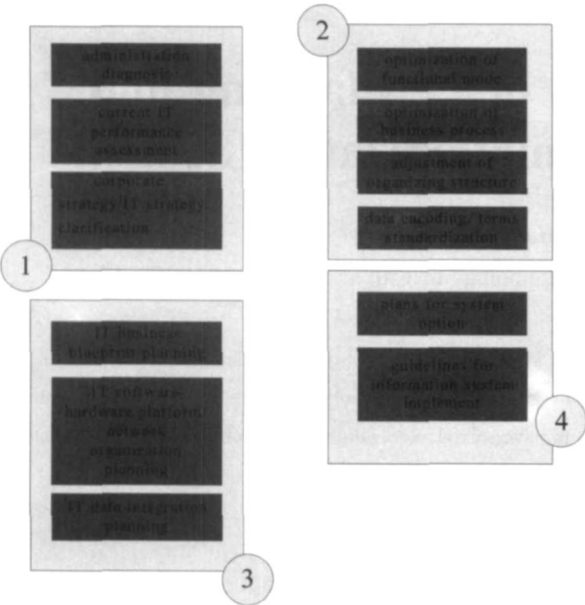


Fig 1 Logical analysis for Informationization Plans and demands

Stage I
administration diagnosis; current IT performance assessment; corporate strategy/ IT strategy clarification

Stage II
optimization of functional mode; optimization of business process; adjustment of organizing structure; data encoding/ terms standardization

Stage III
IT business blueprint planning; IT software/hardware platform/ network organization planning; IT data integration planning

Stage IV
plans for system option; guidelines for information system implement

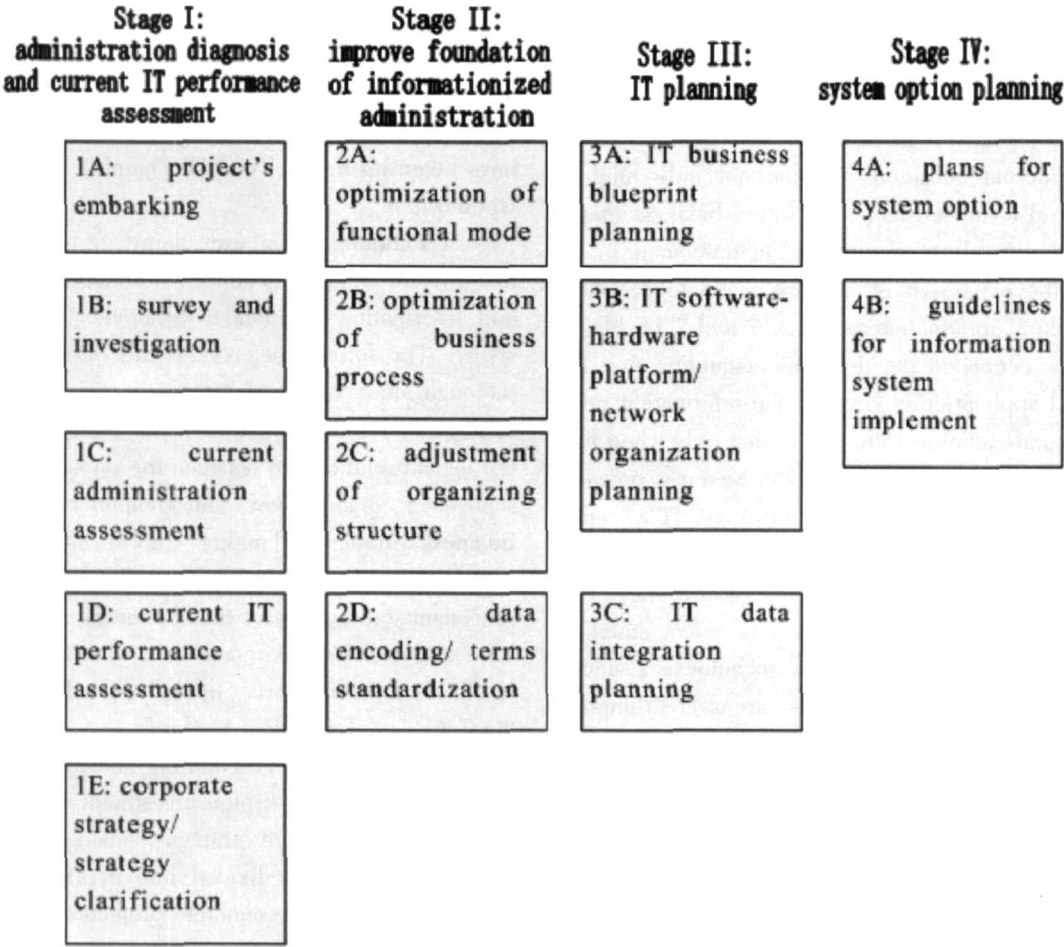


Fig 2 Stages and steps of IT planning

- Stage I
administration diagnosis and current IT performance assessment
- 1A project's embarkings
 - 1B survey and investigation
 - 1C current administration assessment
 - 1D current IT performance assessment
 - 1E corporate strategy/strategy clarification
- Stage II
- 2A optimization of functional mode
 - 2B optimization of business process
 - 2C adjustment of organizing structure
 - 2D data encoding/terms standardization
- Stage III
- 3A IT business blueprint planning
 - 3B IT software/hardware platform/network organization planning
 - 3C IT data integration planning
- Stage IV
- 4A plans for system option
 - 4B guidelines for information system implement
- Figure 2 Stages and steps of IT planning

3 Process analysis and planning based on BPR/BPI

With initial survey and investigation as the base for informationization planning, business and IT prospect planning as the very beginning and embryo of conception, and improvements and optimization of corporate business/data processes, IT application frame and the establishment of IT structure inclusively as the details of IT planning, factors as such are mutually related and influenced.

Business Process Reengineering (BPR), with highlights on business processes as its core and customer's need and satisfaction as its target, carries out a fundamental re-considering and downright redesigning toward current business processing for the purpose of realizing the improvements of enterprise in respects of business conception, cost service, quality and speed. In practice, according to the enterprise's information strategy and the demand based on business analysis and diagnosis of the enterprise's processing condition, improvements and TO-BE process are put forward.

As to the current condition of most domestic mega-size enterprises, automation often lags behind and construction toward informationization comes far from expectation. In addition, problems in slack elementary administration and sub-standardized business process can't be neglected. Therefore, a once-for-all perfect

"rearrangements of business processes and BPR" can never be expected but a step-by-step business integration, which requires a strategy of BPI (Business Process Improvement) — a gradual adjustment and optimization of corporate business processing — to incorporate the business processing integration with the implement of IT systems.

Thus, the factual operation of corporate informationization planning and process analysis in practice can be described accordingly in Figure 3.

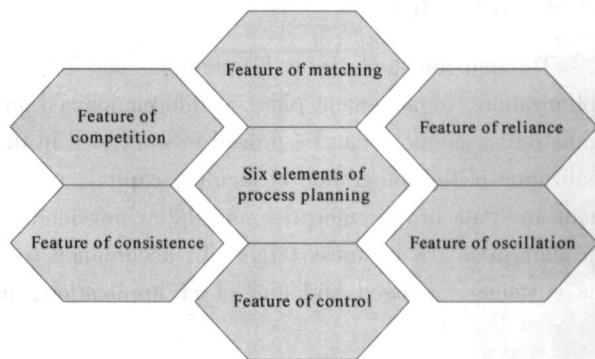


Fig 3 Six elements of process planning

Feature of matching: whether matches for the strategy

Feature of reliance: the relationship relied by the process

Feature of oscillation: the oscillation between the start and end of the process

Feature of control: whether the control qualitative or quantitative

Feature of consistence: whether the result of the process consistent with the administrative target

Feature of competition: competition performance in respects of cost, speed, quality, mobility and service

Explanation of the six features in the diagram

(1) The process's matching for the strategy refers to whether the planning of the process matches for the enterprise's development strategy

(2) The reliance of the relationship refers to the consideration of the number of tasks involved in the realization of the process; in other words, is it economical?

(3) Since each repetition of the component segment or that of the sub-process is regarded as an oscillation, the more the times of oscillation, the less efficient and the more complex the process is.

(4) The feature of control refers to (with regard to the driving force) the decision of the person who will be responsible for the whole process and have it under

control and what will be in control.

(5) The consistence of results with the target is to answer whether there is consistence between the effect of practice and the administrative target.

(6) The feature of competition gives a consideration to problems in the implement, such as cost (incremental and non-incremental), speed (the delay of time), quality (the fulfillment of the process linkage, the efficiency of data processing, the sureness of output), all in all, are they competitive?

4 Conclusion

Through the analysis of IT planning and process optimization, improvement plans of informationized administration as above can be proved to work well in the realization of the integration of faculty, capital, equipment and data in the enterprise and the achievement of the enterprise's business target. In accordance with the customer's need and aim of IT application, in

combination of the current trend of information system development, an initial planning for the customer's information system application construction is set up and further a panorama of information needs—blue print for IT applied business, which lays a sound basis for the application of corporate informationization.

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