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Information Control Analysis of Business Group

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Abstract: The implementation of modern enterprise strategy needs the support of information system and networked information technology. This study confirms the importance of business group information construction by the analysis of information technology dynamics and the result of information technology development effected industry. Besides, it discussed the common features of Executive Information Systems (EIS) and the balanced scorecard application in the exploitation of Executive Information Systems. What's more, this study probe further into the demand and analysis tools of business group information system and put forward the key issues to structure the group integrated information system.

Key words: Business group, information control, EIS, integrated

INTRODUCTION

Business group is one of the advanced forms of enterprise organization for the development of modern enterprise. It is based on one or a few large enterprises as the center to unite a number of corporate enterprises to form economic complex of multistage corporation structure which has a shared business strategy and development goals, through distinguishing the interest relationship of Capital, Contract, Product and Technology.

IMPORTANCE OF THE PROCESS OF INFORMATIZATION IN BUSINESS GROUP

The basic requirement of strategic objective of business group proprietary company is the capital preservation, hedging and appreciation, it have been proved that the main factors effecting carrying out and implementing business strategy is the lack of effective internal control mechanism. Therefore, to carry out and to implement business strategy, there is need for sound and effective internal control mechanism as guarantee. And effective internal control mechanisms need Integrated Information System and Networked Information Technology to support.

Dynamic nature of information technology: The development of modern information technology is prosperous. The economic benefit of network becomes increasingly remarkable. In the past, information about the products and services is tied to their physical value chain while the Internet made information separated from the traditional value chain nowadays and made it possible to large amounts of information communication, the detail and depth of information communication is the essential development and information available to a wider range. Figure 1 is a diverging model of information explosion which display the richness and available range reached a new level in age of internet (Jia, 2010). Information communication and management become more convenient, but they have the information asymmetry, namely one party has more useful information than the other. In addition to the communication barriers caused by asymmetric information, but also caused the inequality of opportunity(Jin, 2004). The application development of Internet have reduced the information asymmetry, enlarged the horizon of business group, increased the development opportunities, promoted the business group's internal business process, improved the efficiency and created value.

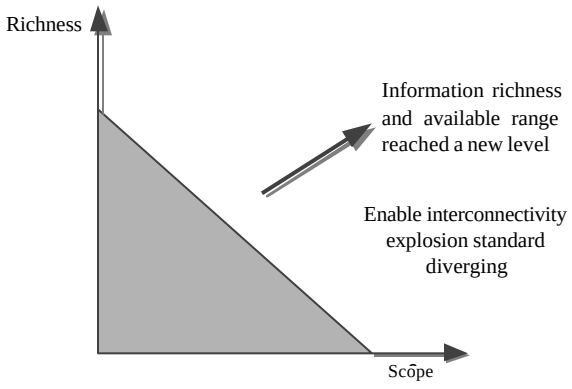

Fig. 1: Diverging model of information explosion

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Table 1: Effect of the information technology to the industry

Effect	Definition	IT investment strategy focus
Effect 1: Alternative	Apply IT to run existing enterprise activities	Reduce costs
Effect 2: New application	Apply IT to execution which is not possible to work in the past	The new products and services which won competitive edge
Effect 3: Structure change and transformation	Apply IT to make industrial process, the new organization and the industrial structure reengineering possible	New, more adaptive and more competitive organizational structure which is user oriented

Effect of the information technology development to industry: Information can create products and demand. Table 1 is summarized on the extensive application of the information technology. Information technology functioned as substitute, new applications, structural change and transformation to traditional industry. The development of information technology has created a lot of businesses. The following are common types of Internet companies (Li, 2004): (1) Virtual store which sells products directly to the user, or enterprise, (2) Information broker, who provide information of product price and practical information and charge from the seller and the buyer or advertisement, (3) Trading agent online, who deal with all kinds of online transactions and fees, (4) The online market, who provides the digital environment for the party of buyers and the sellers, (5) Content providers, who provide the digital content, benefit from all kinds of fees and advertising, like news, (6) Online service providers, who provide connections, benefit from all kinds of fees, advertising and market information, (7) Virtual community, who provide online meeting places for people with similar interests, (8) Web portal which provide Internet access, special content and services and (9) Syndicate online which gather the content and applying methods, then package and make sales to the Third-Party Sites. Common e-commerce types include: (1) Business to Customer (B2C), retailing products or services to individual merchant, (2) Business to Business (B2B), selling products and services between the enterprises and (3) Customer to Customer (C2C), customers sell products directly to other customers.

The constantly development and application of information technology comes to a result of all factors of production such as capital breaks through the traditional pattern. Fundamental changes have taken place (Forbes *et al*., 2004). For example, capital moves extremely fast; Mobile Library and the mall established by mouse have appeared, from brick to click; company comes to without nationality, such as Nissan is a Japanese brand, but its production base is located in foreign countries France is its largest shareholder and the CEO is Carlos Ghosn, whose parents is Lebanese. SONY is a Japanese company while the CEO is a British citizen; Goods, services, labor, investment, information, the movement of idea freedom, come to the development of globalization trend; market distance is shortened; consumer preferences tend to be similar; the national economy become more dependent on the global economy. These examples are excessively numerous.

The top ten of top 500 enterprises pay great attention to the informatization construction. Wal-Mart, ExxonMobil, General Motors, Ford Motor, Enron five companies are excellent in the website quality maintenance and the speed of internet connecting (Pan and Wu, 2013). Data indicate their income scoring, respectively 1, 2, 3, 4 and 5 as evidenced by the importance of informatization construction of business group.

EXECUTIVE INFORMATION SYSTEM (EIS)

EIS, Executive Information Systems, EIS is based on the computer, by providing internal and external informations which are easy to access and can satisfy the strategic goal of organization and is a management system which support the top management information and promote the decision requirements. It is an important means of business group information control. The common features of the EIS are (Wang, 2005) (1) Monitor company internal performance. It can provide comprehensive information fast, conveniently, intuitively by graphics, such as access the details of enterprise state and Exception-based reporting. It has alarm characteristics and can be used for trend analysis, special advisory and friendly user interface. Top decision makers can intuitively understand the running status of group, (2) Environmental monitoring and (3) Communication. EIS, E-mail, calendar and other community support System Integration. EIS is a "communication system", the managers can give orders, put forward the action request, determine the allocation of work with other managers by discussions and negotiations and control the work and acceptance through the network.

In the process of development of the EIS, the key parameters are to use the balanced scorecard (BSC) to determine. The balanced scorecard was developed by Robert Kaplan of Harvard Business School (Wulf, 2009). It developed and refined the Critical Success Factors of Dr. John Rockart. The reason why it is called balance is it is not limited to a narrow, general financial standards, these standards of short-term and long-term goals of learning and innovation achieved a balance and the

internal (business) and external view (client) achieved a balance. The balanced scorecard take concrete actions to practice the company's mission and strategy for creating enterprise competitive edge, it requires companies to measure performance from five perspectives: Financial, Client, Internal, Innovation and Learning perspective (Wang and Chu, 2012). The balanced scorecard transform the organization's mission and strategy into strategic goals and strategic performance measurement by the links of four perspectives, assist enterprises to "focus" on policy issues, "integration" limited resources in Stress Strategic Focal Point, implement strategy efficiently and accelerate the realization of the Enterprise Vision. It is unprecedented to reveal the key information of demand so clearly (which believed to be black box formerly) and it had all the key information linked together to help the strategic monitoring and implementation. It is a strong and full of effect of strategic management tool can not only help in characterization, but also act on the potential causes. It can also coordinate all related activities together by focusing on target group, therefore, produced core competence (Yi *et al*., 2012).

BUSINESS GROUP INFORMATION SYSTEM CONSTRUCTION

According to the business process, the management information system of business group should meets the following requirements (Yu and Wang, 2010) (1) Information Management. System should possess highly integrated functions which can effectively manage and control different types, different size and different parts of the branches (subsidiaries); it can collect the data information of embranchment effectively,

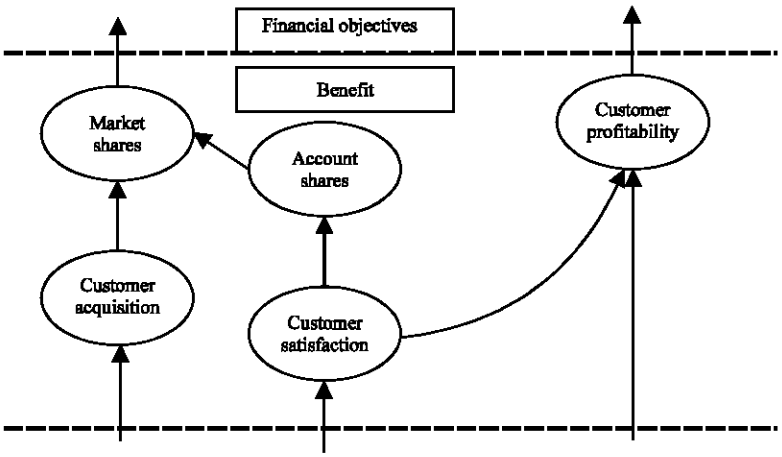

Fig. 2: Driving factors of core results and internal process index

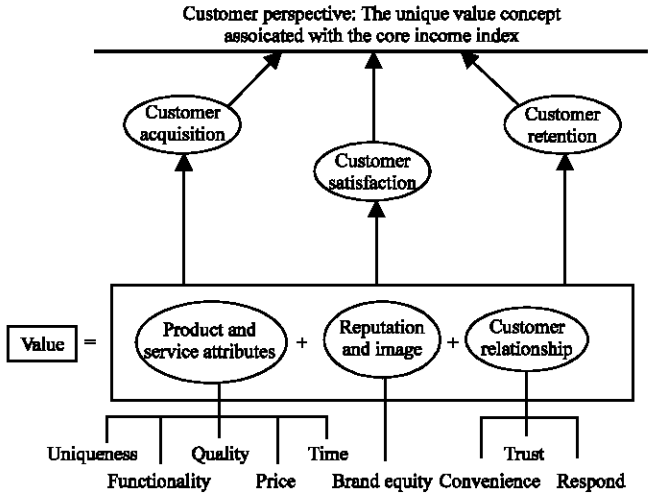

Fig. 3: Customer perspective

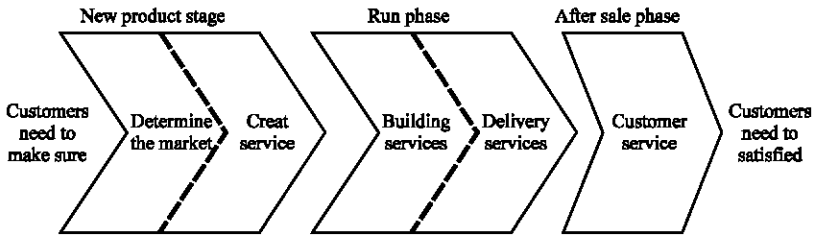

Fig. 4: Internal perspective

integrate and share information resources effectively at the same time, (2) Financial Management. System can implement effective management and monitor for each subsidiary. It help to strengthen the financial control of subsidiary company and grasp the accurate and timely financial data; system can improve the efficiency of budgeting, management and analysis, then approach efficient and comprehensive budget management and gradually change the budget management for the real-time monitoring; system can develop scientific and timely decision-making of fund operation and capital allocation, improve the flexibility and security of capital flows and increase the group management and utilization efficiency of funds in group, (3) Investment Management. System is able to manage various investment projects of different regions subsidiary effectively, analysis the project feasibility and risk, reduce the risk of a variety of investment, raise the scientific nature of the investment decision and rise the success rate of project, (4) Risk Management. System is able to analysis various kinds of financial and business data to subsidiary companies, discover and identify potential risks and issues, monitoring and early warning the risk of management; system is able to enhance auditing ability to subsidiary corporation, shorten the time of audit and reduce the audit cost, (5) Decision Management. System is able to provide effective plan, budget, decision-making tools for management and executive£»It can prompt the implicit relationship between the data to make decisions basis digitally and decision results scientifically and satisfy the group headquarters' demand to integrate planning of the group activities in the future; It also can control operating plans and investment plans effectively, (6) Performance Management. System is able to establish enterprise performance evaluation index system. It can supervise, assess and evaluate the plan implementation of subsidiary, then form virtuous incentive and a feedback mechanism and (7) Personnel Management. System can determine the reasonable scale of human resources, allocation and use the human resources effectively; it also can master and dispose the senior management's performance, rewards and punishments and promotion etc., in a comprehensive and timely way.

The following two cases are the common analysis tools of information technology construction in business group.

- **IT value matrix:** It can be used to balance investment risk and return of IT project portfolio. To an IT project, the degree of novel idea and the importance of IT to enterprise determine its direction of use in the enterprise. If both sides achieve high levels, enterprise tends to use it as a breakthrough strategy, such as Virtual Supply Chain
- **Teng's B2C electronic commerce value grid:** It is used for customer oriented e-commerce value analysis, the application of electronic commerce value depends on potential value of the network searching and the difficulty level of it comes to implementation. Electronic business which is with high potential value of network searching and low cost for acquisition, has been widely used, for example, CD, insurance, book, stock, etc. While business with low value and high cost used much lesser, such as wood, brick and fertilizer, etc.

KEY ISSUES TO STRUCTURE THE GROUP INTEGRATED INFORMATION SYSTEM

- All the network application system in the group should be considered as a whole comprehensive application system and the application of various capabilities should be considered as a whole system of each function module. Based on this idea, we should consider each functional module selection, development and combination and to build an integrated information system of group. Regarding the various business processes in each unit, setting up the standard configuration scheme to each function module in the system would be the choice. We can consider taking advantage of existing resources and integrating as much as possible at this stage
- In the process of informatization construction, holding company should not only consider the solution on the level of the holding company but

also, based on the group's overall planning, create an overall specification of each unit to guide and audit the information construction planning. At present, some domestic subsidiaries of the enterprises have brought different business application system in their business operations independently and the business application system has become the subsidiary of information system. To ensure all kinds of application system of subsidiary can be gradually integrated into the parent company integrated information system, the subsidiaries which have important position in the group, should align to the requirements of the parent company informatization construction to keep consistency with the parent company information system in the process of informatization construction

- The informatization construction of Parent-subsidiary Corporation should try to keep in the same pace. Due to the decision support system and management information system of holding company, information must be directly extracted from subsidiary TPS, ERP, CRM to ensure that the business department (unit) can't filter and whitewash some information, thus to ensure the authenticity of management (decision) information. Therefore, the establishment and perfection of the management information system to the parent company of group, can't break away from subsidiaries of TPS, ERP, CRM system and must be built on the subsidiaries of TPS, ERP and CRM (at least the informatization construction of the parent-subsidiary should maintain synchronized). otherwise, parent company set up no matter how advanced management information system, it will be still hard to achieve its aim, monitoring subsidiary company's business risk and financial risk in real time. The unit misleads the company's top decision-makers by reporting only good news which is an inevitable phenomenon
- We should pay attention to the personnel work of transformation and data specification, in the process of building integrated information system of group. Integrated management information system is organic combination of advanced information technology and management methods which requires the enterprise's decision-making and management. And even ordinary employees should keep learning and mastering modern enterprise management idea, management method and the latest development of information technology to ensure the smooth realization of personnel changes. In addition, data standardization is the first and foremost condition to implement internal information integration and information sharing. The object of integration of management information system is data processing, therefore, it requires the data must be normalized and shares one unified standard. The timeliness, accuracy and completeness of the information transmission can be guaranteed only in this way.

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