System Design for Knowledge Management of Top Service Enterprises

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Abstract Top service enterprises are intensive in knowledge, complicate in management and highly demanding in information transformation and knowledge sharing for their systems, hereby it is the core to concern their technology and working flow. This paper proposes that it is the ensuring guarantee for the successful system implementation when it is combined with the enterprise strategy, business process, customer needs, The anthor designs the knowledge management system and analyze the knowledge administration system of telp serviced enterprises.

Key words Top service enterprise; System of knowledge management; Explicit knowledge; Tacit knowledge

1 Introduction

With economic growth, the markets for the service enterprises compete severely, so as for the top service enterprise market share, it is urgent to smoothly develop them and react agilely for market change. Due to the characteristics within the top service enterprises of being intensive in technology and product knowledge, high quality in its staff while it is dynamic and professional in customers, it is necessary to construct a perfect knowledge management system to deal with complicate knowledge elements, large amount of information and complex management situation.

2 Designing the Knowledge Management System of the Top Service Enterprises

The main function of top service enterprise knowledge management system is to realize knowledge share and application, and the information change into knowledge is the most important and fundamental request in the system, whose design core is to construct a high-efficient access structure to describe all concerned information concretely and conceptually, and according to certain standard to extract, change, load, integrate and further refine, classify and store the information and knowledge

According to information transferring process and knowledge management procedure, the structure of knowledge management system design in top service enterprises is as following Figure 1.

The service enterprise knowledge management system is base on the application and support of technology and knowledge element between the mutual interchange, therefore it is necessary for the construction of top service enterprise to include 4 aspects:

- (1) Fundamental technique of knowledge management. It mainly includes the computer and internet, the platform to support the collection, processing, storing, transferring and application of knowledge for the top service enterprises, through which, the external information and internal knowledge of enterprise will be integrated well.
- (2) Software system of knowledge management. It is a synthetic system to realize knowledge acquisition, storage, sharing and application, in which the explicit knowledge and tacit knowledge can be interchanged mutually through the tools, such as culture management system, group pieces of technology, search engine, expert system and knowledge database.
- (3) Business process rebuilding and knowledge database constructing. It aims to make the enterprise knowledge resource a more smooth and rational stream of knowledge within the knowledge chain, and lets the staff contribute their knowledge, experience and specialty for enterprise while gaining knowledge relevant to business. Besides, it can also re-organize the knowledge content of the enterprise (scheme, strategy, and system and customer information) and its format, forming meaningful knowledge cluster to be administered in different categories.
- (4) Shared enterprise culture atmosphere. It aims to stimulate the employees' participation in knowledge share, enhancing knowledge transference.

The construction of the top service enterprise knowledge administrative system must be closely combine with enterprise idea, enterprise strategy, enterprise organization, enterprise business, business cost, product advantage and customer relation. Its design is a comprehensive project, differing from both traditional business administration, the overlays of the information stream available and the reproduces

of the enterprise culture form, conversely it calls for a specialized combination in all directions and the multiple dimensions.

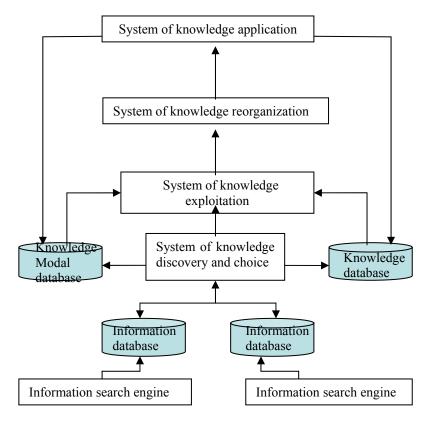


Figure 1 The Knowledge Management System Structure for Top Service Enterprises

3 Realization of the Top Service Enterprise Knowledge Administration System

The top service enterprise knowledge administration system administrates integrate various information data with the platform of advanced technology and network software, reaching the interchange, effective application and creation of knowledge, according to the rebuild of business flow and customer demands, with the common administrative channels as follows:

- (1) Establishment of the goals and core of enterprise administration. In general, it is closely around the following objectives: the establishment of existing knowledge resources system, effective organization of existing knowledge, and transference into sources of system knowledge; continued innovation of knowledge sources through the application learning and research of existing knowledge resources; share knowledge source to form an awareness of culture and responsibility within the enterprise, making every employee aware of his/her responsibility to share a variety of professions as possible as they can and widespread the source of knowledge through staff, products and services; establish capability evaluation system of scientific knowledge to stimulate and share the existence knowledge; realize the value of knowledge, utilize and research the knowledge resources to be successful. In accordance with the above, whose core strength of knowledge includes: research and develop knowledge, service product knowledge, marketing knowledge, customer knowledge, demonstrating unique singularities, and are consistent with its overall strategy and business objectives.
- (2) Establishment of knowledge management organizations. Flat and flexible organizations may result in agile and quick reaction capability. The establishment of knowledge management manager (CKO) manages the knowledge creation, the use, the preservation, the transfer and the innovation to ensure the safeguard for its smooth implementation; but the establishment of professional and part-time job project team can further guarantee the knowledge application effect carrying on the inspection and the appraisal to the knowledge management work.
 - (3) Determination a process for dominance technological knowledge. It requires to combine the

core business technological process and dominance knowledge creation point, in which the employee may apply IT to carry out the memory collecting, recording, arranging and storing in time, and spread it through text, case and technological process.

- (4) Promotion of the transformation of implicit knowledge. One of the core knowledge management is to create interactive mechanism and platform for tacit knowledge and explicit knowledge, so that tacit knowledge is expressed and translated into sharing knowledge of the organization. There is a great deal of tacit knowledge within the top service enterprises, and for its difficulty to explain in words and inextricable link of the owner, together with national conditions and cultural traditions, it is decisive for the existence of obstacles in the process of conversion and sharing of tacit knowledge. For top services business, strengthening the tacit knowledge conversion can be set up by in-house project team, conducting team competition, selecting position expert; or associating with customers outside the enterprise and communicate with other staff and customers to make tacit Knowledge overt, maximizing the role and function of tacit knowledge.
- (5) To improve knowledge sharing level making use of information platform. Knowledge and its type are diverse, a large amount of the data being related to enterprise production management needs to be preserved, transferred and dealt with the enterprise information system. The information door is important platform in knowledge management system, the enterprise should define the knowledge in the initial stage of constructing knowledge administrative system, to categorize the data of business gradually under knowledge administrative system, to realize the knowledge conversion, apply and share with the aid of management technique and information network coordination operation.
- (6) Assessment of the effect of knowledge managing process. It aims mainly to estimate whether the knowledge administration strategy has reached anticipated effect, whether there is the maximum optimization concerning the combination of the core business technological process and knowledge, and find out the advantages and disadvantages in the earlier stage practice, to establish the result measuring standard, and then adjust the enterprise knowledge management plan according to the measuring standard and result.

4 Conclusions

The designing of the top serves enterprise knowledge management system focuses on the conversion between technology and knowledge, whose application emphasizes the conversion from tacit knowledge to covert one, combining with the enterprise strategy, its business flow and the customers' demand to reach the prospect of knowledge application and the knowledge innovation.

References

- [1] Zhou Hui. Dsign and Implementation of Electric, Power Research Enterprise Knowledge Management System[J]. ZheJiang Electric Power, 2009,(4): 63(In Chinese)
- [2] Wang Minghua. The Countermeasures, on Construct Knowledge Management System of Large-enterprise[J]. Internet Fortune, 2010(3): 40(In Chinese)
- [3] Gei Xunxun. The Implementation of IT Enterprise Knowledge Management in China[J]. Morden Management, 2008,(5): 232(In Chinese)
- [4] Xiang Bo. Thinking on Strengthening Management with Knowledge in Enterprise[J]. Journal of Sinopec Management Institute, 2009,(2): 31(In Chinese)