Research on Multi-Stage Management of Corporate Culture in the Science and Technology Enterprises: a Case Study of Lenovo

Cheng Hongyan[1], Yang Huaizhong[2]

1 School of Humanities and Law, Wuhan University of Technology, Wuhan, P.R.China, 430070

2 School of Politics and Administration, Wuhan University of Technology, Wuhan, P.R.China, 430070
(E-mail:Chenghy71125@126.com, hzyang545@whut.edu.cn)

Abstract   To study the multi-stage management of corporate culture in the science and technology(Sci-Tech) enterprises, this paper proposed the phased characteristics of Sci-Tec enterprises' cultural development by taking the Lenovo development process as a case, suggesting that the cultural management principles should be based on the multi-stages of succession. The basic principle is   to adapt to the changing business environment with basic planning vision, whereas the kernel need should be changed under the premise of stability and the amendment should be made according to the external changes. We conclude that Lenovo cultures have been built step by step and changed with basic stability under the concept of Lenovo spirit of "Lenovo services, high-tech association, international association". There are three multi-stage cultures: the traditional corporate culture in creating a foundation; the entrepreneurial innovation of corporate culture in developing the energy and vitality; the supporting culture to establish the institutional and international Lenovo Group. The purpose of mutli-staged corporate cultures are to realize the career goals of staff, quality of life, and the pursuit of business objectives through the realization of Lenovo ideas.
Key words   Sci-Tech corporate culture; Multi-stage management; Entrepreneurial: Innovation; Supporting culture

1 Introduction

With the change of current business environment and increased intensity of competition for scientific and technological enterprises, corporate cultural management is valued by entrepreneurs and researchers. Some study in the perspective of system, of culture or of management. Others use theoretical analysis or case study. This paper takes Lenovo as a case since Lenovo has constantly summed up its building experience of corporate culture in different periods of business environment.

Guided by system theory model, Lenovo's corporate cultures adjust and determine the future social and cultural development in the way of enhancing their cultural adaptation and regulating employees' behavior target. The theory of how to locate the multi-stages of corporate culture will directly impact on its staff, the ability of coping with setbacks and the future decision-making. The emphasis of this study lies in multi-stage cultural management of science and technology enterprises through further analyzing the case of Lenovo's model. Many Sci-Tech entrepreneurs recognize the power of corporate culture to inspire their staff to break through the bottleneck of development and to show a prominent feature of the Sci-Tech enterprises: a continuing technological innovation and management of innovation. During the "puberty of business, corporate conduct or enterprise culture is driven by the leader, but in the prime period, corporate culture drives the leadership behavior[1]." (Ai DiSi, 1997) According to production and product characteristics in business process, corporate culture is defined as historical traditions, values, and ethics and so on, and it is also defined as corporate officers' behavior, management characteristics and norms that embody all the enterprises. It conveys the survival of enterprises. Namely, the different life stages of the enterprises have the appropriate corporate culture theory, and then produce corresponding achievements. As a science and technology enterprise, Lenovo has three stages from its birth: the initial period, innovative growth stage, international development period. Based on the theory of classified cultural management, Lenovo translated successfully from one stage to another with the adjustment of the corporate culture. Lenovo successfully used dominant culture of different contents and essences during the business growth stage and maturity: building the initial period with Chinese traditional culture; fostering technology and management innovation by innovative corporate culture, guiding enterprise into international ranks by supporting culture. Lenovo communicated culture theory hierarchically with internal and external customers, image identification, behavior and other channels on the basis of the above framework. The aim is to guide the Sci-Tech enterprise and organizational

structure as a whole into the right orbit to move forward under a certain atmosphere of permeating the core values into enterprise's minds.

2 Chinese Traditional Enterprise Culture during the Initial Period

The Computer Science Department of the Chinese Academy of Science invested 20 million RMB to start Lenovo's predecessor by 11 technology personnel led by Liu Chuanzhi in 1984. Ten years later, influenced by Lenovo's basic idea of corporate culture, Lenovo Group's total assets had come to 12 billion RMB, and the employees had reached 2300 with the turnover at 47.5 billion and after-tax profit at 140 million in 1994. The existence of an enterprise in this decade depended on how to seek opportunity, to win the customers' approval, and to expand and consolidate market. Therefore, at startup, Lenovo's enterprise culture depended on the moral code and standard work of Chinese traditional culture. "The Lenovo's spirit" and "the quality of Lenovo's employees" had become the source and content of core values of Lenovo's enterprise culture in this construction stage.

Based on the core ideology of "the individual pursuit corporate into long-term development of Lenovo," Lenovo's work ethic is "realistic, enterprising and innovative", with the mission as "to provide humanity with excellent information technology products and services, contribute to gain a place in the World's information industry fields for the China", along with long-term goal as "to accomplish the company as a long-term, and large-scale high-tech companies." With these points in mind, Lenovo's spirits consisted of five elements:" patriotic, faithful, putting the general interest first, striving, realistic and innovative". Being patriotic means" what Lenovo group feeds back to country is not only good products and services, not just the tax of substantial growth and a wide range of employment opportunities, but a fact that guiding Lenovo into the Global 500 after a couple of years". "We must become the mode of Chinese company that keeps its promise by fact, and the mode of mastering advanced management and mode of high-tech industrialization."[1]

So, Legend people should have the basic qualities: good morals, excellent professional training, and dedicated professional attitude, a sense of crisis, competition, learning and summarization. In other words, in work areas, the "Legend people" should have such characters as being strict, serious, active, and efficient; in benefit areas, they should have such characters as equality, trust, appreciation and affection. Employee who owns these qualities is the talent because he can complete his jobs responsibly and consider problem from the fundamental benefit of company. Last, staff should "win the trust of users, gain the trust of colleagues, gain the trust of superiors, win the trust of subordinates, gain the trust of government", thus company will promise that: "be efficient for the users", "would rather lose money, never lose credibility."

In conclusion, in the initial stage the corporate culture mainly embodied four aspects: as for the Lenovo's business operation, "practical and enterprising spirits" were required. Lenovo took the high-tech computers products as the main target. The business leaders, technical personnel, marketing personnel and management decisions, rules, and so on were required to have a thoroughly "practical and enterprising spirit" in this endless field of technical updates. As for staff，they were required with the view of "smaller companies only do things, but larger companies cultivate men". This idea followed old and famous Chinese business tradition, and it is also widely recognized as the same goal by modern companies. As for sale, the goal is "the customer is Queen." The importance of customers is self-evident. At the start the company broke the old way of "Products-For-Sale" which underlined the planning system, boldly innovated the mode of business operation, thus created a "Trade-Industry-Technology" model which would become the basis of international cooperation. The goal of this sentence "Customer is a starting point, research and development are the intermediary, market is the goal" has achieved three objectives: accumulating capital; being familiar with the market; establishing marketing channels. Thus, based on its advantage and specialty (such as low production cost), this enterprise can select one or two products (including his agent sales of products) to develop wholly by themselves, or cooperate product with experienced large foreign enterprises. "Trade" directs the issues of the development and management for customers. As for a high-tech enterprise, customers, research and development are necessary. When potential customers are concerned, the perseverance and dedication reflected the demand of "making 5% hope become 100% reality." Because of the startup situation, Lenovo focused on the balance. The higher performance of characteristic culture was combined with the balance of

---

(1) Liu Chuanzhi. The Speech of "To Penetrate into Motive Force" in the Lenovo Group Pledging Conference in the fiscal year of 1999

consciously internal value orientation (work hard) and external value orientation (customers).As a result, customer value, business efficiency, efficiency of management culture and work of high performance can be organically combined together.

3 Innovative Corporate Culture at the Growth Stage

The main character of scientific and technological enterprises is innovation. The end product faces challenges of technology constantly being updated and the infinite service upgrade. Diversity of customer requirements and technical transformation has dominant impact on the developing space and direction of technology-based enterprise. Thus the managements of Sci-Tech enterprises also have continuous innovation. Management innovation is the process of multiple factors, reflecting the company's integration of management between the internal and external factors. The integrated process of management should require the corresponding innovative corporate culture to ensure how to drive environment towards long-term culture of enterprise.

During 1997-1998 years, Lenovo learned the excellent essence of traditional culture, and re-built it as the innovative corporate culture including market innovation, technology and product innovation, organizational innovation, and management innovation. This kind of culture fully affected behavior recognition system and visual identification system of culture.

First, core value and its elements of innovative enterprise culture were established.[2] (Huang Hetao, 2008)

The innovative corporate culture system that focuses on innovation is divided into four levels by four coordinates which include internal operations, external development, flexibility, and control process. As for the goal-oriented guide, customers' experience is the most important and followed by awareness of the concept of operation and cost. As for the rule-oriented guide, the serious and high efficiencies are the most important for the innovation of technology and product. As for the supporting guide, the trust, appreciation, sharing and cooperation are the most important. As for innovation-oriented guide, the strategic decision is also important and learning and development are following.

Secondly, innovative corporate culture was defined by hierarchical management. According to inheritance of the core of corporate culture at the initial stage, Lenovo group put forward the contents of the four specific dimensions: service culture, strict culture, family culture, entrepreneurial culture.[3] (Huang Hetao,2008)

These four elements always focus on the innovation of technology and management of enterprise, and are also linked together. On service culture, the association proposed new definition in the customer conception. Namely, the customers include internal and external customers. Internal customers include responsibility within a company at all levels, shareholders, and the staff. The core of their services is the only one that is "not responsible for person but for changing things". Each superior staff will become your resources for your job when he gives you job duties and objectives. External customers mainly are referred to consumer groups. We should focus on the customer experience, listen to our customers, and understand the real needs of customers. Thus, the internal and external customers can be satisfactorily served beyond their expectations. What is the customers need is the innovative technology, products and programs in science and technology enterprises, especially for external customers. In fact, strict culture precisely provides solid foundation for innovation and service. Strict culture stresses on facts and data to; enjoy finding the problem and facing the reality courageously; to enjoy endlessly seeking the rule of work; to enjoy simple and efficient service by reviewing ways; to respect discipline and standards; and to focus on objective measurable and operational program. In particular, each project must be concluded, and staff must understand clearly what should be improved and refined after they have completed stage plan. The strict culture is the keystone of upgrading technology and enhancing product quality for the scientific and technological innovation, and is the protection for creating brands and ensuring a favorable good reputation.
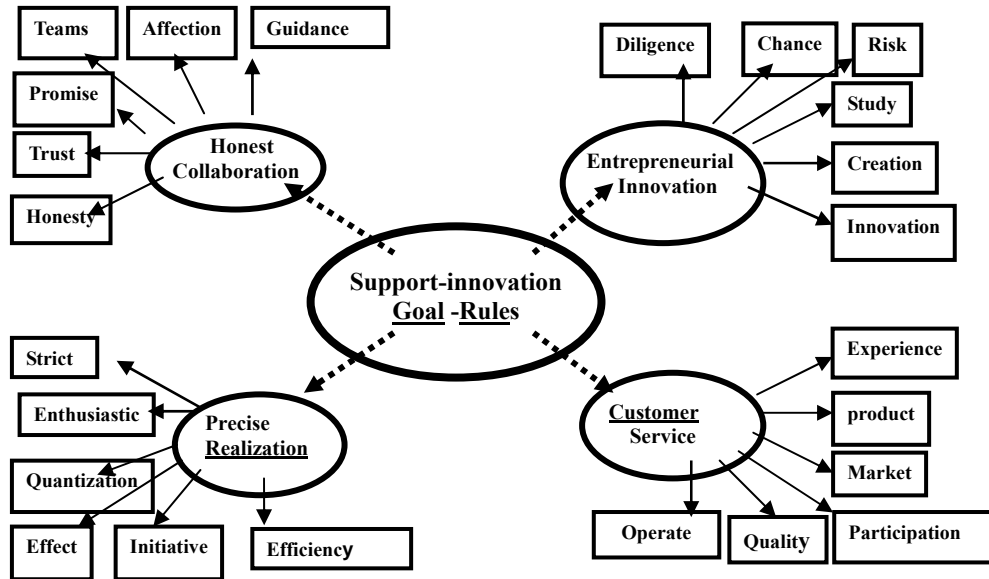
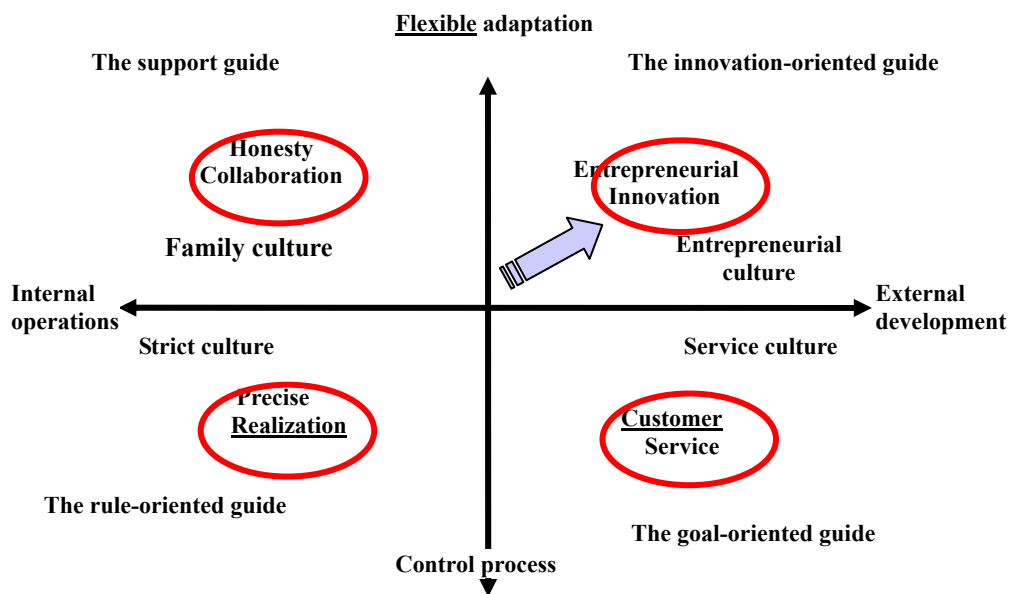**Figure 1   Elements of the Core Value of Innovative Culture of Lenovo**

Figure 2   The Cultural Contents of the Four Specific Dimensions

Being the lubricant and propellant in the cultural system, family culture has created an open, collaborative environment. Advocating equality, trust, appreciation and affection, family culture breaks through the bureaucratic interaction atmosphere of state-owned enterprises, and promotes the Sci-Tech innovation of Lenovo group from three measures. First, staffs are encouraged to participate in decision-making. Thus, the upper and lower levels will increase and exchange communication, and create participation, mobility and freedom for staff. Second, power-sharing is encouraged. What helps to share necessary information and resources to complete tasks and to accept innovative ideas is to weaken authority and identify which is not conducive to innovation. Third, support and cooperation between the upper and lower levels were encouraged. This helps to finish the task through improving the communication and cooperation between different sectors, to improve and exchange of new ideas, and to help employees to face psychological high pressure. Thus, it is also shown that company encourages the staff to engage in innovation for the interest of organization after understanding the enterprise value.

In fact, the innovative culture's main point is to push the professional development of each person and to create benefit for enterprise, thus realizing win-win result for enterprise and individuals. The innovative culture emphasizes employees' surpassing themselves, coping with the challenges and facing change flexibly, trying new methods boldly and improving work continuously. It also helps employee to absorb new ideas and to hold new opportunities.

Finally, the management practice of innovative enterprise culture was constructed. As for Chinese high-tech enterprise, innovation and transformation of high-tech industrialization are the most fundamental tasks, in which transformation is the first subject and innovation the more difficult task. Therefore, Lenovo constructed the enterprise managing process and linked technological research and development in it. The process took "technique" into "product", made a good "product" into the "industry" system which has the ability of mass production and sales. The "Trade-Industry- Technology" mode of the initial period is to realize that market demands promote the industrial research by studying customers and market, then advancing product, finally returning to meet market demand. Senior personnel in this mode are aware of the following: if the final product wants to be successful, it must rely on the success of all aspects of business operation from research to procurement, from production to sales, from marketing to service and to financial personnel departments. According to this idea, Lenovo constructed a holistic and systematic management concept.

Fundamentally, "innovation" is more difficult than "transformation". As a team, development of enterprise should determine the new program of research development, establishing a scientific and standardized development management system in which designing the development to strategically span technological research progress is the most important because that may achieve maximum efficiency. Therefore, Lenovo created practice system of innovative enterprise culture which took technology, products, market as a center. The results of the system ensured technology into product with the engineering development and the products to transform industry with the management enterprise. Such process was as follows:
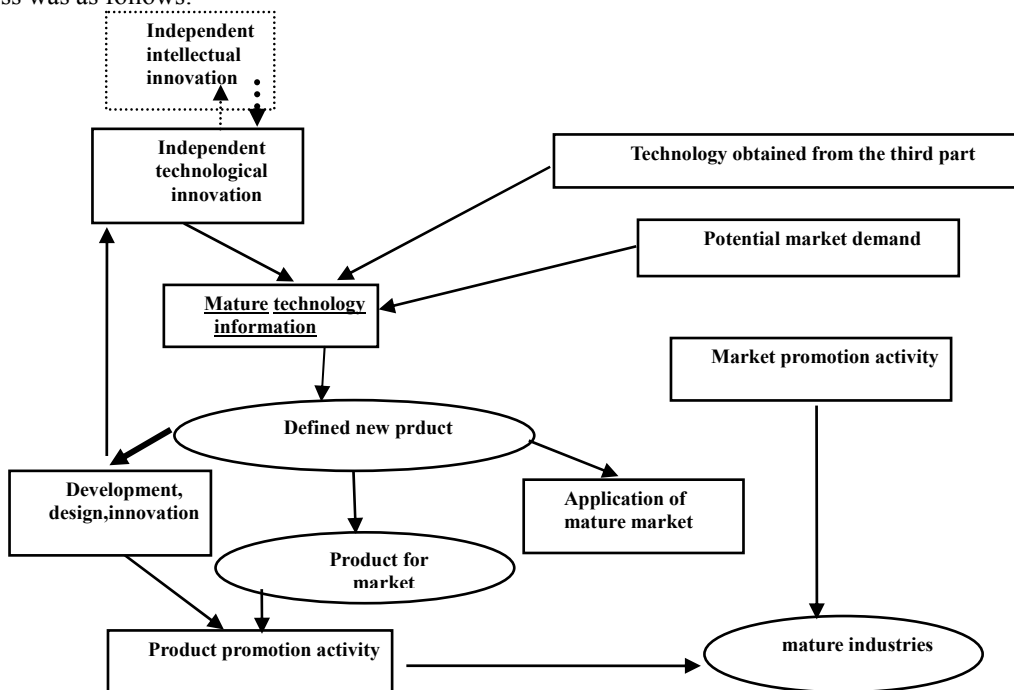

Figure 3   Innovation System of Lenovo's Product and Market

4 The Supporting Enterprise Culture of Mature Stage

Lenovo and America Online-Time Warner carried out various strategic cooperation at June11,2001. After the merger of IBM's PC Business (personal computer business unit) a few years later, how to integrate different cultures and digest cultural conflicts had to be faced by the new Lenovo as an international enterprise. There are many international differences in culture between Lenovo and IBM. Facing these differences, the new Lenovo constructed supporting culture theory and management system,

in which the sixth principle of "honesty, respect, and compromise" was extracted from two different corporate cultures. Namely, a service, high-tech and international New Lenovo wished to be created according to integrated cross-culture.

Supporting enterprise culture is encouraging open atmosphere and harmony among employees to create a close relationship and mutual cooperation.[4](Fang Song, 2006) Such culture provides a relaxed and harmonious environment, promoting equality, openness, cooperation and trust. Enterprise creates an atmosphere of social interaction and collaboration according to humanity principles, advocating personal freedom and the values of mutual respect among the members. (Wallach, 1983) Its basic features are as follows: encouragement, honesty, fairness, security, social interaction, inspiration, intimate relations and mutual cooperation. Supporting culture encourages employees to participate in their own work or life independently. Based on those employee's motivation and loyalty of organization are improved. It advocates equality and mutual assistance among employees, encourages family atmosphere to establish a harmoniously open environment, eliminates conflicts of interest between departments, and strengthens the informal communication among organizations. It is more beneficial for better accessing and processing market information, timely responding to market's change and improving performance. (Fang Song, 2006)

As being business representatives with typical American cultural tradition, IBM Corporation advocates high-degree people-oriented freedom. The supporting culture is obvious. More compromised and decentralized decision-making exists between managers and subordinates; employees have clear attitude and own perspectives towards work and life, and their jobs be arranged by practice ability but not by qualifications. But Lenovo is the manufacturer enterprises with a strong Chinese culture, so the concept of corporate culture in Lenovo, political culture and national cultural are obviously different from that in IBM. The two companies also face friction between strong and weak culture. However, the core values of innovative corporate culture and its actual operation have many echoes in the idea of IBM's culture, such as resolving the conflict between management and staff by the family culture of non-hierarchical power structure, the implementation of barrier-free communication, and personalization of technology staff time.

The New Lenovo inherited the older excellent culture and strengthened each employee's ability training, such as how to respect each other frankly, how to share the management, and how to compromise collaborative work. First, emphasize on education of cultural respect. The new Lenovo's managers need to identify and distinguish the various cultural differences and their individuality, need to work with each other with an open attitude. Both Chinese and foreign employees learn each other as much as possible and also discard their weaknesses. Therefore, Lenovo employees can distinguish cultural differences and strengthen language communicative skills to improve team and organizational efficiency by newspapers or cultural supports. To strengthen the understanding of different culture and improve international perspective, the professional managers should be trained with cultural sensitivity, cross-cultural conflict and regional environment simulation. At the same time, Lenovo also needs to establish common core values of enterprise, business values and collaborative culture to mobilize each employee at the greatest extent to combine their own thoughts and actions with the idea of enterprise for enhancing the adaptability of multinational culture. Second, train employees with the participating capacity. For example, leadership managed staff with a system of "talk-teaching-practice-training-praise-follow-up" to reduce interpersonal conflicts; company populated SRF theory (S-stimulus: demonstrating and explaining the operative method to the staff; R-response: the staff speak or operate the learned methods and techniques; F-feedback: feed back operated conditions timely); avoiding conflicts caused by different pay with a good reward mechanism; training all personnel including leadership with the integrated values of local and international levels; often making the training and developing plans for staff with the latest international management theory to increase knowledge and skills, and to reduce the awareness of the gap between different countries' employees. Third, training center of human resources should plan how to enhance manager's management skills. The manager mobilizes effectively and uses resources to achieve business goals. First of all, he needs to translate orders into goals and talk it to staff by encouraging and counseling them. Such measures are shown in the figure 4:
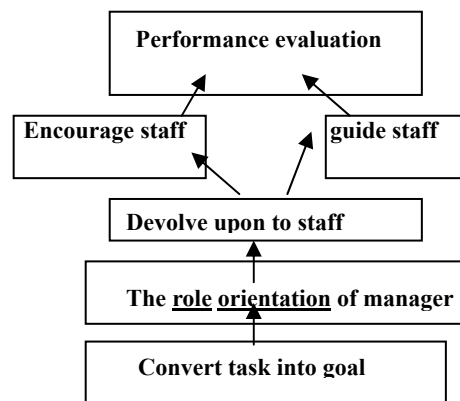
Figure 4   The Operate System of Manager's Management

5 Conclusion

The path of Lenovo's corporate culture realizing the change of phased development successfully confirmed the following principles. The basic principle of multi-stage management of this enterprise culture is that "adapting to changing business environment and having basic planning vision, and the kernel need should be changed under the premise of stability when the amendment to be made in the external level." So this company will actively adapt to the environment and employee's demand.

In conclusion, we state that Lenovo cultures have been built step by step and changed with basic stability under the concept of Lenovo spirit of "Lenovo services, high-tech association, international association ". There are three multi-stage cultures: the traditional corporate culture to create a foundation; the entrepreneurial innovation of corporate culture to develop the energy and vitality; the supporting culture to establish the institutional and international Lenovo Group. The purpose is to realize the career goals of staff, quality of life, and the pursuit of business objectives at all stages through the realization of Lenovo ideas—"make applications, find markets, research and develop, establish industry with the pace of the modern world".

Further suggestions are that when facing international development association, the system of cross-culture management should be strengthened perfectly. They should promote the construction of the core values system to eliminate cultural conflict and operate the core corporate values among employees and managers.

References

[1] AI DiSi. Corporate Life's Cycle[M]. Beijing: Press of China Social Sciences,1997:297(In Chinese)

[2] Huang Hetao Tian Limin. The Case Analyze of Enterprise Culture[M]. Beijing: Press of China labor social security, 2008:159(In Chinese)

[3] Fang Song. Corporate Culture, Technological Innovation and Business Performance: Matching Model[M]. Beijing: Press of Match Economic Science, 2006:159, 208 (In Chinese)

[4] Wallach, E.J..Individuals and Organizations: the Cultural Match. Training and Development Journal (OTACIT-33), Washington, DC: Office and Technology Assessment[C],1983:29-36