Transfer Model of Employee’s Tacit Knowledge in Creative Enterprise

1Wenhe Lin, 2Qinghua Lv
1Business Administration College, HuaQiao University, China, 253062775@qq.com
2Business Administration College, HuaQiao University, China, lvqh99@126.com

Abstract
Tacit knowledge transfer of employee in creative enterprise is not only the jumping-off point for knowledge creation but also is significant approach of knowledge stock growth and knowledge value implement. Since the main objective of Knowledge Management is to facilitate the transfer of knowledge from where it is created or stored, to where it is applied, this paper explored its pathway and methods. It focuses on the impact of knowledge source, knowledge receiver, context, and knowledge distance on knowledge transfer in creative enterprise, and then constructs its output model and ladder model based on previous study so as to supply evidences for decision-making sufficiently and practice successfully under the perspective of knowledge transfer process among employees and main body all levels.

Keywords: Creative Enterprise, Employee’s Tacit Knowledge, Knowledge Transfer.

1. Introduction
Creative enterprise is a core carrier for creative industries and organizations with highly concentrated intelligence, which of formation, development as well as gathering have significantly different characteristics. Knowledge economy era will produce “collective dementia tragedy”, that is “Albright Rule”. To deal with “collective dementia”, the key method is to cultivate the organization intelligence. Knowledge-based talents are about 80 percent of tacit knowledge. Knowledge and experience is deepened in the heart of staffs, which is lost with staff turnover and wasted knowledge [1]. Knowledge transfer is a flow process of knowledge among people, knowledge-processing mechanism, and its influencing factors, including knowledge of the sender and the receiver, and knowledge sharing context factors [2]. Knowledge transfer focuses on how to transfer knowledge as a strategic resource of enterprise or institution. Knowledge transfer is an important source of creative industry and promotes the development of creative enterprises.

Explicit knowledge in organization doesn’t transform sustainable competitive advantage. Constituting organizational core competencies of knowledge base is built on the basis of employee’s tacit knowledge, so the core of knowledge management is to explore the tacit knowledge of employee brain [3]. The effective management of employees’ tacit knowledge in creative enterprise promotes the knowledge circulation within the organization, and value adding of employee’s tacit knowledge. The added value of staff tacit knowledge flows in this paper will be conducive to achieving the value innovative models in knowledge management, and to helping guide the creative enterprises to implement effectively knowledge management strategies.

2. Literature Review on Employee’s Tacit Knowledge in Creative Enterprise
Tacit knowledge is distributed to different levels of the body of knowledge. Tacit knowledge is broadly divided into four categories from the perspective of different levels of enterprises’ knowledge body: individual level, group level, organizational level, and inter-organizational level of tacit knowledge. Michael Polanyi (1958) first proposed the idea of personal tacit knowledge. He published Personal Knowledge in 1958 and published Hidden Aspects in 1966. Different scholars elaborated on the understanding of tacit knowledge from different angles after Polanyi (1958).

Tacit knowledge was equated with personal knowledge when it was found. R.J. Sternberg targeted at the individual level, and proposed that tacit knowledge was personal [4]. L.Chang-Yong, L.Ting-
Ting (1996) claims the knowledge of creative enterprise is mainly divided into two aspects from the perspective of knowledge transfer carrier. One is explicit knowledge which of physical carriers are machinery and equipment, products, books, drawings, patents, manuals and reports[5]; The other category is tacit knowledge, which of carriers are employees (knowledge embedded in carriers, and transferred among carriers)[6]. X.Gu (2008) thinks that employee’s tacit knowledge is comprehensive reflection by personal experience and capacity, which is difficult to state by codified and formalized language [7]. Therefore, sending and receiving of knowledge among individuals and organizations are fundamental way to address effective transfer of employee’s tacit knowledge. Scholars have diverse perspectives on employee’s tacit knowledge, but still have some consensus: for example, tacit knowledge is present in the individual mind; it is relatively subjective knowledge, difficult to obtain, understand and communicate. Such knowledge is often based on the presence of unstructured way.

Norwegian philosopher Grimen comprehensively summarized studies on nearly half a century of “tacit knowledge”. Grimen’s classification on tacit knowledge is clearer. Based on Grimen’s classification, this article divides employee’s tacit knowledge of creative enterprise into two categories, one called “true tacit knowledge”, which is difficult to use the universal symbols to express, including “strong thesis of tacit knowledge” and “Gestalt thesis of tacit knowledge”. The other called “pseudo-tacit knowledge”, including “thesis of conscious under articulation”, which is not expressed awareness for some reason, and “thesis of unconscious under articulation”, which is owed to lack of knowledge or that knowledge holders unable to externalize knowledge.

In reality, employee’s tacit knowledge in the creative enterprise is an organism formed by the four levels of knowledge. As shown in Figure 1, strong thesis of tacit knowledge is in the bottom and value-added basis for employees in creative enterprise. The more underlying knowledge is the more stability in the pyramid of employee’s tacit knowledge in creative enterprise. The difficulties of direct measure and learning are relatively large. Strong thesis of tacit knowledge in the bottom is value-added basis of creative enterprise, and has decisive and guiding role in the formation and development of explicit knowledge. Strong thesis of tacit knowledge is the most essential concepts existing in employees inside with the implicit way, and become basic part of employee’s tacit knowledge. The lower of employee’s tacit knowledge has decisive and influential impact on the upper level of knowledge among the four levels of knowledge, such as strong thesis of tacit knowledge and Gestalt thesis of tacit knowledge contributing to the formation and development of thesis of conscious under articulation. At the same time, the upper of knowledge is the reaction of lower knowledge, such as improvement of thesis of unconscious under articulation affecting strong thesis of tacit knowledge to change, which will alter the structure of employee’s tacit knowledge in the creative enterprise.

**Figure 1.** Classification of Tacit knowledge in creative enterprise
3. Employee’s Tacit Knowledge Transfer in Creative Enterprise: Processes and Methods

According to the above employee’s tacit knowledge classification in creative enterprise, knowledge transfer can roughly be divided into the following four processes (see Table 1). The first transfer process is that employee’s tacit knowledge is transferred into the operation of intellectual capital. The second and third processes of knowledge transfer are the product of knowledge-based economy. The second and third processes of knowledge transfer don’t directly carry on knowledge materialized, which differed from the fourth process, that is, innovations fruits of employee’s tacit knowledge in creative enterprise don’t directly transfer into physical product by following steps (see Figure 2). If business decisions were guided by knowledge-products after running business decisions, that was the third process of knowledge transfer. If business decisions were guided by intelligent assets, that was the second process of knowledge transfer. The fourth process of knowledge transfer implanted innovative knowledge into physical products. Number of employee’s tacit knowledge is implanted into producing processes of physical products and employee’s tacit knowledge in creative enterprise is recognized as “productivity”. Creative enterprise can process and re-converted employee’s tacit knowledge acquired into explicit knowledge, create new explicit knowledge and then receive employee’s tacit knowledge outputs through the above processes.

<table>
<thead>
<tr>
<th>Tacit knowledge dimension</th>
<th>Processes</th>
<th>methods</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strong thesis of tacit knowledge</td>
<td>Knowledge assets—(conversion) — intellectual capital</td>
<td>Monitoring, learning team, “learning by doing, doing by learning”, expert reserves</td>
</tr>
<tr>
<td>Gestalt thesis of tacit knowledge</td>
<td>Employee’s tacit knowledge (creation)— (dominance) —structure of intelligence assets</td>
<td>Simulating environment, cognitive style of expert type</td>
</tr>
<tr>
<td>Thesis of conscious under articulation</td>
<td>Employee’s tacit knowledge (creation)— (dominance) —(exchange) —value;</td>
<td>Material or spiritual incentives, lifelong employees system</td>
</tr>
<tr>
<td>Thesis of unconscious under articulation</td>
<td>Employee’s tacit knowledge (creation)— (implantation) —entity product— (exchange) —value</td>
<td>Training, learning team, sensitivity of knowledge cultivating</td>
</tr>
</tbody>
</table>

The difficulty on the transfer of strong tacit knowledge is “internal stickiness”, only expressed by actions such as non-verbal way, and tested by knowledge transfer. The typical example to solve “internal stickiness” is mentoring (viz. prentice learn certain skill from master), or establishing learning team with the center of the “experts” by the way of working with master and participating internal and external training, and then through “learning by doing, doing by learning” to realize internal diffusion of expert knowledge, and then using statistical processing and establishing expert reserves. It is critical to cultivate specific environment, which is suitable for the Gestalt thesis of tacit knowledge to express and disseminate in creative enterprises. Especially, the second type of tacit knowledge can be achieved outputs being in the specific technical and human environment. Therefore, creative enterprise can use the simulation environment for designing teaching activities, specifically, to create “knowledge transfer space”, that are, “interaction space of individual face-to-face”, “interaction space of individual's visual exchange”, “interactive space of collective conversation” and “interactive space of collective demonstration”. The thesis of conscious under articulation of tacit knowledge has a clear and specific motivation. Creative enterprises are generally available to apply physical, spiritual and other incentives to achieve the multiplier effect in the knowledge transfer process, and implement the “lifelong employment system” for employees with specific knowledge to enhance their sense of belonging, and make them participate actively in realizing vision goals of corporate. The thesis of unconscious under articulation of tacit knowledge have been neglected due to take for granted, and caused knowledge transfer obstacles due to their own insufficient
communication skills. Creative enterprise can apply the methods of training, learning team, and sensitivity of knowledge cultivating. If this type of employee’s tacit knowledge is fully utilized, tacit knowledge can be directly implanted into physical products and creative create directly outputs of employee’s tacit knowledge.

4. Output and Ladder Model of Employee’s Tacit Knowledge Transfer in Creative Enterprise

Knowledge transfer in creative enterprise is a process where knowledge is passed between people or knowledge processing mechanisms. Based on four influencing factors of Hai Zhuge(2006), this article proposed four influencing factors. In our research the subject was the “knowledge source”; the object was the “knowledge receiver”; community was the “context”, and tool was the “knowledge distance”. Fig.3 shows these transformations.
Figure 3. Four influencing factors of employee’s tacit knowledge transfer

When knowledge source \( i \) and knowledge receiver \( j \) carries on employee’s tacit knowledge transfer, it will produce an outputs effect, i.e. lower level of knowledge receiver will learn a certain amount of employee’s tacit knowledge, and higher level of knowledge receiver will be unchanged. Outputs can be understood as knowledge production during the transfer process of employee’s tacit knowledge. Knowledge receiver \( j \) and the distance of two kinds of employee’s tacit knowledge are equivalent to two input factors of knowledge production. Level of knowledge source \( i \) and knowledge receiver \( j \) can measure learning ability and the distance of two units can measure knowledge spillovers. Suppose at time \( t \), \( i \) was the knowledge sender and \( j \) was the knowledge recipient, when \( i \) and \( j \) exchanged employee’s tacit knowledge, outputs was represented by Cobb-Douglas production function.

\[
\Delta Z_{j,t+1} = \begin{cases} 
0, & Z_{i,t} \leq Z_{j,t} \\
E \cdot Z_{j,t} \cdot (Z_{i,t} - Z_{j,t})^{\beta}, & Z_{i,t} > Z_{j,t}
\end{cases}
\]

(1)

Formula (1) for output model \( 0<\alpha<1, 0<\beta<1, \alpha<\beta \) ensure that contribution of external knowledge spillover effects for outputs is larger than intrinsic level of knowledge. It is consistent to the premise that employee’s tacit knowledge transfer causes knowledge growth. \( \Delta Z_{j,t+1} \) means two units of transfer outputs ; \( Z_{i,t} \) represents the level of employee’s tacit knowledge receiver. \( Z_{j,t} \) represents the level of employee’s tacit knowledge source. \( Z_{i,t} - Z_{j,t} \) means the level distance of two units of knowledge transfer. \( E \) means the context coefficient of creative enterprise (0 < \( E \) < 1). We can see from output model (1) that it is necessary to improve the level of knowledge receiver (\( Z_{j,t} \)), level distance of two units of knowledge on knowledge transfer (\( Z_{i,t} - Z_{j,t} \)) and optimize context (\( E \)) to increase the outputs of employee’s tacit knowledge transfer.

After analyzing the outputs model of employee’s tacit knowledge transfer, it can form ladder model of employee’s tacit knowledge internal and external transfer in creative enterprise. Fig.4 transfer model of employee’s tacit knowledge actually is a description of the process of knowledge transfer caused by knowledge of qualitative change. Based on the previous analysis to achieve the quantitative accumulation of knowledge transfer needed for the knowledge production processes, such as knowledge innovation, dominance, implantation, exchange etc., the model contains the creating of intellectual capital, structure of intelligence assets, intellectual products, and entities products in the process of knowledge transfer. Knowledge creation in organization is a spiral process, which comes from individuals, and expands beyond the boundaries of groups, departments, institutions, organizations, and continues to move forward with the expanding of interactive community. Employee’s tacit knowledge in creative enterprise has the polymerization of accumulation of knowledge, and transfer knowledge in the spiral flow.
Employee’s tacit knowledge transfer in creative enterprise is divided into four outputs: intellectual capital, the structure of intelligence assets, intellectual products, and physical products. (1) Intellectual capital. For example, employees in creative enterprises obtain and accumulate skills and techniques on job, its manifestations including emotional knowledge (such as love, relationships, passion, and pressure), skills, behavior knowledge (such as improvisation and entertainment) [8]. Due to knowledge capital is recessive, it is difficult to understand, comprehend, evaluate, or transaction. These implicit characteristics make creative enterprises keep sustainable competitive advantages. (2) The structure of intelligence assets. It is explicit knowledge expressed by images, symbols and languages. For example, trademark, design and brand equity are belong to the structure of intellectual assets. Since the structure of intelligence assets is tangible, it is easier to comprehend compared with knowledge capital. (3) Intellectual product. It is essentially the value-added way by means of transferring the employee’s tacit knowledge to organizational knowledge [9]. Creative enterprises will shape the employee’s tacit knowledge into structure of knowledge on the market and institution, by the way of maximizing resource efficiency to achieve the strategic objectives, such as documentation, product specifications, and operating manuals and literature and information about customers and suppliers. Intellectual rights are protected by law (e.g. concession), and patents also are fallen into this category. (4) Physical products. Knowledge receivers integrate organically shared knowledge in their efforts and methods, and then create new knowledge, form operational knowledge, use them in the production and operation of organization.

5. Conclusions

Creative enterprises focus on improving the knowledge level parameters, organizations and across organizational, narrowing the “space distance” and “social distance” among the transfer units, and change employee’s tacit knowledge into explicit knowledge, set up and optimize
externally situational factors adaptable for the employees in creative enterprise in the process of knowledge transfer among employees, groups, organizations and across organizational. Employee’s tacit knowledge in creative enterprise realize intellectual capital, the structure of intelligence assets, intellectual products, and entity products by means of monitoring, learning team, material or spiritual incentives, lifelong employees system etc.. This sublimating tacit knowledge determines the important elements of technological capability in creative enterprises.

6. References