Organizational learning and unlearning: Transferring knowledge to greenfield versus acquisition joint ventures

Eric W. K. Tsang
School of Business Administration
Wayne State University
USA
ewktsang@wayne.edu

Abstract

This issue of organizational unlearning, which is defined as the discarding of old routines to make way for new ones, has received limited attention in the literature although studies of organizational learning have been proliferating. Based on a comparative case analysis of eight Sino-foreign joint ventures, this study examines knowledge transfer by foreign partners to greenfield versus acquisition joint ventures. Since an acquisition joint venture is formed on the basis of an existing state enterprise, the need for organizational unlearning arises. The study investigates how issues related to organizational unlearning affect each of the four stages of the transfer process, namely initiation, implementation, ramp-up, and integration. Its findings indicate that organizational unlearning is an important source of stickiness in inter-organizational knowledge transfer.

Keywords: knowledge transfer, organizational learning, organizational unlearning, stickiness, joint venture, China

Suggested track: Managing organizational knowledge and competence

1 Introduction

While studies of organizational learning have been proliferating, our understanding of organizational unlearning has languished and has received limited attention in the literature. There have been almost no empirical studies of organizational unlearning. To address this knowledge gap, the present study investigates how issues related to organizational unlearning affect knowledge transfer based on a comparative case analysis of eight Sino-foreign joint ventures.

Empirical studies have found that transfer of knowledge within the multinational corporation is laborious, time consuming, and difficult. Szulanski (1996) uses the term “internal stickiness” to connote the difficulty of transferring knowledge within the organization. It is reasonable to expect that interfirm transfer of knowledge across national borders is even more problematic. Despite the previous studies of transnational interfirm knowledge transfer, researchers seem to have neglected the role played by organizational unlearning. This study thus helps advance our understanding in this area.

The paper is organized as follows. The next section presents the theoretical background of the study, defining and discussing some key concepts. It is followed by a description of the research methodology and the profile of the case companies. Then research findings are presented in the order of the four stages in the knowledge transfer process identified by Szulanski (1996). The paper ends with some concluding remarks.

2 Theory

Interfirm knowledge transfer across borders has been prevalent during the last two decades when countries such as Russia, China, Vietnam and Eastern European nations opened up their economies to foreign investments. A popular market entry mode in these transition economies is international joint venture. Local partners of these ventures used to operate in a planned business environment and, more often than not, are technologically backward. In contrast, foreign partners usually come from countries with more sophisticated business environments, and thus possess more advanced management and technological expertise. At least during the initial stage of operation, the foreign partner needs to actively transfer its expertise to the venture in order to develop the latter’s competitive advantage in the local market. Following Argote and Ingram (2000), interfirm knowledge transfer is defined as the process through which one firm is affected by the experience of another. An important factor affecting the difficulty of such knowledge transfer is whether the joint venture is of the greenfield or acquisition type.

2.1 Greenfield versus acquisition joint ventures

A joint venture can be established from scratch (greenfield) or on the basis of an existing organization (acquisition). Acquisition joint ventures are common in transition economies, such as China. One of the aims of the Chinese government in attracting foreign investments is to restructure the huge number of inefficient state enterprises. As such, many Sino-foreign joint ventures have been established by acquiring the existing assets of state enterprises. Under this arrangement, the Chinese partner, which is a state enterprise, usually contributes its factory and machinery to the venture. The foreign partner injects capital and new machinery into the venture. The Chinese staff, who were originally employed by the state enterprise, continue to work in the venture though there are normally some layoffs. This acquisition type of joint ventures is in contrast to a greenfield investment whereby the joint venture is based on a new operation built from scratch and new staff are recruited from the labor market. The two types of joint venture differ only in terms of how they are established, and are exactly the same in all the other aspects. Both are subject to the same Chinese joint venture laws.

An acquisition joint venture is different from an ordinary acquisition, which is defined as "purchase of stock in an already existing company in an amount sufficient to confer control," (Kogut & Singh, 1988, p. 412), in several respects. First, a joint venture is a separate legal entity distinct from its parent companies and enjoys, to a varying extent, operational autonomy. This is often not the case for an acquisition, which usually involves a greater degree of integration between the acquirer and the acquired firm in order to achieve operating synergy (Nahavandi & Malekzadeh, 1988). Second, the Chinese partner of a Sino-foreign joint venture can exert substantial influence on how the venture should be run even if the partner is a minority shareholder (Schaan, 1988). The Chinese partner's influence is enhanced by the fact that the venture is located in China. Third, resources and capabilities of the foreign partner are normally perceived as more efficient than those of the Chinese partner. It is because the foreign partner usually possesses more advanced technologies and is more experienced in competing in the international market. For acquisitions effected between domestic companies or between companies of developed countries, such a perceived differential of efficiency does not normally exist.

As discovered by this study, the distinction between greenfield and acquisition joint ventures is important because in the latter case, the foreign partner normally has to implement a strategy of dismantling or restructuring the existing backward system of a state enterprise on the one hand, and installing its own on the other. The former involves organizational unlearning while the latter organizational learning. In other words, compared with greenfield joint ventures, acquisition joint ventures need to go through an additional step of organizational unlearning.

2.2 Organizational learning and unlearning

This study adopts the routine-based approach of Levitt and March, who regard organizational learning as the process of “encoding inferences from history into routines that guide behavior” (1988, p. 320). Based on this definition, organizational unlearning refers to the discarding of old routines to make way for new ones. Following Feldman and Pentland (2003) as well as Feldman and Rafaeli (2002), organizational routines are defined as repetitive patterns of interdependent actions carried out by multiple organizational members involved in performing organizational tasks. They consist of the rules, procedures, strategies, technologies, paradigms, and so on around which organizations are constructed and through which they operate. Feldman and Pentland (2003) emphasize the important role of human agency and distinguish between the ostensive and performative aspects of a routine. The ostensive aspect refers to the schematic form of a routine, or the routine in principle. The performative aspect consists of the specific actions performed by specific individuals in specific places and times. It is the routine in practice.

Both the ostensive and performative aspects are necessary for forming a routine although previous conceptualizations have emphasized the ostensive aspect. Thus, a routine is successfully discarded only when both aspects of the routine are removed from the organization. When an organization decides to discard an existing routine and to replace it by another, this action first involves the ostensive aspect of the two routines. The change inevitably requires corresponding adjustment of work practices by the affected organizational members subsequently. If they continue using the old routine, it becomes clear that the performative aspect of the routine has not been successfully discarded.

Knowledge transfer can be regarded as “a process in which an organization recreates and maintains a complex, causally ambiguous set of routines in a new setting” (Szulanski, 2000, p. 10). The need to unlearn often hinders knowledge transfer because individuals have a tendency toward maintaining the status quo (Heath et al., 1993); that is, they want to carry on existing organizational routines to which they have been accustomed. Newell et al.’s (2003, p. 7) study of transferring best practices in the British National Health System found that one reason for transfer failure was that “making changes to an existing practice takes considerable time and effort.”

An acquisition joint venture is established on an existing state enterprise, which has its own organizational routines in place. These old routines may become a barrier to knowledge transfer. When the foreign partner of an acquisition joint venture tries to install its own routines, local employees may not be willing to give up the corresponding old routines. As discussed in detail below, such inertia complicates the knowledge transfer process.

3 Methods

This study made use of a comparative case study method with intensive interviews conducted at two separate time periods. The research consisted of two stages, namely data collection and data analysis.

3.1 Data collection

The study included eight Sino-foreign joint ventures. Data were collected in two stages. The first stage was carried out in 1995 and 1996. Semi-structured interviews were first conducted in Singapore with managers who were involved in overseeing their companies' overseas investments. These interviews provided useful information about the joint ventures established by the companies in China. The information also helped the selection of joint ventures to be visited. Within the constraint of research access, the eight joint ventures were selected according to the logic of literal and theoretical replication (Yin, 1994), whereby multiple cases are treated as a series of experiments with each case serving to confirm or disconfirm the inferences drawn from previous ones. A total of 37 managers were interviewed in a face-to-face manner. The number of managers contacted in each case varied from three to seven. The informants included expatriate and Mainland Chinese managers holding senior positions such as joint venture general managers and deputy general managers, as well as senior managers based in Singapore who were in charge of overseas operations. In each case, at least one manager from each of the two sides (Chinese and foreign) of a joint venture set-up was interviewed. The second stage of the fieldwork was carried out about two years later. All the eight joint ventures were contacted for updating their developments. A main objective was to investigate how far the routines brought in by the foreign partners were integrated into the daily operation of the ventures. A total of 21 managers were interviewed over the phone, with the number of managers contacted in each case varying from two to three. Thirteen of them were also among the respondents in the first stage.

A key focus of the questions asked in the interviews were about knowledge transfer to the venture carried out by the foreign partner. Managers associated with the foreign partner were asked to describe in detail the nature of the routines that were transferred to the venture, the transfer process, the problems encountered, and the extent of success, while managers associated with the local partners were asked to describe their attitudes toward the routines brought in by the foreign partner, and problems of learning the routines.

3.2 Data analysis

Data analysis was conducted after each stage of the fieldwork. There are no fixed rules of how to condense a staggering volume of data into a concise report. Basically, this study followed four steps. The first step was presenting and organizing the data. All the interview tapes were transcribed and write-ups were completed. For non-taped interviews, write-ups were based on detailed interview notes, which were written within 24 hours after the respective interviews. Interview write-ups as well as other sources of information such as press cuttings, annual reports and company brochures were carefully studied. The focus was on comparing and contrasting the information collected, and exploring the different meanings implicit in the descriptions. The second step was coding, which refers to conceptualizing the data (Strauss, 1987). The data were coded according to their impacts on organizational unlearning and knowledge transfer. The author and a research assistant first worked out a coding scheme together and then coded the data independently. The third step was within-case analysis. All the interview write-ups and the codes related to a case were analyzed at the same time. Idiosyncrasies of the case were taken into consideration. The final step was searching for cross-case patterns. The tactic used was to select dimensions for classifying the cases, and then to identify within-group similarities coupled with inter-group differences (Eisenhardt, 1989).

Table 1
List of case companies

Case company	Main product	Nature of joint venture	Year of establishment	Age of former enterprise (Year)	Number of employees	Number of foreign partners	Shares held by foreign partners (%)
A	Cans	Greenfield	1994	N.A.	70	1	85
B	Poultry	Greenfield	1991	N.A.	1,200	2	65
C*	Cans	Greenfield	1995	N.A.	100	1	65
D*	Cans	Acquisition	1994	12	500	1	57
E	Beverages	Acquisition	1989	4	860	2	70
F	Construction materials	Acquisition	1995	5	1,000	1	51
G	Construction materials	Acquisition	1995	7	1,500	3	66
H	Industrial equipment	Acquisition	1994	37	360	1	60

* This pair of joint ventures had the same foreign partner.

4 Brief profile of the cases

Table 1 presents the major characteristics of the eight cases as at the first stage of the fieldwork. This section briefly describes the cases, and more details are given in the following sections. All the eight cases were located in the coastal provinces of China. With the exception of Cases B and E, the cases had been established for only a couple of years when they were visited during the first stage of the fieldwork. In other words, most of the cases were in the initial phrase of knowledge transfer. There were three greenfield and five acquisition joint ventures. The three greenfield joint ventures served as the base for investigating the issues of organizational unlearning encountered by the foreign partners in the five acquisition joint ventures. The ages of the former state enterprises on which acquisition joint ventures were based varied from 4 to 37 years. The sizes of the cases also varied a great deal from 70 to 1500 employees.

For all the eight cases, the Chinese partners were minority shareholders, and major decisions as to how the ventures should be run rested with the foreign partners. Each venture had one Singapore company as a foreign partner. The other foreign partner of Case B was a Malaysian company while that of Case E was a Thai company. Both companies did not actively participate in the management of the ventures, which were basically run by the Singapore partners. Case G was more complicated. The other two foreign partners were from Indonesia and Japan. The Indonesian and Singapore partners worked together to restructure the original state enterprise, while the Japanese partner was not active in day-to-day management, and mainly transferred production technology to the joint venture. The foreign partners of Cases C and D, which manufactured the same type of products, were the same Singapore company. As such, these two cases provide an excellent contrast between greenfield and acquisition joint ventures.

5 Results

In his study of intra-firm transfer of best practices, Szulanski (1996) identifies four distinct stages in a transfer process: initiation, implementation, ramp-up, and integration. This section presents the case findings in the order of the four stages with a focus on the issues of organizational unlearning that rose in each stage in the five acquisition joint ventures.

5.1 Initiation

This stage consists of events that lead to the decision to transfer a routine. A transfer begins when both a need and the knowledge to meet that need exist. For the three greenfield joint ventures, the foreign partners of Cases A and C were in the same industry where the joint ventures operated. They decided to transfer all the major routines to the ventures at the very beginning. Case B was more complicated. The foreign partners were not in the poultry industry but the Chinese partner was. What the foreign partners brought to the venture were mainly non-production routines, such as finance, marketing and purchasing. At the beginning, the Chinese side was responsible for setting up the production system. Subsequently, the foreign partners hired a poultry consultant from Singapore, who tried to change the system of the Chinese partner. Thus organizational unlearning was involved for the related production routines.

When the foreign partners of the five acquisition joint ventures decided to invest in the ventures, all of them planned to restructure the original state enterprises. Such a restructuring process is a planned organizational change. Dunphy and Stace (1990) classify strategies for such change into four types along two dimensions, namely incrementalism versus transformation, and collaboration versus coercion. The first dimension refers to whether the change is implemented in small, continuous steps, or in a large, discontinuous manner, while the second concerns whether staff of the organization are invited to participate in planning and implementing the change.

For the five acquisition joint ventures, major restructuring processes usually took place during the initial stage of operation. The foreign partners often had a tight schedule as to which routines had to be replaced and when the replacement needed to be completed. Thus, the change tended to be radical and discontinuous. The foreign partner was naturally the director of change. Participation of local staff was seldom invited partly because the tight schedule made extensive participation and consultation difficult. Another reason was that the foreign partner worried that local employees might demand substantial modifications to the routines concerned and as a result, the purpose of restructuring was somewhat defeated. In short, the change strategy adopted by the foreign partner could be classified as transformative and coercive. Dunphy and Stace's (1990) typology names this strategy dictatorial transformation.

Individuals going through a dramatic change are likely to experience considerable uncertainty and stress. Such stress becomes a barrier to change (Armenakis & Bedeian, 1999). A distinct finding related to the acquisition joint ventures was that before the original state enterprise was formally converted into a joint venture, the workers were usually briefed by the Chinese management on the reasons for and benefits of forming the joint venture, problems that might arise, and future changes to be implemented. The briefing helped the workers psychologically prepare for the oncoming changes and reduce their stress. For example, the former enterprise of Case E borrowed heavily from the bank and could not repay the loans. It was under serious financial stress when the foreign investors came to its rescue. The Chinese deputy general manager said that when he and his colleagues briefed the workers about forming the joint venture, they managed to persuade the workers that the changes made by the foreign partners were necessary for the survival of the whole enterprise.

Szulanski (2000, p. 13) states that initiation stickiness "is the difficulty in recognizing opportunities to transfer and in acting upon them." Such stickiness was not a major issue for both the greenfield and acquisition joint ventures in this study because the foreign partners usually recognized the opportunities to transfer their routines and acted upon them. A more important kind of stickiness for the acquisition joint ventures was to convince the recipient that the transfer was necessary.

Case G is a classic example. The original state enterprise started production in 1988 and had been profitable since 1991. Its productivity was the highest among similar plants in China, and it was selected by the Chinese government in 1994 as one of the excellent enterprises. The only objective of converting into Case G was to expand production by building a new production line, which cost more than US$100 million. The enterprise was unable to raise the required capital on its own. The enterprise director assumed the position of general manager in Case G. He had been working in the enterprise on day one and was involved in building the enterprise from scratch. He himself was a national model worker, which was a highly regarded honor in China. During the interview, he showed the author dozens of award certificates won by the enterprise in the past. In brief, he was very proud of his and the enterprise's achievements. Learning foreign management techniques was an idea totally alien to him. Since the former enterprise had been doing well, he argued that the Singapore and Indonesian partners should not intervene in daily management, and that the changes initiated by these partners would only make things worse. He claimed that if a survey was conducted to find out whether the Chinese employees were in favor of the joint venture, 95 per cent of them would say "no." The interviews that the author conducted in the joint venture suggested that his claim had some validity. Many local employees adopted a passive stance on the changes introduced by the foreign partners – since now the foreign partners are the boss, the locals have to follow their instructions. Although in several management meetings, the foreign partners tried to justify the need for transferring their routines to the venture, the local employees were not convinced.

5.2 Implementation

Implementation begins with the decision to carry out a transfer. Resources flow between the source and the recipient during this stage. A key finding of this study was that foreign partners of the acquisition joint ventures generally encountered greater resistance than their counterparts of the greenfield joint ventures. The following comment made by an expatriate manager of Case D probably describes a typical situation faced by foreign partners of the acquisition type of Sino-foreign joint venture:

> People are very resistant to change. . . . If we say, “The production flow will be this: we’ll put this coating on before that coating,” they (the Chinese staff) don’t like that because change in the system of the factory changes the routine of the factory. The change makes their life more complicated.

Local employees of the five acquisition joint ventures often used their old routines as benchmarks for judging the new ones introduced into the ventures by the foreign partners. In other words, before they were willing to carry out a new routine, they first compare its ostensive aspect with that of the old one. For example, Case D raised the hygiene standard at the production line because their products would be used to hold food or drink. The local workers complained that their old practice had been used for many years without causing any problems. Their logic was that the practice should be all right, otherwise it would not have lasted for so long.

As indicated by this study, the foreign partner often needs to argue that the routine in principle is superior to the one that it is supposed to replace. The objective is to establish the legitimacy of the new routine in the joint venture. The legitimacy of the ostensive aspect of a routine as perceived by local employees depends on two main factors: (1) social embeddedness of the routine, and (2) perceived expertise of the foreign partner.

For routines that are socially embedded, it is often difficult, if not impossible, for the foreign partner to demonstrate that they are unquestionably more effective and efficient than their alternatives. The old human resource management (HRM) system in Chinese state enterprises is a good example. The system was very much a socially constructed product firmly embedded in the former socialist production model (Von Glinow & Teagarden, 1988; Warner, 1993). Tsang (1994) classifies the causes of HRM problems in Sino-foreign joint ventures into ones that are of Chinese cultural origin and those that originate from the existing institutional environment. Both sets of causes have firm roots in the present Chinese society. To complicate matters further, the Chinese partner of a joint venture often insists that personnel issues are "internal" matters and are off limits to foreign scrutiny (Hendryx, 1986). For all the eight cases, the person directly in charge of HRM was a local Chinese manager. One expatriate manager of Case G mentioned that when he implemented a certain recruitment procedure, the local HRM staff resisted, saying that they had been using the old procedure for many years and there had been no complaints. The expatriate manager had to explain in detail the benefits of the new procedure over the old one.

On the other hand, production routines are more technology-based and less socially embedded. Moreover it is relatively straightforward to demonstrate the superiority of a new production routine. For instance, in the first month after Case F was formed, production volume reached a record level once certain production routines had been revised. This clearly established the legitimacy of the changes made by the foreign partner. Another example is the transfer of accounting practices. Few problems were encountered for all eight cases. There were several reasons. First, accounting standards and practices are well codified and somewhat independent of the social context. As such, they should be readily transferable. Second, it is evident that China needs to replace her socialist accounting system by international accounting practices. The legitimacy of the latter is thus in place, and the need to discard the former is obvious. Finally, Chinese employees are motivated to learn international accounting practices. For instance, in Case C, a local accountant who had more than 20 years of professional experience was eager to learn under the supervision of two Singaporeans who were much younger. She recognized that what she learned was of great value in the labor market.

The other factor affecting legitimacy is the perceived expertise of the foreign partner. Local employees judge the expertise largely based on two related aspects, namely reputation of the foreign partner in the industry and quality of the most senior person assigned by the foreign partner to the venture. The cases in this study provide a good contrast with respect to the reputation of the foreign partner in the industry. The Singapore partner of Case E possessed a very popular brand in the Asia Pacific market. The Chinese deputy general manager said, “As you know, the Singapore side is a famous company in this industry and we are very confident in the technologies and changes brought in by them. They will lead us to regain our lost market share in the Chinese market.” Similarly, the Singapore partner of Cases C and D was a major player in the industry. Even though the Chinese partners had reservation about some of changes implemented in the ventures, they never questioned the technical superiority of the Singapore partner.

On the other hand, the Singapore partners of Cases B and G were not in the same business as the ventures. Partly because of this lack of expertise, the changes initiated by them were not well received by their Chinese counterparts. The Chinese deputy general manager of Case B commented, “They (i.e., the Singapore partner) have never been in this ball game before. How can they be the coach?” Although the Singapore partner of Case H was a rather experienced player in the industry, it was only a medium sized company and was not well known. In contrast, the Chinese partner was a pioneer in that industrial sector of China. “Many people here are not yet convinced by the necessity to change, as proposed by the Singapore partner. … They (i.e., the Singapore partner) do not seem to be technically superior to us. Let’s wait and see how good they are. Time will tell,” commented the Chinese deputy general manager.

Bennis and Nanus (1985) argue for the key role played by the leader in creating a conducive environment for organizational learning. Thus the quality of the most senior person assigned by the foreign partner to the venture also affects the perceived expertise of the partner. This person represents the foreign partner in designing and implementing the whole program of technology transfer, and should be able to gain not only the trust but also the respect from local staff (Armenakis et al., 1993). Possessing relevant work experience and technical knowledge is essential. When local employees are asked to change their job routines, they will wonder whether the new method is better than their old one. If the instruction comes from someone whom they regard as an expert in that area, it will be much more convincing and more likely be accepted. This is particularly the case in China because Chinese treasure experience.

The cases again offer a good contrast. The first general manager of Case H was appointed by the Singapore partner and was newly recruited for this position. He had worked in several textile factories in China but did not have any experience in Case H's industry. He frankly told the joint venture staff on the first day of his arrival that he had experience in the textile industry only. Then he had a hard time in the venture; the local staff simply did not believe that he could revive the enterprise. Case G was in a somewhat similar situation. The Japanese partner was in the same industry as the joint venture whereas the Singapore and Indonesian partners were not. Unfortunately the Japanese did not involve themselves in managing the venture other than transferring production technology. The most senior expatriate manager was the executive director from the Indonesian partner. He was a marketing expert but had no experience in Case G's industry. He initiated some changes in the marketing department, such as pricing and promotion procedures. The Chinese managers scorned the changes, saying that he was not familiar with the industry. "It's like laymen leading experts," said one Chinese manager. In contrast, Case F is a good illustration of the importance of having the right leader. The Singapore partner, which was in the same industry as Case F, assigned two managers to China: the general manager and a deputy general manager in charge of finance, personnel and administration. The general manager had worked in the Singapore partner for over 20 years and had been the general manager there in charge of operation. The other two Chinese deputy general managers showed their great respect to the general manager's experience and expertise. Owing to his wealth of experience, the general manager could tackle the problems arising from knowledge transfer very effectively.

Szulanski (2000) discusses several factors affecting implementation stickiness, such as the communications and technical gaps between the source and the recipient. While these factors may be valid for many cases, he misses the point that establishing the legitimacy of a new routine often constitutes significant implementation stickiness in unlearning cases where justification is required for replacing an old routine by a new one. The failure to establish such legitimacy may result in the reluctance of the recipient to accept the ostensive aspect of the new routine, not to mention the recipient's unwillingness to implement the routine.

5.3 Ramp-up

The ramp-up stage begins when the recipient starts using the transferred knowledge. This stage is characterized by the unexpected problems that the source and the recipient need to tackle. An important unexpected problem identified among the five acquisition joint ventures was that local employees sometimes continued using the old routine although its ostensive aspect had been replaced by that of the new one. In other words, the performative aspect of the old routine has not been successfully discarded.

A key factor affecting the occurrence of this problem is the deployment of experts by the foreign partner. Expatriates often play the role of change agents – explaining the nature of the new routines and their superiority over the old ones, teaching local staff to operate the routines, and making necessary adjustments to suit the local situation. In order that a new routine be properly used by local employees, the foreign partner needs to deploy sufficient manpower in the venture. For example, relative to the size of operation, the Singapore partner of Case E appeared to have the greatest deployment of experts among all the eight cases. Although the general manager said that a gradual localization program had started, there were seven expatriate managers in charge of major functional areas. The Singapore partner stressed that a large number of expatriate managers were required, particularly at the initial stage of restructuring, for discarding the old routines quickly, ensuring that the new routines were properly run, and immediately dealing with any problems that might arise.

On the other hand, the Singapore partner of Case H used to assign two expatriate managers to the venture, one of whom was the general manager. But later both returned to Singapore. At the time of the author's visit, the Singapore partner did not have any full-time expatriate managers in Case H. The position of general manager was left vacant. The executive director of Case H was also the general manager of the Singapore partner. He spent about two weeks a month in the joint venture and managed the restructuring process there. A problem of having part-time expatriate managers was the difficulty of following through the ramp-up stage. The Chinese deputy general manager, who was supposed to be in charge of the joint venture during his absence, commented on the situation:

> The executive director once asked me to implement a new procedure in the factory. Then he went back to Singapore. Some problems were encountered when the procedure was implemented. The supervisors and workers who were affected by the procedure pressed me for solutions. Frankly speaking, I didn't have any idea. I called Singapore but he was having a business trip and other people there could not help much. . . . Finally, the workers reverted to the old method. Anyway, they didn't like the change.

It is natural that local employees of an acquisition joint venture revert to the old routine when they fail to obtain sufficient support from the foreign partner during the ramp-up stage. The old routine is something that they are most familiar with and have used for a considerable period of time. There were no reported incidences of this problem for the three greenfield joint ventures because, except for the production system of Case B, the corresponding old routines simply did not exist.

Similar to the implementation stage, another factor is the social embeddedness of the routine concerned. When the old routine is heavily embedded, it takes time for local employees to fully abandon its use. As mentioned above, HRM practices are among the most socially embedded organizational routines in China. Consider the issue of bonus allocation. Under the former socialist system, the range of pay in virtually all Chinese enterprises was narrow. Income polarization was discouraged, and spiritual incentives were preferred to material rewards. Outstanding performers were awarded titles such as "model worker" and given public acclaim. Egalitarianism in pay was also consistent with the Chinese culture of cultivating harmonious interpersonal relationships in the workplace and playing down interpersonal competition within the organization (Osigweh & Huo, 1993). An expatriate manager of Case D recounted the difficulty of eliminating egalitarianism:

> We persuaded the supervisors on the shop floor that in a market economy, we have to differentiate between good and poor workers, and reward them according to their performance. The supervisors seemed to accept our argument and agreed to adopt our proposed appraisal system in evaluating the performance of their workers. . . . However, we found from the recent half-yearly performance appraisal ratings that no workers were rated having poor or very poor performance. As a result, bonuses were allocated more or less equally among workers. It was apparent that nothing had really changed. We immediately called a meeting with the supervisors. Most of them responded that they accepted the new appraisal system in principle but had difficulties of putting it into practice. They worried that labeling anyone as a poor worker would hurt the harmony of their work group. One even admitted that two of her workers didn't do well but both were her neighbors, and that Chinese generally tried to develop good relationships with their neighbors.

Finally, since routines often require interpersonal cooperation and communication within the organization, human relation complications can be a barrier to the adoption of new routines. This factor is particularly crucial if the original state enterprise of the acquisition joint venture is old. Until recently, state enterprises in China rarely went bankrupt. Once a state enterprise was established, it used to exist forever regardless of its performance. Hence, except Case H, the former enterprises of the other four acquisition joint ventures were relatively young by the Chinese standard when the foreign partners came in. When the former enterprise was converted into Case H, it was 37 years old, even older than the Singapore partner. "This is an old factory with old machines and old guards," the executive director exclaimed. State enterprises used to provide life employment and "cradle-to-grave" welfare coverage for their employees. A state enterprise is, in a sense, more like a social community than a production unit (Shenkar, 1996). The implication is that the older the state enterprise, the more complicated the human relations among its employees will be. This was exactly the situation in Case H. There were several cliques deeply entrenched in the organization. "Implementing a change which upsets the status quo of these cliques is like moving mountains," said the Chinese deputy general manager. This comment was verified by a failed attempt to install a new organizational structure, which would improve internal coordination and communication. There was little change in how local employees coordinated and communicated after the new structure became official. "You can't put long-time enemies in the same team and hope that they will work together," said the deputy general manager, though she appreciated the new structure introduced by the Singapore partner. In short, if a new routine upsets the status quo of complicated human relations, it is likely that people revert to the corresponding old routine that was generated by and comfortably embedded in such relations.

In discussing ramp-up stickiness, Szulanski (2000, p. 15) comments that "when a new practice coexists over time with the practice it was meant to replace, duplication of effort and resource contention is likely." Although he touches upon the issue of unlearning, he fails to elaborate how it affects ramp-up stickiness. Again, this study throws light on this neglected area.

5.4 Integration

The integration stage is concerned with the gradual institutionalization of new routines after the recipient has achieved satisfactory results. A key finding of this study was that the integration stage was often longer in the acquisition than greenfield joint ventures. Cases C and D provide an excellent contrast. They were in the same line of business, had the same Singapore parent company, and were established at almost the same time. The only major difference was that the former was a greenfield investment whereas the latter was an acquisition. Thus Case D offered an opportunity for investigating organizational unlearning with Case C serving as a control group. At the time of the author's visits during the first stage of the fieldwork, the expatriate managers of Case D were still tackling the problems related to organizational unlearning in the implementation and ramp-up stages whereas Case C had already successfully passed through the implementation stage and the ramp-up stage was progressing satisfactorily. This gap of progress remained in the second stage of the fieldwork. Few of the new routines were institutionalized in Case D while most of them were in Case C. In response to this difference in performance, an expatriate manager of Case D said, "The guys over there (i.e., in Case C) were lucky. They don't have to deal with the problems of killing the old system."

As in the ramp-up stage, a difficulty encountered by the five acquisition joint ventures was that local employees occasionally reverted to the old routines even though the new ones had been used for a considerable period of time. For instance, Case G introduced a new purchasing procedure that required more rigorous assessment of the quality of suppliers. After the procedure had been in place for about two years, staff in the purchasing department continued using the old procedure from time to time. Some respondents commented that they could still see the shadows of the old routines that had been discarded. "The old system haunts this place," said the deputy general manager of Case F. The situation was more serious for Case H, of which the former state enterprise was old. Routines of an organization are stored not only in the non-human component of its organizational memory such as manuals, policies, files, information systems, and so on, but also in the collective memory of its members. Usually, it is the human component of organizational memory that forms the greatest obstacle to change (Nystrom & Starbuck, 1984). Hence the older the former state enterprise, the more fossilized the collective memory becomes. Routines of an old enterprise may become part of the members' work habits, and habits are difficult to get rid of.

More often than not, a routine is not a stand-alone item. Routines within the organization are interrelated in the sense that the performance of one may involve that of another. Since it is virtually impossible to change all the routines at the same time, the foreign partner of an acquisition joint venture usually brings in its new routines in a sequential manner. Another factor affecting the institutionalization of new routines is that they may not be compatible with other existing old routines. The foreign partners of Case G, for instance, asked the marketing department to regularly collect detailed information about their potential customers through daily marketing and sales activities. Although the practice was considered a good idea, it could not take root in the department partly because the existing system of storing information was backward. Since information could not be retrieved efficiently, the sales people were not motivated to collect it.

In spite of the abovementioned difficulties, time is on the side of the foreign partner. When routines are not used regularly, they tend to decay (Martin de Holan et al., 2004). The influence of a discarded routine therefore diminishes over time and may be ultimately forgotten. For example, when Case E was first visited in 1995, it had been established for about six years and had gone through the integration stage. The Singapore general manager was satisfied with the outcome of the restructuring and said that his major task was maintenance. In fact, the Chinese deputy general manager could not recall in detail how certain things were done in the past; that is, his memory of the old routines faded with time.

Time also facilitates unlearning through personnel turnover. Martin de Holan et al. (2004, p. 47) argue that when "(k)ey personnel leave the organization, routines are forgotten." The First Emperor, in fact, not only burnt the books, as described at the beginning of the paper, but also killed many scholars who read and taught these books. The objective of the latter action was to eliminate the related human memory, an important component of organizational memory (Walsh & Ungson, 1991). As mentioned earlier, the foreign partners of Case B were not in the poultry industry. The Chinese deputy general manager was a poultry expert and was responsible for setting up the production system. Later, the foreign partners hired a poultry consultant from Singapore, who tried to change the system. The Chinese deputy general manager opposed the changes, commenting that the industry was location-specific and things that worked in Singapore might not work in China. He became an obstacle to carrying out the new production routines. He was subsequently transferred out of Case B by the Chinese partner. His departure signified the ending of the old production system. In the second stage of the fieldwork, it was found that the new production routines gradually took root in the venture.

For integration stickiness, Szulanski (2000, p. 16) argues that "when difficulties are encountered, the new practices may be abandoned and, when feasible, reversal to the former status quo may occur." This study enhances our understanding of this issue by showing that the chance of reversal to the former status quo will be higher when unlearning is involved and that time is a key factor facilitating the discarding of old routines.

6 Conclusions

It is well known that the organizational context in which knowledge transfer takes place is important (Kostova, 1999). This study indicates that the distinction between greenfield and acquisition joint ventures is essential when investigating knowledge transfer to international joint ventures, especially those located in transition economies. Unfortunately, this distinction has been neglected by virtually all of the previous empirical studies of this subject (e.g., Child & Markóczy, 1993; Lyles & Salk, 1996).

The massive scale of restructuring that often takes place in an acquisition joint venture offers an excellent opportunity for studying organizational unlearning, which has been rarely investigated empirically. On a theoretical level, Huber (1991) argues that organizational unlearning is conceptually subsumable under learning. The present study empirically refutes this argument by clearly showing that organizational learning and unlearning are distinct processes. Learning takes place in greenfield joint ventures without the need for unlearning, and issues related to unlearning become obstacles to learning in acquisition joint ventures.

This study represents a step toward an empirical “unpacking” of the phenomenon of stickiness in knowledge transfer first introduced by Szulanski (1996). For each of the four stages in a knowledge transfer process, the study identifies issues associated with organizational unlearning that affect stickiness. These issues, which enhance our understanding of the stickiness of knowledge transfer, have never been discussed by Szulanski or any other studies. It should be noted that the need for unlearning is not unique to acquisition joint ventures and arises whenever a new routine replaces an existing one. For example, in the collaboration between Rover and Honda, Honda suggested that wire connections in the engine be clamped. Rover had a long tradition of not clamping. The Rover people therefore asked why they needed this extra step. That is, they challenged the legitimacy of the new routine. Both parties could not come to a compromise (Saka, 2004). In short, organizational unlearning is an important source of stickiness and needs further research.

This study offers some managerial implications with strategic importance. It helps managers understand the nature of resistance that may arise when transferring knowledge to acquisition joint ventures. The effort required to tackle such resistance should not be underestimated. Expatriate managers of Cases D to H generally expressed that the effort was much greater than they had initially expected. Although the Singapore general manager of Case F was very successful in restructuring the former enterprise, he preferred to run a greenfield joint venture instead of inheriting an old operation. In a greenfield set-up, it would be easier for him to implement his ideas and to run the operation in his own way. If a multinational corporation wants to transfer, in a speedy manner, routines which are radically different from those practiced in the host country, a greenfield investment seems to be a much better strategic option than an acquisition. In an empirical study of human resource practices adopted by Sino-foreign joint ventures, Goodall and Warner (1997, p. 577) observe that “the most radical departures from traditional reward practices are found in a small, new, high-technology enterprise with a majority of younger workers and operating on a *greenfield site*” (emphasis added).

This paper is not without limitations. First, the empirical study is based on data from Sino-foreign joint ventures only. Characteristics idiosyncratic to the Chinese institutional and cultural environment might have affected the results. Generalization of the research findings to joint ventures in other countries should be made with caution. Second all the informants were managerial grade staff and opinions from the rank and file were not taken into account. Although managers, especially top management, are the key people who make decisions concerning knowledge transfer, success of the transfer depends on support received from below. Moreover, people at the upper and the lower levels of a hierarchy usually have rather different worldviews and perceptions, and thus the case studies were biased in this sense. Lastly, the paper does not include other factors that affect knowledge transfer, such as control system, interpartner trust, absorptive capacity, local staff training, expatriate HRM practices, and so on. Although data on some of these factors were collected in the fieldwork, they were not reported here because of space constraint.

References

Argote, L., & Ingram, P. (2000). Knowledge transfer: A basis for competitive advantage in firms. *Organizational Behavior and Human Decision Processes,* 82(1), 150-169.

Armenakis, A. A., & Bedeian, A. G. (1999). Organizational change: A review of theory and research in the 1990s. *Journal of Management,* 25(3), 293-315.

Armenakis, A. A., Harris, S. G., & Mossholder, K. W. (1993). Creating readiness for organizational change. *Human Relations,* 46(6), 681-703.

Bennis, W., & Burt, N. (1985). *Leaders: The Strategies for Taking Charge*. New York: Harper & Row.

Bowker, G. C. (1997). Lest we remember: Organizational forgetting and the production of knowledge. *Accounting, Management and Information Technologies,* 7(3), 113-138.

Child, J., & Markóczy, L. (1993). Host-country managerial behaviour and learning in Chinese and Hungarian joint ventures. *Journal of Management Studies,* 30(4), 611-631.

Dunphy, D. C., & Stace, D. A. (1990). Transformational and coercive strategies for planned organizational change: Beyond the OD model. In F. Massarik (Ed.), *Advances in Organization Development,* vol. 1 (pp. 85-104). Norwood, NJ: Ablex.

Eisenhardt, K. M. (1989). Building theories from case study research. *Academy of Management Review,* 14(4), 532-550.

Feldman, M. S., & Pentland, B. T. (2003). Reconceptualizing organizational routines as a source of flexibility and change. *Administrative Science Quarterly,* 48, 94-118.

Feldman, M. S., & Rafaeli, A. (2002). Organizational routines as sources of connections and understandings. *Journal of Management Studies,* 39(3), 309-331.

Goodall, K., & Warner, M. (1997). Human resources in Sino-foreign joint ventures: Selected case studies in Shanghai, compared with Beijing. *International Journal of Human Resource Management,* 8(5), 569-594.

Heath, C., Knez, M., & Camerer, C. (1993). The strategic management of the entitlement process in the employment relationship. *Strategic Management Journal,* 14(Winter Special Issue), 75-93.

Hendryx, S. R. (1986). Implementation of a technology transfer joint venture in the People’s Republic of China: A management perspective. *Columbia Journal of World Business,* 21(1), 57-66.

Huber, G. P. (1991). Organizational learning: The contributing processes and the literatures. *Organization Science,* 2(1), 88-115.

Kogut, B., & Singh, H. (1988). The effect of national culture on the choice of entry mode. *Journal of International Business Studies,* 19(3), 411-432.

Kostova, T. (1999). Transnational transfer of strategic organizational practices: A contextual perspective. *Academy of Management Review,* 24(2), 308-324.

Levitt, B., & March, J. G. (1988). Organizational learning. *Annual Review of Sociology,* 14, 319-340.

Lyles, M. A., & Salk, J. E. (1996). Knowledge acquisition from foreign parents in international joint ventures: An empirical examination in the Hungarian context. *Journal of International Business Studies,* 27(5), 877-903.

Martin de Holan, P., Phillips, N., & Lawrence, T. B. (2004). Managing organizational forgetting. *MIT Sloan Management Review,* 45(2), 45-51.

Nahavandi, A., & Malekzadeh, A. R. (1988). Acculturation in mergers and acquisitions. *Academy of Management Review,* 13(1), 79-90.

Newell, S., Edelman, L., Scarbrough, H., Swan, J., & Bresnen, M. (2003). “Best practice” development and transfer in the NHS: The importance of process as well as product knowledge. *Health Services Management Research,* 16(1), 1-12.

Nystrom, P. C., & Starbuck, W. H. (1984). To avoid organizational crises, unlearn. *Organizational Dynamics,* Spring: 53-65.

Osigweh, C. A. B., & Huo, Y. P. (1993). Conceptions of employee responsibilites and rights in the United States and the People’s Republic of China. *International Journal of Human Resource Management,* 4(1), 85-112.

Saka, A. (2004). The cross-national diffusion of work systems: Translation of Japanese operations in the UK. *Organization Studies,* 25(2), 209-228.

Schaan, J.-L. (1988). How to control a joint venture even as a minority partner. *Journal of General Management,* 14(1), 4-16.

Shenkar, O. (1996). The firm as a total institution: Reflections on the Chinese state enterprise. *Organization Studies,* 17(6), 885-907.

Strauss, A. L. (1987). *Qualitative Analysis for Social Scientists.* Cambridge: Cambridge University Press.

Szulanski, G. (1996). Exploring internal stickiness: Impediments to the transfer of best practice within the firm. *Strategic Management Journal,* 17(Winter Special Issue), 27-43.

Szulanski, G. (2000). The process of knowledge transfer: A diachronic analysis of stickiness. *Organizational Behavior and Human Decision Processes,* 82(1), 9-27.

Tsang, E. W. K. (1994). Human resource management problems in Sino-foreign joint ventures. *International Journal of Manpower,* 15(9/10), 4-21.

Von Glinow, M. A., & Teagarden, M. B. (1988). The transfer of human resource management technology in Sino-U.S. cooperative ventures: Problems and solutions. *Human Resource Management,* 27(2), 201-229.

Walsh, J. P., & Ungson, G. R. (1991). Organizational memory. *Academy of Management Review,* 16(1), 57-91.

Warner, M. (1993). Human resource management “with Chinese characteristics”. *International Journal of Human Resource Management,* 4(1), 45-65.

Yin, R. K. (1994). *Case Study Research: Design and Methods* (2nd Ed.). Beverly Hills, CA: Sage.