Knowledge Integration Effect in the Process of Mergers and Acquisitions Based on Entropy Weight Method

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Abstract
Merger and acquisition is one of the important means to enhance enterprises’ competitive advantages and achieve economies of scale, and knowledge integration effect is the key to the success of enterprises’ mergers and acquisitions (M&A). Based on the competitive advantage theory and economies of scale theory, this paper analyses the effect factors of knowledge integration in enterprise’ M&A, the research indicates that the knowledge integration during M&A can be effected by learning motivation, learning capacity, the time period of M&A and the relationship between both enterprises. Then the empirical study of one domestic automobile parts production company’s M&A case is made with entropy weight-fuzzy comprehensive evaluation model, and finally this paper puts forward the countermeasures and suggestions to improve the knowledge integration effect during M&A.

Key words: Mergers and Acquisitions, Knowledge Integration, Entropy Weight, Fuzzy Comprehensive Evaluation

1. INTRODUCTION
Under the background of economic globalization and economic transition in China, M&A can effectively achieve optimal allocation of resources, help enterprises break through the interior resources limitation and promote their accelerating growth, therefore M&A becomes more and more important in Chinese economic activities. How to integrate and use knowledge to enhance their knowledge creativity, in order to achieve the global knowledge competitive advantage, becomes a major practical problem for China’s enterprises in the international development. Many famous transnational corporations domestic and abroad realize industrial integration by M&A in order to achieve the goal of synergy effect and enhancing their core competitiveness. In the case of mergers and acquisitions, it is found that transnational mergers and acquisitions enterprises have great influence on M&A performance because of the different countries systems (Sun and Peng, 2012). Based on the cultural environment, research shows that the smaller the cultural difference between the two sides, the smoother the M&A integration (Buckley, Forsans and Munjal). It should be noted that M&A can’t create value by itself. The value can be created by orderly knowledge integration after M&A. From the literal meaning, integration refers to the process of taking measures to restructure things, which not only includes organic combination of many discrete factors and parts and gradual improvement of imperfect parts, but also includes readjustment of original and related factors’ inherent relationship to realize harmonious and high-efficient development to achieve the collaborative effect of 1+1>2 eventually. The ability of knowledge integration refers to the research of Gardner et al - five items for measurement (Gardner, 2012). Through the analysis, it can be concluded that knowledge integration after enterprises’ M&A work is the key factor in determining success or failure of M&A. Therefore, research on knowledge integration in enterprises’ M&A is of great theoretical significance and practical significance both to improve enterprises’ M&A efficiency and to enhance the holistic competitive advantages.

2. THE INFLUENCING FACTORS ANALYSIS OF KNOWLEDGE INTEGRATION IN ENTERPRISE’S M&A PROCESS
Through a large number of statistical analysis, the world-famous consulting company--McKinsey finds that only about one-third M&A in the whole world enterprise’ M&A cases could be considered successful. Many transnational M&A enterprises have failed to capture key knowledge and improve technical performance (Wang, Wei and Lu, 2014). The paper makes in-depth exploration of those failed M&A case and easily gets the conclusion that the reason for a great number of failed M&A is directly from the knowledge integration failure during M&A. Knowledge integration effect, to a large extent, determines the success or failure of M&A. Based on the enterprise’s M&A basic theory, combining with many real enterprise’s M&A cases, it can be found that the knowledge integration during M&A can be effected by learning motivation, learning capacity, the time period of M&A and the relationship between both enterprises. After research, some scholars find that retention of core staff by the acquiring company, integration degree and M&A roles also have an impact on knowledge integration in enterprise’ M&A.

Knowledge integration, to a large extent, depends on the learning motivation. If lacking stimulation of learning
motivation, the enterprise will be no longer keen on learning and naturally its knowledge integration speed will slow down. Knowledge integration effect will become inevitably worse. In general, if the enterprise has stronger learning motivation and its knowledge is at an early stage in the M&A process, its learning ability will have stronger impact on knowledge integration. Similarly, if the enterprise is at a later stage of M&A and its knowledge stocks of both sides are nearly similar, its learning ability will naturally weaken.

After enterprise’s M&A, diachronic will also influence knowledge integration. After M&A, the two sides will make a knowledge transfer with time, and knowledge transfer will gradually evolve into a routine. So, for the long time M&A enterprise, learning motivation will be obviously weakened. For the short time M&A enterprise, knowledge transfer between the two sides have not yet started, and strong learning motivation will help them achieve knowledge integration (Wang, 2006).

It’s necessary to integrate and balance different perspectives of different stakeholders (Dangelico, Pontrandolfo and Pujari, 2013). If the two sides of M&A always maintain a good relationship with mutual trust, it will effectively promote knowledge integration. The good and harmonious relationship can help M&A enterprises explore staff’s different skills and knowledge. In-depth communication and cooperation of enterprises employees between the two sides can be adopted to achieve the goal of accurately obtaining technical and management knowledge.

3. EVALUATION OF KNOWLEDGE INTEGRATION EFFECT IN ENTERPRISE’S M&A PROCESS

3.1. Evaluation Index System of Knowledge Integration Effect in the Enterprise’s M&A

3.1.1. knowledge type in enterprise M&A process

The variety of resources including funds, raw materials, production equipment, staff, knowledge and so on that enterprise has have a significant impact on enterprise’s performance. The knowledge resources are vital to the enterprises’ survival and development, which makes the M&A enterprises attach great importance to knowledge integration effect. There are many knowledge types that needed to be integrated in the M&A process; they can roughly be divided into market knowledge, management knowledge and technical knowledge. The obtainment of customer resources and its management knowledge, and the design of marketing networks and its management knowledge belong to the market knowledge. The management system and the operation of business process established and implemented by enterprises can be categorized as management knowledge. The knowledge serving for production, research and development and design are obviously technical knowledge.

3.1.2. Evaluation index system of knowledge integration effect in the enterprise’s M&A process

The evaluation index system of knowledge integration effect in the enterprise’s M&A process is shown in the following table 1.

<table>
<thead>
<tr>
<th>Target</th>
<th>First level index</th>
<th>Second level index</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evaluation Index System of Knowledge Integration Effect</td>
<td>Market knowledge integration</td>
<td>Adaptation degree of raw material supply chain</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Stability of the sales channels</td>
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<tr>
<td></td>
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<td>Customer loyalty</td>
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<td></td>
<td>Maintenance of customer database and customer relationship</td>
</tr>
<tr>
<td></td>
<td>Management knowledge integration</td>
<td>Management capability and efficiency of operating division</td>
</tr>
<tr>
<td></td>
<td></td>
<td>The scientificalness of formulated development plan</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Management level of human resources</td>
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<tr>
<td></td>
<td></td>
<td>All staff’s recognition of enterprise culture</td>
</tr>
<tr>
<td></td>
<td>Knowledge integration of technology</td>
<td>Performance of enterprise R&amp;D</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Achievements growth rate of R&amp;D</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Application coverage rate of knowledge management system</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Measures to enhance acceptance rate of products</td>
</tr>
</tbody>
</table>

If the two sides of M&A always maintain a good relationship with mutual trust, it will effectively promote knowledge integration. The good and harmonious relationship can help M&A enterprise explore staff’s different skills and knowledge. In-depth communication and cooperation of enterprise employees between the two sides can be adopted to achieve the goal of accurately obtaining technical and management knowledge.
3.2. Evaluation Method

Through the comprehensive analysis of the advantages and disadvantages of qualitative and quantitative evaluation method, entropy weight fuzzy comprehensive evaluation method is appropriate for the evaluation of the knowledge integration effect in the enterprise’s M&A process. The concrete procedure is to apply entropy weight method to determine each index’s weight in the evaluation index system of knowledge integration. Then, on this basis, fuzzy comprehensive evaluation method is used to make comprehensive evaluation of the knowledge integration effect in the enterprise’s M&A process.

3.2.1. Entropy weight method

The original “entropy” is one thermodynamically concept and is introduced to the informatics theory by the famous scholar C.E. Shannon. The basic idea of entropy weight method determining the index weight is to use the information provided by the entropy value of indexes to determine the index weight. Because this method can effectively avoid the interference of human factors in the evaluation index weight, to a certain extent, it ensures that the evaluation results in accordance with the actual situation. Thus, it is considered to be an objective weighting method. Based on this, the paper selects entropy weight method to determine the index weight and to measure the information amount of knowledge integration effect index in the enterprise’s M&A process effectively, which ensures that the established evaluation index system of knowledge integration can reflect the real situation of knowledge integration (Zhang, Zhang and Chi, 2010).

Step 1 Calculate each index’s entropy value

If the $e_j$ is the entropy value of the $j$ index; the entropy value $e_j$ can be calculated through the following two formulas:

$$ f_j = \frac{x_j}{\sum_{i=1}^{n} x_j} $$

$$ e_j = \frac{1}{\ln n} \sum_{j=1}^{m} f_j \ln f_j $$

In the formulas, $f_j$ is the characteristic ratio of the $i$ M&A enterprise under the $j$ index; $x_j$ is the $J$ index value of the $i$ M&A enterprise ($i=1, 2, \ldots, n; j=1, 2, \ldots, m$); $\sum_{i=1}^{n} x_j$ is the index value sum of all enterprises under the $j$ index.

Step 2 Calculate each index’s entropy weight

If the $w_j$ is the entropy weight of the $j$ evaluation index; the index can be calculated through the following formula:

$$ w_j = \frac{1-e_j}{n-\sum_{i=1}^{n} e_j} \quad (j=1, 2, \ldots, m) $$

In the formula, $e_j$ is the entropy value of the $j$ index.

The characteristic of each index weight in entropy weight method is that, for the evaluation sample, if each sample’s index value difference is large, the weight of the index is correspondingly large.

3.2.2. Fuzzy comprehensive method

In 1965, American distinguished Professor L. A. Zandeh created the fuzzy comprehensive evaluation method through research. In fact, there are a lot of fuzzy phenomena in the real life and in the field of scientific research, thus the fuzzy comprehensive evaluation method that can solve fuzzy problems are applied quickly and widely. The applying principle of fuzzy comprehensive evaluation is that it can transform the affiliation relation of index at all levels to a relatively reasonable quantitative relation by the authoritative investigation (Wu and Cheng, 2003).

In general, the fuzzy comprehensive evaluation method can be reasonably applied on the basis of entropy weight method. Entropy weight method mainly focuses on determining the index weight in the evaluation index system. Fuzzy comprehensive evaluation is an effective multi-factors decision method to evaluate things influenced by various factors and its representation is fuzzy set. Its application process is usually first to determine the comment set, secondly to confirm single factor evaluation matrix, then to deduce fuzzy comprehensive evaluation matrix, finally to calculate the evaluation score. Under the circumstance of evaluation factors set determined, evaluation objective can be successfully implemented by fuzzy comprehensive evaluation. The concrete steps are as follows:
Step 1 Confirm comment set

Comment grade and corresponding score can be confirmed according to certain standard, for example, comment set \( P = \{ P_1, P_2, \ldots, P_n \} \), evaluation grade can be set as \{ successful, relatively successful, completely failed \}. The setting of comment set and grade is carried on according to the detailed conditions of the research problem, there is no unified standard, but it’s not suitable to subdivide in great detail or roughly. In addition, the grade score matrix of the grade can also be presumed as \( F = (F_1, F_2, \ldots, F_n) \), similarly, this score needs to be roughly rational distributed and certain interval should be reserved between every grade. The table 2 below can be imitated to set evaluation grade.

<table>
<thead>
<tr>
<th>( P )</th>
<th>Evaluation Grade</th>
<th>( F )</th>
</tr>
</thead>
<tbody>
<tr>
<td>( P_1 )</td>
<td>Successful</td>
<td>( F_1 )</td>
</tr>
<tr>
<td>( P_2 )</td>
<td>Relatively successful</td>
<td>( F_2 )</td>
</tr>
<tr>
<td>( \ldots )</td>
<td>( \ldots )</td>
<td>( \ldots )</td>
</tr>
<tr>
<td>( P_n )</td>
<td>Completely failed</td>
<td>( F_n )</td>
</tr>
</tbody>
</table>

Step 2 Confirm the single factor evaluation matrix

Selecting authoritative experts in relative field, comment grade of each index can be obtained by expert investigation method. After statistical processing of the comment grade, the fuzzy evaluation matrix of the lowest level index is correspondingly obtained and is generally indicated by the letter \( R \):

\[
R = \begin{bmatrix}
R_{11} & R_{12} & N & R_{1n} \\
R_{21} & R_{22} & N & R_{2n} \\
M & M & M \\
R_{n1} & R_{n2} & N & R_{nn}
\end{bmatrix} (i=1,2,\ldots,n)
\]

\( R_{ij} \) represents the membership degree of lowest level index and the corresponding comment grade in the index system. The quantity of evaluation matrix \( R \) is determined by the quantity of reciprocal in the second level index. The next step - fuzzy comprehensive evaluation is carried on the basis of evaluation matrix.

Step 3 Deduce the fuzzy comprehensive evaluation matrix

The index factor weight set is used to represent the set consisting of importance weight of the index factor. Through the above calculation, the index factor weight set of superior level can be obtained. The superior level index can be presumed as \( A=(a_1, a_2, \ldots, a_n) \), and the fuzzy comprehensive evaluation matrix \( B \) can be obtained through the multiple of index factor weight set of superior level and fuzzy evaluation matrix \( R \) in the second step as follows:

\[
B = A \times R = (b_1, b_2, \ldots, b_n)
\]

Step 4 Calculate the comprehensive evaluation score

Comprehensive score \( T \) of evaluation objective is obtained by the multiple of the fuzzy comprehensive evaluation matrix \( B \) deduced from the above formula and grade score matrix presumed in the first step:

\[
T = F \times B^T
\]

After \( T \) is calculated, the objective evaluated in which grade can be obtained.

4. EMPIRICAL ANALYSIS

The automobile parts manufacturing enterprise \( Z \) Company had two times M&A in 2005 and 2007. \( Z \) Company established in 1997 and the registered capital was 120 million. It produces products such as the ignition coil, sensor and parts around the car engine. \( Z \) Company belongs to high-tech enterprise with the certification of Science and Technology Ministry and the Chinese Academy of Sciences. In 2009 and 2010, this company’s revenue has topped 100 million; in 2011, the revenue is up to 120 million RMB, and the profit is nearly 30 million.

\( Z \) is an old enterprise that produces ignition coil, but it faces the bankrupt risk due to management problems, debt problems, etc. In 2005, \( Z \) spent 45 million to purchase \( A \) company’s 30 million shares and became the largest shareholder of \( A \) company; the holding proportion is 80%. In addition, \( Z \) paid 10 million to solve \( A \) company’s historical debt. After M&A, \( Z \) have changed the \( A \) company’s chairman, general manager, the personnel of the board of directors and board of supervisors, only kept a few members of former administration level. In 2006, the
The fuzzy obtained by confirmed matrix is presumed correspondingly as $P$ weight method is shown in table 3:

**The knowledge integration effect of Z Company is evaluated by the entropy weight-fuzzy integrated evaluation method according to the above index system. The index weight of the evaluation system confirmed by entropy weight method is shown in table 3:**

<table>
<thead>
<tr>
<th>Evaluation Index System of Knowledge Integration Effect</th>
<th>First index</th>
<th>Second index</th>
</tr>
</thead>
<tbody>
<tr>
<td>Market knowledge integration 0.35</td>
<td>Adaptation degree of raw material supply chain 0.31</td>
<td>Performance of enterprise R&amp;D 0.34</td>
</tr>
<tr>
<td></td>
<td>Stability of the sales channels 0.28</td>
<td>Achievements growth rate of R&amp;D 0.19</td>
</tr>
<tr>
<td></td>
<td>Customer loyalty 0.23</td>
<td>Application coverage rate of knowledge management system 0.31</td>
</tr>
<tr>
<td>Management knowledge integration 0.3</td>
<td>Maintenance of customer database and customer relationship 0.18</td>
<td>Measures to enhance acceptance rate of products 0.16</td>
</tr>
<tr>
<td>Knowledge integration of technology 0.35</td>
<td>Management capability and efficiency of operating division 0.3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>The scientificness of formulated development plan 0.22</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Management level of human resources 0.23</td>
<td></td>
</tr>
<tr>
<td></td>
<td>All staff’s recognition of enterprise culture 0.25</td>
<td></td>
</tr>
</tbody>
</table>

After confirming each index weight, the fuzzy comprehensive evaluation can be done. Firstly, the comment set $P = \{\text{successful, relatively successful, general, failed, completely failed}\}$ needs confirming, and the grade score matrix is presumed correspondingly as $F = (90, 80, 70, 60, 50)$. Then, the single factor evaluation matrix can be confirmed. After the data statistics of knowledge integration index’s comment grades of A and B company that obtained by 10 experts in theoretical circle and 10 experts in business field through the expert investigation method, the fuzzy evaluation matrix of second grade index can be deduced.

$$R_1 = \begin{bmatrix} 0.5 & 0.3 & 0.2 & 0 & 0 \\ 0.6 & 0.2 & 0.1 & 0.1 & 0 \\ 0.6 & 0.2 & 0.1 & 0.1 & 0 \\ 0.5 & 0.2 & 0.1 & 0.2 & 0 \\ 0.8 & 0.1 & 0 & 0.1 & 0 \\ 0.6 & 0.3 & 0 & 0 & 0.1 \\ 0.5 & 0.2 & 0.3 & 0 & 0 \\ 0.6 & 0.2 & 0.1 & 0.1 & 0 \\ 0.5 & 0.3 & 0.2 & 0 & 0 \\ 0.7 & 0.2 & 0.1 & 0 & 0 \\ 0.5 & 0.3 & 0 & 0.1 & 0.1 \\ 0.6 & 0.3 & 0 & 0.1 & 0 \end{bmatrix}$$

$$R_2 = \begin{bmatrix} 0.5 & 0.3 & 0.2 & 0 & 0 \\ 0.6 & 0.2 & 0.1 & 0.1 & 0 \\ 0.6 & 0.2 & 0.1 & 0.1 & 0 \\ 0.5 & 0.2 & 0.1 & 0.2 & 0 \\ 0.8 & 0.1 & 0 & 0.1 & 0 \\ 0.6 & 0.3 & 0 & 0 & 0.1 \\ 0.5 & 0.2 & 0.3 & 0 & 0 \\ 0.6 & 0.2 & 0.1 & 0.1 & 0 \\ 0.5 & 0.3 & 0.2 & 0 & 0 \\ 0.7 & 0.2 & 0.1 & 0 & 0 \\ 0.5 & 0.3 & 0 & 0.1 & 0.1 \\ 0.6 & 0.3 & 0 & 0.1 & 0 \end{bmatrix}$$

$$R_3 = \begin{bmatrix} 0.5 & 0.3 & 0.2 & 0 & 0 \\ 0.6 & 0.2 & 0.1 & 0.1 & 0 \\ 0.6 & 0.2 & 0.1 & 0.1 & 0 \\ 0.5 & 0.2 & 0.1 & 0.2 & 0 \\ 0.8 & 0.1 & 0 & 0.1 & 0 \\ 0.6 & 0.3 & 0 & 0 & 0.1 \\ 0.5 & 0.2 & 0.3 & 0 & 0 \\ 0.6 & 0.2 & 0.1 & 0.1 & 0 \\ 0.5 & 0.3 & 0.2 & 0 & 0 \\ 0.7 & 0.2 & 0.1 & 0 & 0 \\ 0.5 & 0.3 & 0 & 0.1 & 0.1 \\ 0.6 & 0.3 & 0 & 0.1 & 0 \end{bmatrix}$$
From Table 3, second grade index weight is respectively $A_1 = (0.31, 0.28, 0.23, 0.18); A_2 = (0.3, 0.22, 0.23, 0.25); A_3 = (0.34, 0.19, 0.31, 0.16). Thus,

$$G = \begin{bmatrix} A_1 \times R_1 \\ A_2 \times R_2 \\ A_3 \times R_3 \end{bmatrix} = \begin{bmatrix} 0.554 & 0.281 & 0.087 & 0.047 & 0.031 \end{bmatrix}$$

Fuzzy comprehensive evaluation matrix $B$

$$= A \times R = \begin{bmatrix} 0.35 & 0.03 & 0.0637 & 0.192 & 0.094 & 0.055 & 0.022 \\ 0.35 & 0.0634 & 0.19 & 0.073 & 0.02 & 0.1045 & 0.003 \end{bmatrix}$$

Comprehensive evaluation score $T = F \times B^T$

$$= \begin{bmatrix} 0.57785 \\ 0.2368 \\ 0.1045 \\ 0.0634 \\ 0.01745 \end{bmatrix} \times \begin{bmatrix} 0.57785 \\ 0.2368 \\ 0.1045 \\ 0.0634 \\ 0.01745 \end{bmatrix} = 83$$

Using the same method to calculate, the knowledge integration effect score of merging and acquiring B Company is 67 points.

<table>
<thead>
<tr>
<th>Table 4. Knowledge Integration Effect of Z Company’s Two M&amp;A item</th>
<th>Knowledge Integration Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Merging A company</td>
<td>83</td>
</tr>
<tr>
<td>Merging B company</td>
<td>67</td>
</tr>
</tbody>
</table>

From Table 4, it can be found that the knowledge integration of merging and acquiring A Company is relatively successful, while, the knowledge integration of merging and acquiring B Company is general.

5. SUGGESTIONS AND CONCLUSION

5.1. Attach Great Importance to the Knowledge Integration of Enterprises’ M&A

Many enterprises recognize the knowledge resources are valuable in their management; they also learn and accumulate useful knowledge for their enterprise development. Enterprises continue to put theoretical knowledge into practice during research and development, production, sales, after-sales service and other business activities, and then they sum up the most suitable knowledge for their own development. Enterprises can also participate in the association’s annual meeting and other activities to interact with peers and learn from their experience. The knowledge integration becomes more important for both sides of M&A, so taking measures to promote knowledge integration success in enterprise M&A process is imminent. On the contrary, Part of M&A enterprises lack the cognition of knowledge integration’s importance, they do not have the management concept that knowledge integration in the M&A process can also improve the core competitiveness, which will directly lead to knowledge integration failure. The M&A enterprises devote corresponding high-quality resources to participate and promote knowledge integration, the progress of knowledge integration can be effectively sped up, and the effectiveness of knowledge integration can be improved. Only in this way, knowledge integration of M&A enterprises is likely to be successful.

Each enterprise’ development planning, corporate culture, management concept and developing goals are different, their experience and knowledge also are different. Therefore, M&A enterprises’ knowledge needs integrating are various, including research and development, production, operation and management and so on. Therefore, careful analysis of the both enterprises’ actual situation during integration is needed, including their advanced knowledge and knowledge’s type and content confirmed scientifically. Also, it is necessary to analyze the potential problems probably encountered in the integration process and formulate the viable knowledge
integration strategies towards these issues.

5.2. Optimize the Organization Structure of Knowledge Integration in Enterprise’s M&A

Generally speaking, the production enterprise’s organizational structure is relatively complex with lots of department and large staff scale, and the quality is uneven. Knowledge integration itself cannot be completed by the enterprise’s one or two department, which needs a broader range of departments and personnel. Hence, it’s necessary to set up a professional organization to lead and promote the knowledge integration work so that it can progress smoothly. Establishing specialized knowledge integration team can be considered to strengthen the organizing guarantee of knowledge integration in enterprise M&A. In the process of M&A, the knowledge integration team is in charge of the related M&A activities, including the formulation and implementation of concrete method, stage summary, effect evaluation of the knowledge integration. After completing the knowledge integration, the team may be dissolved.

Knowledge integration team of enterprise M&A could be composed of the Leadership Council and the Executive Team, of which, the Leadership Council is usually made up of both sides’ senior management personnel and the intermediary agency’s consultants of M&A. In particular, the leader of the leading team must be occupied by enterprise’s general manager or deputy general manager, only in this way can knowledge integration work be facilitated smoothly, and coordinate knowledge integration and the other M&A team strongly. The Executive Team is composed of specific staff responsible for the implementing and completing concrete work of knowledge integration.

The senior management personnel of M&A enterprise plays two important roles: policy makers of M&A and leaders of knowledge integration. They master the systematic knowledge integration and knowledge management methods and attach importance to knowledge integration work in the M&A process. Because of their busy schedule, the specific work of knowledge integration need to be done by staff at the basic level, which exposes many problems, such as aging staff, unreasonable personnel structure, expertise lack and so on in the process of implementing knowledge integration. In order to prevent and solve these problems effectively, it is necessary to develop effective incentive and restraint mechanism to enhance the employees’ activeness to participate in knowledge integration work.

Knowledge integration of M&A enterprise requires effective co-ordination of both sides’ staff. Hence, after announcing the M&A program, it is necessary to make the staff know related M&A information, the other enterprise’s development strategy, production management situation through normal channels, so that they will not take negative attitude towards M&A and intentionally contravene the knowledge integration work in the M&A process. In fact, in a number of enterprise M&A cases, there is resistance mood between individual employees and department or the whole enterprise causing the failure of the whole knowledge integration work. Therefore, on the one hand, it is necessary to make the relevant circumstances preach to the both sides’ staff. On the other hand, developing a reasonable plan to implement knowledge integration step by step is needed. The knowledge integration team can work smoothly on this basis.

5.3. Improve the Knowledge Integration Capability of M&A Enterprise

While people are aware of the knowledge integration’s importance in enterprise’s M&A, it is necessary to take effective measures to change the current situation of lacking integration experience and worse integrating knowledge capability. On one hand, it makes enterprises learn high efficient methods of knowledge integration from advanced enterprises during their communication and cooperation. On the other hand, it makes enterprises put the learned experience and knowledge into practice combining with their production and management situation. The acquired company’s deteriorating business conditions make their knowledge relatively backward, knowledge integration’s learning motivation and learning capability low. So the acquiring company can promote the acquired company to learn and absorb advanced knowledge, and help to improve business performance so as to achieve the goal of effective knowledge integration.

There is a misunderstanding in real M&A case that all the knowledge of the both sides is attempted to integrate. In fact, only the key knowledge closely connecting with the enterprise’s survival and development is needed integrating and this knowledge is often mastered in the key department or the core staff. Thus, strengthening the knowledge integration capability of the staff in research and development, management, sales and other key department or core staff is urgent. Meanwhile, enhancing their knowledge application level can promote enterprise to change this part of knowledge into competitive advantages.

5.4. Construct Knowledge Integration Evaluation Mechanism of M&A Enterprise

Evaluating the knowledge integration effect scientifically and objectively is very important for the knowledge integration in enterprise’s M&A. The scientific evaluation of knowledge integration is comprehensive, not only includes whether the knowledge integration measures are implemented effectively and improvement degree of business performance due to knowledge integration, but also can reflect the issues that enterprises should focus on in enterprises’ M&A in the future. Establishing a feedback mechanism of knowledge integration by the
evaluation of knowledge integration effect timely, M&A enterprises can adjust knowledge integration measures to achieve the purpose of promoting knowledge integration. Sharing the key knowledge of both the acquired and the acquiring enterprise is also an important means of knowledge integration. Through knowledge communication, sharing and exchanging, enterprises can upgrade their production process, promote their research and development and management level and improve management mode to achieve the knowledge integration’s goal maximally and finally enhance the enterprise’s core competitiveness and the production management level.

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