

The Application of Hofstede Theory in the Modeling of Hidden Costs in Mergers and Acquisitions

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Abstract: This article focuses on the application of Hofstede's theory in the modeling of hidden costs in mergers and acquisitions. Firstly, the concept and significance of hidden costs in mergers and acquisitions were expounded. Then, the core contents of Hofstede's theory were introduced in detail, including dimensions such as power distance, uncertainty avoidance, individualism and collectivism, masculinization and feminization, long-term orientation and short-term orientation. Then, deeply analyze the influencing factors of the hidden costs of mergers and acquisitions, explore how to integrate Hofstede's theory into the modeling process of hidden costs of mergers and acquisitions, and construct a model framework based on this theory and explain its application logic. Research shows that the hidden cost model of mergers and acquisitions constructed by Hofstede theory can assess the hidden costs in mergers and acquisitions more comprehensively and accurately, providing more valuable references for enterprises' merger and acquisition decisions.

Keywords: Hofstede Theory; Hidden Costs of Mergers and Acquisitions; Modeling Cultural Dimension

1. Introduction

In the current context where the process of global economic integration is accelerating continuously, enterprise mergers and acquisitions have become an important strategic means for enterprises to achieve rapid expansion, optimize resource allocation, and enhance market competitiveness [1]. According to the data statistics of internationally renowned consulting institutions, the scale of global mergers and acquisitions transactions has remained at a high level in recent years, with

considerable amounts involved and a large number of transactions. However, mergers and acquisitions are not always smooth sailing. Many cases of mergers and acquisitions ultimately fail to achieve the expected goals and even end in failure. In addition to explicit financial costs such as merger and acquisition prices and transaction fees, there are also a large number of implicit costs that are difficult to quantify directly during the merger and acquisition process. These implicit costs often have a significant impact on the final outcome of the merger and acquisition [2].

The hidden costs of mergers and acquisitions are characterized by concealment and complexity. They may be concealed in the integration stage after the merger and acquisition, involving multiple aspects such as the integration of corporate culture, changes in employee psychology, and organizational structure adjustment [3]. For instance, cultural differences may lead to communication barriers and conflicts between the employees of both parties in a merger and acquisition, affecting work efficiency and teamwork. Employees' concerns and unease about mergers and acquisitions may lead to the loss of talent, taking away the core technologies and knowledge resources of the enterprise. Ignoring these hidden costs may lead enterprises to underestimate the total cost of mergers and acquisitions, thereby making wrong decisions and increasing the risk of merger and acquisition failure [4].

Hofstede's theory, as an important theory in the field of cultural studies, provides a powerful tool for analyzing cultural differences among various countries and regions [5]. This theory quantitatively describes cultural characteristics through multiple cultural dimensions, which can help enterprises deeply understand the values, behavioral patterns and communication models in different cultural backgrounds. In mergers and acquisitions, cultural differences are a factor that

cannot be ignored. They can affect many aspects of an enterprise, such as its management style, employee behavior, and communication methods, and thereby generate various hidden costs. Applying Hofstede's theory to the modeling of hidden costs in mergers and acquisitions helps enterprises more accurately identify and evaluate the impact of cultural differences on hidden costs in mergers and acquisitions, construct a more scientific and reasonable cost model, and improve the accuracy and success rate of merger and acquisition decisions [6].

With the in-depth development of economic globalization, cross-border mergers and acquisitions and cross-cultural mergers and acquisitions are becoming increasingly frequent. There are significant differences between enterprises in different countries and regions in terms of culture, law, economy, etc. These differences bring many challenges and uncertainties to mergers and acquisitions. Cultural differences, as a key factor, have a particularly prominent impact on the hidden costs of mergers and acquisitions [7]. For instance, in terms of the dimension of power distance, in some countries, the power of enterprises is relatively concentrated and the decision-making process is clearly hierarchical. In contrast, enterprises in some other countries place more emphasis on democratic participation and their decision-making is relatively decentralized. When there is a significant difference in power distance between the two parties in a merger and acquisition, it may lead to difficulty in effectively implementing management decisions and increase organizational coordination costs.

It is of great theoretical and practical significance to study the application of Hofstede theory in the modeling of implicit costs in mergers and acquisitions. From a theoretical perspective, it enriches the relevant theories of merger and acquisition cost management and cultural research, providing new perspectives and methods for a deeper understanding of the relationship between cultural differences and the implicit costs of mergers and acquisitions. From a practical perspective, it provides enterprises with a more comprehensive cost assessment tool when making M&A decisions, helping them better cope with the challenges brought by cultural differences, reduce M&A risks, and increase the success rate of M&A [8].

2. Overview of Hidden Costs in Mergers and Acquisitions

2.1 Definition of Hidden Costs in Mergers and Acquisitions

The implicit costs of mergers and acquisitions refer to the costs that are difficult to directly observe and accurately measure due to various factors during the merger and acquisition process, in addition to the explicit costs such as the directly paid merger and acquisition price and transaction fees [9]. These costs are usually hidden in the integration stage after a merger and acquisition and are not directly reflected in the financial statements, but they have a potential impact on the long-term development and performance of the enterprise. For instance, after a merger and acquisition, the enterprise needs to invest a considerable amount of time and resources in cultural integration to reduce the negative impact of cultural conflicts on employee morale and work efficiency. This part of the investment is the hidden cost of cultural integration.

2.2 Classification of Hidden Costs in Mergers and Acquisitions

2.2.1 Cultural integration cost

Conflicts and frictions caused by cultural differences among various enterprises require investment of time and resources for cultural integration, including expenses for cultural research, training, communication, etc. [10] For instance, when an American enterprise acquires a Japanese one, American culture emphasizes individualism and competition, while Japanese culture focuses on collectivism and cooperation. After the merger and acquisition, American enterprises need to understand the cultural characteristics of Japanese enterprises, carry out cross-cultural training, and promote communication and understanding among employees of both sides to achieve effective cultural integration. The expenses incurred by these activities are the costs of cultural integration.

2.2.2 Employee turnover costs

Mergers and acquisitions may cause unease and worry among employees, leading to the loss of core talents. Employee turnover not only takes away a company's technology and knowledge, but also increases the cost of recruiting and training new employees [11]. For instance, after the merger and acquisition news is announced,

some employees in key positions may choose to leave due to uncertainty about their future career development. Enterprises need to spend time and money rerecruiting suitable personnel and training new employees to enable them to quickly adapt to the working environment and job requirements. This part of the recruitment and training expenses, as well as the business interruption losses caused by employee turnover, constitute the employee turnover cost.

2.2.3 Organizational coordination costs

After a merger and acquisition, the organizational structure of the enterprise needs to be adjusted and optimized. The difficulty of coordination and communication among various departments increases, which may lead to a decline in work efficiency and an increase in operating costs. [12] For instance, after a merger and acquisition, the enterprise may need to integrate its original business processes, break down the barriers between departments, and achieve information sharing and collaborative work. However, due to the differences in working methods and cultures among various departments, problems such as poor communication and unclear responsibilities may arise during the coordination process, leading to delays in work progress and increased coordination costs.

2.2.4 Customer churn cost

Mergers and acquisitions may affect customers' trust and loyalty to the enterprise, leading to customer churn. Customer churn will directly affect a company's sales revenue and market share. For instance, if a client believes that the acquired enterprise has changed in terms of product quality, service level, etc., or has a negative impression of the image of the acquired enterprise, they may choose to turn to a competitor. Customer churn not only causes enterprises to lose their current business income, but may also affect their long-term market reputation and customer relationships, increasing the cost of acquiring new customers.

2.3 The Significance of Hidden Costs in Mergers and Acquisitions

Although the hidden costs of mergers and acquisitions are difficult to quantify directly, they play a crucial role in the success or failure of mergers and acquisitions. Ignoring hidden costs may lead enterprises to underestimate the total cost of mergers and acquisitions, thereby making wrong decisions. For instance, some

enterprises, when conducting cross-border mergers and acquisitions, fail to fully take into account the hidden costs brought about by cultural differences. As a result, serious cultural conflicts arise after the mergers and acquisitions, leading to low employee morale, reduced production efficiency, and ultimately affecting the overall performance of the enterprise. Therefore, accurately identifying and evaluating the hidden costs of mergers and acquisitions is an important guarantee for enterprises to successfully implement merger and acquisition strategies.

3. Core Content of Hofstede's Theory

3.1 Power Distance

Power distance refers to the degree to which members with less power in a society or organization accept the unequal distribution of power. In cultures with a large power distance, subordinates usually do not question the decisions of their superiors, and the organizational structure is relatively hierarchical. In cultures with a smaller power distance, employees are more inclined to participate in decision-making, and the organizational structure is relatively flat.

3.2 Uncertainty Avoidance

Uncertainty avoidance refers to the degree to which a society tolerates uncertainty and ambiguous situations. In a culture that avoids high uncertainty, people tend to establish strict rules and procedures to reduce uncertainty and have a lower tolerance for risks. In a culture that avoids low uncertainty, people are more willing to accept change and take risks, and have a lower dependence on rules.

3.3 Individualism and Collectivism

Individualistic culture emphasizes the freedom, independence and self-actualization of the individual, with personal interests taking precedence over collective interests. Collectivist culture emphasizes collective harmony, teamwork and loyalty, with the interests of the collective taking precedence over those of individuals.

3.4 Masculinity and Femininity

Masculine culture emphasizes competition, achievement and material success, and pursues personal excellence and status. Feminine culture

pays more attention to the quality of life, interpersonal relationships and caring for others, emphasizing cooperation and fairness.

3.5 Long-term Orientation and Short-term Orientation

A long-term-oriented culture focuses on future development and long-term interests, and is willing to sacrifice short-term benefits for long-term goals. A short-term-oriented culture pays more attention to immediate benefits and immediate satisfaction, and has relatively less planning for the future.

4. Analysis of the Influencing Factors of Hidden Costs in Mergers and Acquisitions

4.1 Cultural Difference Factors

Cultural differences are one of the important reasons for the emergence of hidden costs in mergers and acquisitions. Enterprises in different countries and regions have significant differences in values, management styles, communication methods, etc. These differences may trigger cultural conflicts and increase the cost of cultural integration. For instance, in cultures with a large power distance, the management decisions of enterprises after mergers and acquisitions may have difficulty receiving positive responses from subordinates, resulting in low execution efficiency. In a culture that avoids high uncertainty, employees may feel scared and uneasy about the changes after mergers and acquisitions, thus developing a resistant attitude.

4.2 Factors of the Enterprise Itself

The scale, industry and management level of the enterprise itself will also affect the hidden costs of mergers and acquisitions. Larger enterprises may encounter more complex organizational integration issues after mergers and acquisitions, and the coordination costs are relatively high. Enterprises in different industries have differences in business processes, technical standards, etc., and the difficulty of integration varies, as does the hidden cost. Enterprises with a higher level of management can better cope with various challenges in the process of mergers and acquisitions and reduce the probability of hidden costs.

4.3 External Environmental Factors

External environmental factors include policies

and regulations, market competition, economic conditions, etc. Changes in policies and regulations may affect the approval process and transaction costs of mergers and acquisitions. Fierce market competition may lead to customer churn and a decline in market share, increasing the cost of customer churn. The instability of the economic situation may affect the financial status of enterprises and the confidence of employees, and thus hinder the smooth progress of mergers and acquisitions.

5. Application of Hofstede Theory in Modeling Hidden Costs in Mergers and Acquisitions

5.1 Construct a Framework for the Hidden Cost Model of Mergers and Acquisitions Based on Hofstede's Theory

Based on Hofstede's theory, a framework for the implicit cost model of mergers and acquisitions can be constructed. According to the five cultural dimensions of Hofstede's theory, corresponding cultural index values can be determined for both enterprises of the merger and acquisition respectively. These indicator values can be obtained through cultural research, questionnaires and other methods. For instance, regarding the dimension of power distance, relevant questions can be designed to understand the degree to which enterprise employees accept decisions from their superiors, the clarity of the organizational hierarchical structure, etc., thereby quantifying the magnitude of power distance.

Based on the differences in various cultural dimensions, analyze the influence mechanism on the hidden costs of mergers and acquisitions. For instance, the disparity in power distance may lead to the difficulty in effectively implementing management decisions of enterprises after mergers and acquisitions. In enterprises with a large power distance, subordinates are accustomed to obeying the decisions of their superiors and lack initiative and innovation. In enterprises with a smaller power distance, employees are more inclined to participate in decision-making and may question the decisions made by their superiors. When the power distance between the two parties in a merger and acquisition is significantly different, it may trigger management conflicts and increase organizational coordination costs and communication costs.

Based on the analysis of the impact of cultural differences on hidden costs, a corresponding mathematical model is established to estimate the hidden costs of mergers and acquisitions. Quantitative analysis methods, such as regression analysis and analytic hierarchy process, can be adopted to quantitatively estimate hidden costs. For instance, taking cultural difference indicators as independent variables and various hidden costs as dependent variables, by collecting merger and acquisition data of related enterprises and using regression analysis to establish functional relationships among them, the size of hidden costs can be estimated based on the values of cultural difference indicators.

The model is verified through actual merger and acquisition cases. Based on the verification results, the model is optimized and adjusted to enhance its accuracy and reliability. Multiple merger and acquisition cases from different cultural backgrounds can be selected, and the model can be used to estimate the hidden costs. The estimation results can be compared and analyzed with the actual hidden costs incurred to identify the errors and deficiencies in the model, and then the model parameters or structure can be corrected and improved.

5.2 Correlation Analysis between Specific Cultural Dimensions and Implicit Costs

5.2.1 Power distance and hidden costs

The disparity in power distance may lead to difficulty in effectively implementing management decisions of enterprises after mergers and acquisitions. In enterprises with a large power distance, subordinates are accustomed to obeying the decisions of their superiors and lack initiative and innovation. In enterprises with a smaller power distance, employees are more inclined to participate in decision-making and may question the decisions made by their superiors. When the power distance between the two parties in a merger and acquisition is significantly different, it may trigger management conflicts and increase organizational coordination costs and communication costs. For instance, when a company with a large power distance acquires a company with a small power distance, the employees of the small company with a large power distance may be dissatisfied with the centralized management style of the large company, leading to a decline in work

enthusiasm, poor communication between departments, affecting work efficiency, and thereby increasing hidden costs in organizational coordination and communication.

5.2.2 Uncertainty avoidance and hidden costs

Employees in a high uncertainty avoidance culture may feel fearful and uneasy about the changes after mergers and acquisitions, worrying about losing job stability and vested interests. This psychological state may lead to low morale among employees, a decline in work efficiency, and even cause staff turnover. Therefore, uncertainty avoidance differences will increase the cost of employee turnover and the cost of production efficiency loss. For instance, after a company in a context of high uncertainty avoidance culture is acquired, employees may have a strong resistance to the new management model, business processes and other changes, and be reluctant to accept the new job requirements, resulting in a decrease in production efficiency. At the same time, some employees may choose to leave due to concerns about future uncertainties, and the enterprise will have to spend additional costs to recruit and train new employees to fill the job vacancies.

5.2.3 Individualism and collectivism and hidden costs

Employees in an individualistic culture pay more attention to personal interests and self-actualization, and have relatively lower loyalty to the collective. Employees in a collectivist culture place more emphasis on collective interests and teamwork, and are willing to sacrifice their personal interests for the collective. When there are differences between the two parties in a merger and acquisition in terms of individualism and collectivism, it may lead to difficulties in the integration of corporate cultures, increase the cost of cultural integration and employee turnover. For instance, after an enterprise dominated by an individualistic culture merges with one dominated by a collectivist culture, the employees of the individualistic culture enterprise may find it difficult to adapt to the working style that emphasizes teamwork and collective decision-making in the collectivist culture enterprise, feeling that their personal development space is restricted, and thus choose to leave. Employees of collectivist cultural enterprises may be dissatisfied with the practice in individualistic cultural enterprises that overly emphasize individual competition and neglect

collective interests, which affects their work enthusiasm and increases the difficulty and cost of cultural integration.

5.2.4 Masculinization and feminization and hidden costs

A masculine culture emphasizes competition and achievement, and employees may pay more attention to personal performance and promotion. Feminine culture emphasizes cooperation and interpersonal relationships, and employees pay more attention to the harmony and development of the team. The differences between the two parties in a merger and acquisition in terms of masculinity and femininity may lead to conflicts in management styles, tense relationships among employees, and increase organizational coordination and communication costs. For instance, after a male-oriented cultural enterprise acquires a female-oriented one, the management approach of the male-oriented cultural enterprise that focuses on performance assessment and competition may conflict with the harmonious and cooperative working atmosphere emphasized by the female-oriented cultural enterprise, leading to tense relationships among employees and difficulties in collaboration among departments. This requires more time and energy to be invested in coordination and communication. Increase the costs of organizational coordination and communication.

5.2.5 Long-term orientation and short-term orientation and hidden costs

Enterprises in a long-term-oriented culture pay more attention to future development and long-term interests, and are willing to invest resources and energy for long-term goals. Enterprises in a short-term-oriented culture pay more attention to immediate benefits and immediate satisfaction. When there are differences between the two parties in a merger and acquisition in terms of long-term and short-term orientation dimensions, it may lead to inconsistent strategic planning and divergent investment decisions, increasing the cost of strategic adjustment and opportunity costs. For instance, after a long-term-oriented cultural enterprise acquires a short-term-oriented one, the short-term-oriented cultural enterprise may be more inclined to pursue short-term financial indicators and profits, while the long-term-oriented cultural enterprise focuses on long-term market layout and technological research and development. Such differences in strategic planning may lead to contradictions in

investment decisions, resource allocation and other aspects for enterprises, requiring continuous adjustment of strategic directions and increasing the cost of strategic adjustment. At the same time, some long-term development opportunities may be missed due to short-term behaviors, resulting in opportunity costs.

6. Conclusion

This paper studies the application of Hofstede theory in the modeling of implicit costs in mergers and acquisitions. By analyzing the concept, classification and significance of hidden costs in mergers and acquisitions, as well as the core content of Hofstede's theory, the influencing factors of hidden costs in mergers and acquisitions were explored, and a model framework of hidden costs in mergers and acquisitions based on Hofstede's theory was constructed. The correlation analysis between specific cultural dimensions and hidden costs was elaborated in detail. Research shows that the hidden cost model of mergers and acquisitions constructed by Hofstede theory can assess the hidden costs in mergers and acquisitions more comprehensively and accurately, providing more valuable references for enterprises' merger and acquisition decisions.

Future research can further expand and deepen the application of Hofstede's theory in the modeling of implicit costs in mergers and acquisitions. On the one hand, more cultural theories and research methods can be combined to continuously improve the hidden cost model of mergers and acquisitions and enhance the accuracy and applicability of the model. On the other hand, more empirical research can be carried out, more data on merger and acquisition cases can be collected, and the model can be more extensively verified and optimized. In addition, it is also possible to study how to combine the hidden cost model of mergers and acquisitions with other decision-making models to provide enterprises with more comprehensive decision support for mergers and acquisitions.

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