

# Research of Smartphone Industry Outsourcing Decision Model

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## Abstract

Along with the change in the industrial environment and the rivalry among international marketing, many enterprises have been research to modify business model in order to compete with others. Outsourcing is one decision model for enterprises to focus on the main original technology into the competitive market. This research is going to study the smartphone as:

1. To confer the decision model while planning and executing outsourcing in smartphone industry.
2. To analyze the reference factors and limited extent of production.
3. To find out the main key in succeed outsourcing tactic. Also, this research becomes aware of the partner relationship between well executing outsourcing tactic and original equipment manufacturing factories.
4. To specialize an ability of core technology will not only effect enterprises management into positive way but also increase and keep the superiority in the competitive market.

*Key words* : outsourcing strategy, the ability of core technology, smart phone industry

## 1. The Purpose

As a result of keen competition in smartphone industry and production replaced frequently, brand enterprises have to put most resource into research and development new commodity and its marketing. However, this decision brings about low income and profits without non-core technology support if brand enterprises inspect the cost breakdown structure. Therefore, the brand enterprises must seek the probability in cost transfer positively in order to decrease the production cost, especially transfer non-core technology producing parts.

The producing characteristics in smartphone industry:

1. High elimination rate in technique and difficult in the producing process to assemble and install.
2. Keen competition, fast reaction in market and high engineering service level.
3. Unpredictable raw materials value and high purchasing cost.

This research focus on the trend in fast growth smartphone industry and keen competition in consumption market that integrate the smartphone producing characteristic by related technique of decision to investigate the process of formation and adopted policy of outsourcing in smartphone industry.

According to the market research report by IDC in 2014, the global outsourcing service market increases above 5.9% every year and be forecasted to reach 813 hundred million in 2018. Even so outsourcing is a method of operation to reduce the cost for enterprises; it is a strong business strategy to increase the production capability and production quality in order to rise above competitive market and forces on main business. Outsourcing is not only an important strategy in an organization development tactic and a common strategic for all (Lamminmaki ; 2011) but also provide main competitiveness in income, sale, and producing even more professional supporting. (Leeman and Reynolds ; 2012) Therefore, outsourcing suppliers attempt to change the

OEM mode in order to increase the level and expand the coverage of professional outsourcing service; outsourcing suppliers establish high technology standard in OEM industry for customers and clients to create the most additional value that meet "win-win situation" between original equipment manufacturing suppliers and brand enterprises. ( Jeremy et al. ; 2008 ) Consequently, brand enterprises try to reduce the cost and keep well cooperation relationship with outsourcing suppliers at the same time in this particular period. They expect to promote more effective and have lower cost by the division of labor on technical capability and specialization of outsourcing suppliers and then bring up stronger competitive capability in a competitive market. ( Strange ; 2011 )

The enterprises adopt external professional suppliers to execute non-core activities. This decision promotes the operation performance in order to increase enterprises competitive advantage by concentrated source into development of main capability. ( Elmuti ; 2003 ) Especially smartphone industry is high elimination rate in technique, Keen competition and production replaced frequently, so this industry need mutually supporting outsourcing suppliers to strengthen itself competitive capability. However, outsourcing strategy is formed by enterprise future planning for production, itself competitive capability and reference enterprise long term development planning to determine the enterprise cooperation strategy. This research focuses on the mode how the smartphone brand enterprises consider and execute the outsourcing strategy. Also, this research examines how the smartphone industry form and plan the outsourcing strategy which is based on its technique of determination. According to the essence of outsourcing strategy and the key thought on determination, this research investigates how these main factors influence the smartphone industry in their performance and competitive advantage, and

then expect to develop an appropriate outsourcing determined mode and reference for smartphone industry or related industry. The main purposes are:

1. Understanding the essence of outsourcing strategy, including the key thought on determination to select the outsourcing strategy.
2. To investigate how these main factors influence the smartphone industry in their performance and competitive advantage.
3. Well using outsourcing strategy; to seek and to cooperate appropriate outsourcing suppliers in order to strengthen brand enterprises itself production competitive capability.
4. To develop an appropriate planning mode of outsourcing strategy for smartphone industry and to become the reference for smartphone industry or related industry.

## 2. Reference

### Core Competence

Core competence is the concealed specialty behind the production. This professional specialty integrates the technology and source internal of internal departments in the company. Core competence is not only difficult to copy for competitor but also bring about special utility and added value, and provide the production with unique competitive advantage and services for clients that make the enterprises to succeed and profits increasing conspicuously. According to the rising growth high technology in Taiwan, the enterprises change their composition to global overall arrangement. If the enterprises still keep their core capability in traditional manufacturing mode or hold any useful and useless internal enterprises resource; moreover, the enterprises enlighten itself the innovative thought and excellent professional technique, then they will be unable to confront the global impact. However, based on “Hafeez and Zhang” in 2002, core capability is formed by many valuable abilities which is unique and unmatched, and it is potential success key influence for

enterprises. Therefore, the enterprises must possess high value and unique capability in order to keep its competitive advantage (Figure 1). Core capability integrates resource and abilities and increase organizational added value.

The enterprises have to integrate whole internal resource to develop the technique capability of competitive advantage. The scholar, Hope and Hope points at that core capability is the particular competitive advantage in his book, “Competing in the third wave “; for example, the ahead of technique, excellent operation or perfect customer service. By training core capability, the enterprises will be able to create the productions and service in keeping with clients’ demand in changeable competitive market.

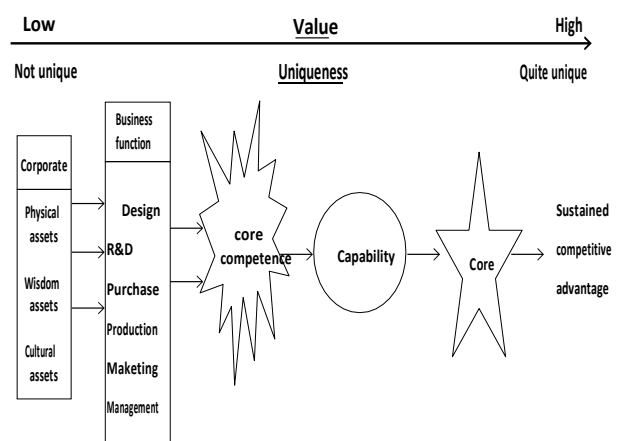


Fig. 1 The structural of core capability (Hafeez and Zhang ; 2002)

### Outsourcing Strategy

How an enterprise running success business depend on its operating strategy. And what a success enterprise executing strategy would be different result with several factors; external and internal environment, whole enterprise resource, and the ability how to perform the source. Therefore, same strategy cannot be executed for other enterprises at the same time. Many enterprises choice the symbol learning method and reference the strategy from success enterprises in order to reach the goal in the short time. But then enterprises reach an impasse by conservative copy. For this reason, the purpose

of executing strategy is forming the competitive advantage in order to confront the changeable competitive environment with saving capacity and establish itself in an unassailable position. However, the scholars, Tajdina and Nazari point out that the outsourcing is the dependence of the external resource for enterprises in 2012. The level of dependence of external resource is the index for enterprise to consider an appropriate outsourcing operating strategy. Therefore, based on characteristic of outsourcing and factor of consideration, the enterprises have to consider the outsourcing strategy with three determined factors; how to execute the resource in effect, how rely on resource and the cost of business transactions. They must invest their resource to main concentrated strategic goal and bring needed external resource to strengthen internal capability in order to have the utility with complementary. (Arnold ; 2000) consequently, before the strategy improvised and purchase is formed, it need to be inspected and integrate usable internal resource and coordinated external resource in order to get composite result with ineffective and cooperation.

But, along with global development, Keen competition and enormous market demand, the enterprises not only seek outsourcing to reduce cost but also expend itself relationship through external specialized suppliers or producers in order to ensure and handle the clear market position and operating strategy, and then focus on the resource to develop enterprise core competitive capability. Now outsourcing is an important tool to seek after excellent strategy. (Ehie ; 2001) The main purpose of outsourcing for enterprises is enhancing its competence by external specialized suppliers supporting, moreover, it will use limited resource on core activities in order to promote the running of enterprises and increase its benefits. In the slight profit age, the scholar, Adobor though that managers have not only to re-examine and make a thorough planning in the worthwhile activities of chain value of enterprises but also reflect on correct strategy selections in self-made or outsourcing. The enterprises

become more concentrated and specialized on development focus in order to respond accordingly to this new environment of Keen competition and performance guide. Also, the enterprises begin to estimate and analyze if any occupational activity would provide typical competitive advantage and key running strategy to develop that influence enterprises to invest more resource into interior or expanding outsourcing service market.

### 3. The formation and determined model of outsourcing strategy

Along with global development and keen economical competition, competitive pressure causes enterprises to pursue the scale economy and decreasing running cost, especially in smartphone industry. Based on high level smartphone is near market saturation, more middle and low level mobile stores try lower price marketing strategy to hold the market share. For this reason, to reduce the cost is the primary goal because the smartphone industry needs to confront with increasing competitive pressure daily. Then, enterprises execute outsourcing strategy to control the cost and have flexible human resource in order to decrease the cost. The concealed benefit of outsourcing includes cost improvement and the core capability to well use the resource, in other words, it is easy to cause several situations, for example, the decreasing of ingenuity, the leak of knowledge and training the competitors by over depended on outsourcing strategy that is contested seriously. However, in the competitive market, some enterprises believe that outsourcing is the answer for all questions and forget outsourcing is only a strategy and a tool. All strategies come with risks. Without careful planning assessment, adjusted and managed execution, it might not achieve expected result. Therefore, the enterprises have to consider its production competitive advantage, uniqueness and the point of development of business running strategy.

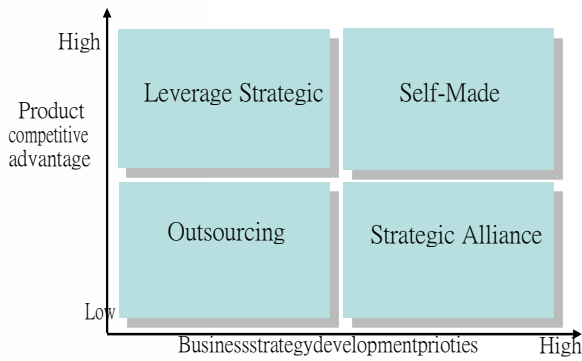


Fig. 2 The decision model of outsourcing strategy

This research inspects the decision model of outsourcing strategy by study of business strategy and production. And it analyzes the executing strategy in every stage of the decision process by the key development business strategy and production competitive advantage. (Figure 2)

The illustrations of decision strategy are:

1. To avoid the leak of technology and keep the business competitive advantage, the enterprises must take free development strategy, which is free manufacture strategy if business productions possess market competitive advantage and valuable activities in main strategy.
2. To strengthen and improve production competitive advantage, the enterprises take the method of strategic alliance to integrate with related specialty or leader of industry if business productions might not possess market competitive advantage but have valuable activities in main strategy.
3. The enterprises take leverage strategy that provide technology to related manufacturers to assist manufacturing development if business productions possess market competitive advantage but not have valuable activities in main strategy.
4. The enterprises take outsourcing strategy to assign specialized contractors who possess competitive advantage if business productions do not possess market competitive advantage and do not have valuable activities in main strategy.

#### 4. The factors of considered outsourcing

According to the trend of fast growing in smartphone industry and division of labor based on specialization in competitive market, the brand enterprises of smartphone become to focus on and specialize in the main development in order to respond accordingly to this industrial environment of keen competition and performance oriented. The enterprises begin to estimate each business performance in order to analyze if these works can be able provided the effective methods to enterprises for its unique competitive advantage. In this way, the enterprises invest more resource into the territory of good business results, and dissolve the territory of uncompetitive advantage or turn to expanding external service market, such as outsourcing. However, there are many situations are needed to be consider to execute outsourcing strategy and each scholar gives their own view and recommends different opinions.

This research recommended related opinions what is needed to consider to draw up the outsourcing strategy that is based on several statements, for example, the characteristic of smartphone industry, the limit of producing goods and the reference to analyze whole enterprise resource (Figure 3). Therefore, in this research is expanded the considered factor in business outsourcing strategy. These factors are the enterprise core technology capability, the dependent level in external resource, the peculiarity in production and partnership with outsourcing original equipment manufacturing factories. In this research to point out that enterprise will rise up the dependent level in external resource while a functional department is without core competence. And the level of partnership with outsourcing original equipment manufacturing factories and the limited level of running strategy will be rise up for unique production, even to depend on outsourcing original equipment manufacturing factories completely to make up its core technology or reduce cost.

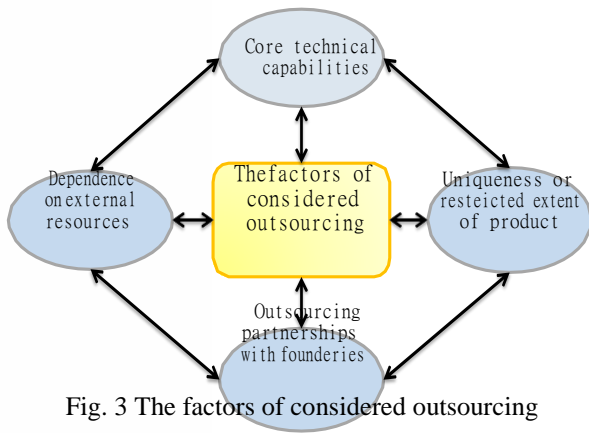


Fig. 3 The factors of considered outsourcing

Otherwise, the enterprise will drop the dependent level in external resource, rise up the level of threshold to build a production and enhance the level in the peculiarity of production if its core technology capability is strong. Then the production is limited in its possibility. The outsourcing strategy is the method to keep the partnership with original equipment manufacturing factories.

However, the manufacturing factories are be concerned the organizations as manpower in intensive and high cost for most enterprise. For this reason, the most brand enterprises would consider how to cooperate with external specialized original equipment manufacturing factories in order to seek the benefits and managed convenience in the lower cost and profits age. Besides, the condition of business production is not only important to consider the outsourcing strategy but also main considered factor to choice outsourcing. So, the risk of technology leak in seeking outsourcing when the production is unique and good expectancy; on the other hand, it will come higher cost in self-made (Figure 4).

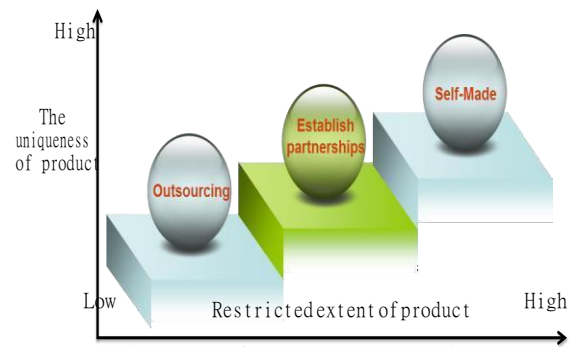


Fig. 4 Self-made and outsourcing

Therefore, to keep the partnership with original equipment manufacturing factories is necessary and consider the original equipment manufacturing factories as 2nd manufacturing factories would provide the high producing flexibility for brand enterprises.

## 5. The original equipment-manufacturing model

The original equipment-manufacturing model is the basic of the development of Taiwan industry. However, along with the change in the imitating of the competitive countries and quick extend in similar operation model such as EMS and CEM; the original equipment manufacturing is changed between cooperation model and operation model. Brand enterprises rely on original equipment manufacturer factories more than before because of the capacity improvement of original equipment manufacturing factories. And original equipment manufacturing suffers the pressure from brand enterprises and competitive environment, and then OEM model in lower value added transfer to ODM model in higher value added; finally transfer to JDM model in more competitive ability by the integration in whole supply chain. Even so, the improvement of technology, production capacity and creativity is the only method to keep competitive in the competitive environment of the original equipment manufacturing industry. Especially in the competitive environment of smartphone industry, the original equipment manufacturing factories cannot grow up by

strong production capacity under the pressure between the cost and profit if the original equipment manufacturing factories only keep OEM order. Therefore, original equipment manufacturing factories must emphasize self-capability in research and development to transfer to ODM model in order to participate in the production design and increase the production decision-making power, moreover transfer to JDM model. And then JDM model is not only able to join the brand enterprises' nucleus production design and development, but also express the opinions about the materials selection and producing process. Further, it can expand the customer service and maintain service in order to increase the original equipment manufacturing factories' value added and competitiveness. "Fig. 5"

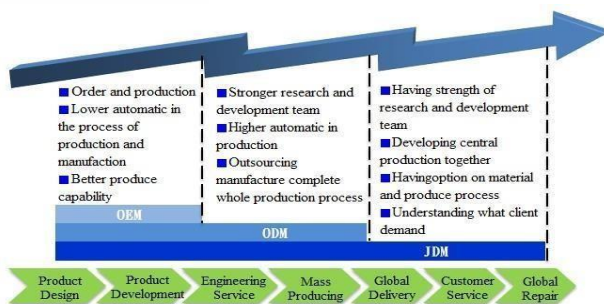


Fig. 5 The original equipment-manufacturing model

By the original equipment-manufacturing model of ODM and OEM, the productive activities only achieve brands' shipping goal; brands would execute by themselves or entrust professional service vendors to enforce the last technology service at customer side.

However, the capability of execution of original equipment manufacturing model usually depends on the level of original equipment-manufacturing factories' technology capability. It is able to offer complete service for brand vendors and the customers who are at the last part in productive activities. The technology capability of original equipment manufacturing of JDM model is not only able to help to design and develop now production with brand vendors, but also find the solution method and avoid same problem again by self-technology capability

in the short time. Furthermore, the original equipment manufacturing of JDM model has not only the competitive advantage but also the capability to integrate the ability of related good vendors that create more value added for brand vendors by self-nucleus technology capability in order to increase self-competitiveness in the industry. Therefore, helping brand vendors' production to design, global shipping out and after-service all include in the service of JDM model that OEM and ODM models cannot compare.

## 6. Conclusion

According to the many research reports, the enterprises seek excellent and specialized original equipment manufacturing factories to improve the production capability, reduce the cost and increase competitive advantage in competitive market in order to focus on itself core technology. However, the outsourcing strategy is not the cure-all, it often fails. For this reason, to ensure the success of outsourcing strategy is planning carefully outsourcing strategy, estimating and managing the original equipment manufacturing factories. This research is the reference for who intend to do service outsourcing industry to study the growth trend of smartphone industry and to cooperate in the development of outsourcing strategy. The conclusions are:

1. Well executing outsourcing strategy, integrating appropriate service outsourcing factories that let brand enterprises would focus on core technology and competitive production in order to improve its enterprise competence.
2. Outsourcing strategy affects enterprises in positive direction to engage in business and achieve its performance.
3. It is necessary in strategic direction to keep partnership with original equipment manufacturing factories. So, the original equipment manufacturing factories is the key factor for business strategy to keep the growth in elasticity.

4. Outsourcing strategy is not only the effective running model to respond fast to market demand but also the essential method to strengthen the enterprises core competence and keep its competitive advantage.

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