

# A Study of Successful IT Outsourcing model for SMB

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**Abstract** - Most of the small and medium industries rather focus on immediate problems and how to properly maintain organizational matters and existing system than the strategic and operational use of Information Technology when they deal with applications and operation of Information System. This study found out that there were few studies on IT outsourcing for small and medium companies in Korea compared to large enterprises' IT outsourcing. Most preceding studies researched the problems of partnership and technical, managerial, and economical success factors for big companies. Small and medium companies have the problems of financial difficulty, organizational scale (40.3%), shortage of manpower for system operation (24.1%), and lack of practical use of managers (8.9%). SMB firms have required support of government for their Informationalization but, we found out amount of companies (41%) not be informed or don't account on government's supporting IT of SMB programs. In addition, Range and Contents of outsourcing, Reputation of Outsourcing vendor, Reliability of maintaining were selected as CSFs of SMB IT outsourcing. While large corporation staff more considered CEO's willing and inner facts of their companies.

**Keywords:** IT Outsourcing, SMB Information Systems. .

## 1. Introduction

At present, most of the small and medium industries rather focus on immediate problems and how to properly maintain organizational matters and existing system than the strategic and operational use of Information Technology when they deal with applications and operation of Information System.

However Information system should be regarded as a strategy to improve their competitiveness. When the small and medium business (SMB) adopt IT infrastructures, they want to outsource it with many reasons. They also requires aid from government.

Thus, it need to research on SMB IT structure's status and government support policy to the SMB companies. This research also suggests the successful IT outsourcing model for SMB based on the survey.

### 1.1 Outsourcing as a strategy

It is difficult to catch up with rapidly changing environment of business and implement proper information systems to corporation organization.

According to Loh and Venkartramn, IT outsourcing is defined as supplying whole of IT infrastructures or certain human or material resources. Korea Nation Computerization Agency defined as a short or long-term consignment contract of all or part of an organization's IT resource to achieve its goals.

On the contrary, there are some different definitions that are focus on the early of outsourcing which was related to IT. The early style contains data processing and operation of data center or entrust management information.

<㉠ 1> Outsourcing types and goals

Type	Goal
Cost Reduce	Outsourcing less important function to reduce cost
Spin-off	For concentrating on a certain part or function of corporation
Network	For obtaining synergy effect with partner companies.
Core Competency	Improve corporation's core competency by outsourcing competition.

## 2. Precedent Researches

Middle of 1980's, there were many companies went outsourcing after EASTMAN KODAK case, what we call Kodak's effect. Determinant and influence factors were main topics from late of 80's to early of 90's. While there are few of study focus on the SMB IT outsourcing. Precedent researches have been lack of study on the SMB IT outsourcing.

### 2.1 Theory Research

#### 1) Transaction cost theory

Williams made the layout of transaction cost theoretically for the first time. The gist of this theory is the transaction performed by internal organization is more efficient than by outsourcing when people are forcing on reducing cost.

Every organization tries to reduce the total amount of producing cost and transaction cost. Because of this, people focus on the structure of organizations to get the

goal efficiently. People even treat the organization structure as a official structure arrangement.

**2) The theory of depending on resources.**

The theory of depending on resources is receiving needed resources and ability from trading relation of other organization in external surrounding to make up for after the Business estimate its own ability

**2.2 The research of Jaenam Lee and Younggil Kim’s cause and causality model for the success of Information system outsourcing**

There are lots of interests between consumers and providers how to form partnership in information system outsourcing.

There is information system partnership model which Henderson(1990) suggested to check out the success elements for outsourcing partnership. There is also Cause and Causality model included with mutual profits, the unity power and trust measure. 225 domestic companies datum are used for this.

Therefore, Partnership was considered as a key elements along with sharing measure, unity measure and trust measure for mutual profits

**2.3 Fitzgerald & Wilcocks’ research**

Fitzgerald & Wilcocks treat contract and partnership as a main topic, and these contract and partnership is one of important elements.

Picture1 shows whether the clearness of contract and consumers’ demanding details are possible enough to understand or not. Also that shows the positions of outsourcing which can be successful outsourcing or dangerous and non efficient outsourcing.

**2.4 Grover, Cheon & Teng’ research**

Grover, Cheon & Teng(1996) focus on service quality and partnership with researching the outsourcing of various information system function and the relation of that outcome. They emphasis service quality of outsourcing vendor and it also expedites relations between information systems functions and output of outsourcing which are CSF of outsourcing project. Their study says the strong partnership brings successful outsourcing.

**2.5 Loh & Venkatraman’s research**

Based on the preceding research, Loh & Venkatraman established a synthetic study model of all factors that effect on preceding model and proved this model practically.

Through the survey on the fortune 500, a hypothesis which the profit from the out-sourcing(technology, business) can effect on outsourcing is adopted, and a hypothesis which risk(control, opportunity) can effect on outsourcing and failure is also adopted. And another hypothesis which degree and outcome of the outsourcing

is controlled by cost-structure is adopted. If a company has expensive cost-structure, it double-checks its physical substructure for increase of managing effectiveness, and it selects outsourcing as a alternative to reduce the cost of IT technology.

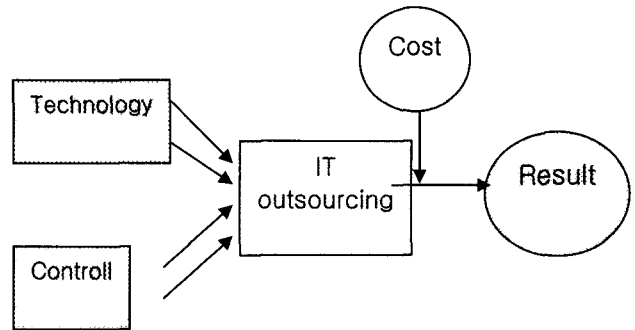


Figure 1 Model of benefit and risk of outsourcing <Loh, Venkatraman>

**2.6 Kim Min-soo and Oh Sung-tak’s research**

In the research of decision-making factors for information system outsourcing, they sent survey researches to 200 listing companies randomly and received 180 survey researches. Through the survey, they proved how business condition and IT condition effect on outsourcing decision. From the four hypothesizes 1) the side of strategic importance of IT 2) the side of company condition 3) the side of human resource 4) organization scale 2) and 4) was verified as meaning factor.

So far, preceding IT outsourcing researches focused on only big enterprises. Results of the studies are following.

table 2 result of the studies on enterprise IT outsourcing

Researcher	Main topic and result
cheon (1992)	Moderating effect of service quality and partnership
Fitzgerald & Wilcocks (1994)	Contract and partnership
Loh & Venkatraman (1995)	Importance of Cost
Grover, Cheon & Teng (1996)	Importance of service quality and partnership
Juon Young-soo (1998)	Partnership and Asset
Yi Jae-nam & Kim young-gul (1999)	Partnership as a critical success factor
Cheon Myung-jung (1999)	correlation between services quality and result.
Shon (2000)	Interaction of scale of organization between outsourcing result and IT outsourcing
Han & Lee (2002)	Influence of appropriateness on the outsourcing
Han Young-chun (2003)	Decision-making variable of IT sourcing
Kim Min-soo & Oh Sung-tak (2003)	Importance of skilled staff on the IT outsourcing

### 2.7 Condition of SMB IT outsourcing

IT-outsourcing for SMB is usually supported by government because of its organizational condition. There is almost 10 informationalization for SMB business which underway by the governmental department. There are 3 businesses that are controlled by Ministry of Commerce, Industry and Energy( supporting informationalization for thirty-thousand SMB, *Construction of the digital Industry-Complex and Supporting B2B*, IT education and training), 3 businesses are controlled by Ministry of Information and Communication( Diffusion of SAP for each types of businesses, networking for small companies, Supporting for IT equipment purchase), 3 businesses are controlled by SMB Administration( Digitalization of manufacturing spot, IT innovation consortium, SMB informationalization incubator), and some more businesses for tax support. The budget of these department related to IT support business comes up to about 150 billion won. According to the research of Korea Federation of Small and Medium Business, 63.1% of the companies answered 'don't know at all or don't know well' about these governmental IT business, and 24.9% answered 'know a little bit'. Meanwhile, just 10% answered 'know well' for this question. 66% answered 'don't use it' while 34.0% answered 'do use it' for the question about practical use of IT support business. The reason they don't use it was 'organizational scale (40.3%), shortage of manpower for system operation (24.1%), and lack of practical use of

managers (8.9%). Just 18.2% answered 'It's very useful', 30.8% answered 'not useful', and 51.0% answered 'It's just normal'. On the other hand, It was found out that there is more usefulness in medium business than small business.

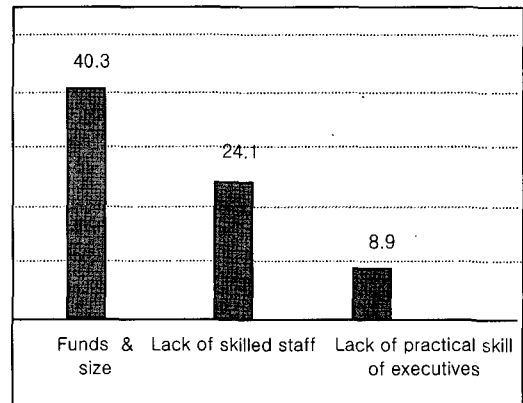


Figure 2 Reason not using information systems of SMB 2003 , <http://www.kfsb.or.kr/>

### 3. Characteristics of SMB IT outsourcing

This study surveyed CSF of IT outsourcing, need of government support for outsourcing, CEOs and staff of 32 small and medium companies. Surprisingly, still many companies CEO and staffs were not informed well government supporting program. SMB's CEO and staff are still lack of awareness of the government support program similarly 2003's survey. It shows government policy to SMB IT infrastructure need to be changed.

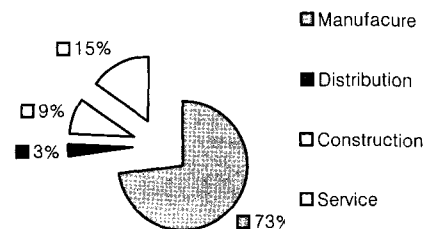


Figure 3 Ratio of surveyed companies type

We surveyed 32 SMB firms including 24 of manufacturing companies, 5 of service companies, 3 of construction companies and a single distribution company.

21 companies of them are didn't participated in government support program for informatization of SMB.

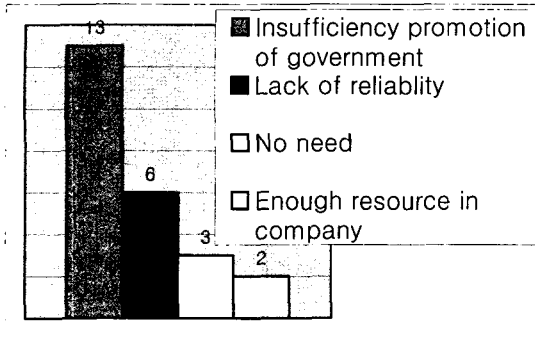


figure 4 Reason of not participating in the government support program for SMB informatization

For reasons of IT outsourcing were financial problem and lack of workforce were selected. When they chose outsourcing vendor, they consider reliability of vendor, feasibility and contents, cost and skill of vendor in order. Meanwhile as CSF, feasibility of outsourcing range and functions, reliability of outsourcing vendor, guarantee of support and maintain and technology or skill of outsourcing vendor were selected. It showed SMB staffs stressed not inner factors but out factors more for IT outsourcing.

On the contrary, big enterprise staffs considered inner fact like CEO's will and scale of organization.

table 3 CSF of SMB IT outsourcing

Rank	CSF
1	Feasibility of outsourcing range and functions
2	Reliability of outsourcing vendor
3	Guarantee of support and maintain
4	Technology or skill of outsourcing vendor

#### 4. Conclusion

With comparing the characteristic of outsourcing between big enterprise and SMB, we found out CSF of SMB IT outsourcing. The CSF of SMB IT outsourcings were different from big enterprises case. Feasibility of outsourcing range and functions, reliability of outsourcing vendor, guarantee of support and maintain and technology or skill of outsourcing vendor were selected while CEO's will and interest, inner factors such as scale of company and strong partnership were selected as the big enterprises'. For SMB case inner factors were less important. In addition, SMB staffs strongly need government support for their implementation IT infrastructures. However many SMB

companies still away from government support programs. In further study, government support program for SMB IT outsourcing should be considered to solve those SMB companies' problems.

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