

중소기업 인터넷마케팅 도입 영향요인에 관한 연구

원동준*, 조형래**

요약

본 연구는 국내 중소기업을 대상으로 인터넷마케팅의 전략적 고려와 도입의도 형성에 관여하는 요인을 파악하기 위한 목적으로 진행되었다. 혁신확산이론과 선행연구에 대한 이론적 고찰을 통하여 변수의 선정에 거쳤으며, 각 변수의 영향력을 확인하기 위한 목적으로 실증적 분석을 실시하였다. 설문조사를 통해 최종적으로 135개 기업들의 자료가 확보되었고 이들 자료들이 실증분석에 사용되었다. 실증분석 결과 경쟁강도, 거래처의존도, 인터넷마케팅 지식수준, 인터넷마케팅 경험수준은 두 개의 종속변수인 인터넷마케팅 전략적 고려 및 도입의도에 모두 유의한 영향을 미쳤으며, 학습몰입은 인터넷마케팅 전략적 고려에만 부의 영향력을, 환경동태성은 인터넷마케팅 도입의도에만 부의 유의한 영향을 미치는 것이 확인되었다. 실증분석을 종합적으로 본 결과 현재의 중소기업들은 치열한 경쟁을 완화할 수 있는 수단으로 인터넷마케팅 도입을 고려하며, 인터넷마케팅의 지식이나 경험 수준 등이 중요한 영향요인으로 나타남으로서 사전적으로 그런 지식과 경험을 가진 기업들이 그 효과성에 대한 인식이나 접근성이 더 높은 것으로 해석된다. 인터넷마케팅 지식과 경험 수준이 모든 종속변수에 매우 유의한 관련성을 보이는 것으로 나타나서 사후적으로 세부적인 인터넷마케팅 각 수단들의 지식이나 경험 수준과 종속변수들간의 관련성을 상관분석에 의해 더 심도있게 분석하고 그에 따른 결과들도 논의하였다. 본 연구는 종합적으로 인터넷마케팅 도입에 영향을 주는 변수들을 파악하고자 하였다는 점에서 가장 기본적인 의의가 있으며, 좀 더 실무적으로 의미 있는 연구방법 등을 통해 시사점을 얻고자 하였다는 점에서 의미를 찾을 수 있었다.

키워드 : 인터넷마케팅 도입, 환경동태성, 경쟁강도, 거래처의존도, 인터넷마케팅 지식 및 인터넷마케팅 경험

A Study on the Factors Influencing SMEs' internet marketing Adoption

Dongjun Won*, Hyungrae Jo**

Abstract

This study examines the key factors which influence the strategic consideration and intention of adoption of internet marketing of small-and-medium sized companies, based on theoretical consideration of innovation diffusion theory and previous studies related. The result of analysis shows that the degree of market competitiveness, customer dependency, the level of internet marketing knowledge and experience have significant effects on both of strategic consideration and adoption intention for internet marketing. Also, learning commitment has negative influence on strategic consideration only, while environmental dynamism does on adoption intention. Comprehensively, the findings implies that firms consider selection of internet marketing to reduce the severity of competitiveness and that firms which has more knowledge or experience about

internet marketing seems to consider selection of internet marketing through the perception of the effects of internet marketing or possible access to internet marketing. Based on the findings that the level of internet marketing knowledge and experience have much significant effects on both of strategic consideration.

Keywords : internet marketing adoption, environmental dynamism, competitive intensity, customer dependency, internet marketing knowledge and internet marketing experience

* Corresponding Author : Hyungrae Jo

1. Background and Purpose of the Study

Overall marketing activities that are carried out within the online environment are called internet marketing or online marketing. The effectiveness of internet marketing has been proven by a variety of cases and studies, and now it has achieved wide recognition as an innovative means to maintain a competitive advantage, especially for small and medium-sized enterprises(SMEs) in Korea. Internet marketing can be utilized for any company either to create new opportunities or to overcome crisis situations.

However a lot of SMEs are still not aware of the usefulness of internet marketing and its adoption and utilization is not widespread. Yet the costs for internet marketing are very low, and depending on the type of ad, it can even be totally free. Considering this, the hindrance of internet marketing adoption among SMEs might be caused by a variety of factors besides their resource constraints. Thus, it is significant to find key influential factors on internet marketing adoption among SMEs.

The concept of internet marketing includes not only websites but also online media, ad products and online environment. This indicates a more holistic and comprehensive approach is necessary to understand the situation SMEs are facing.

This study will find out what the influential

factors on internet marketing intention and adoption and will weigh up the importance of each factor, to derive key implications which contributes SMEs' internet marketing adoption, theoretically and practically.

2. Theoretical Background

2.1 Outline of Internet Marketing

'internet marketing', also known as 'online marketing', 'digital marketing', 'cyber marketing' or 'virtual marketing' (H. Bang, 2001) means a series of promotional activities to publicize company products or services with Internet technology and online media. Online media has a lot of advantages when it comes to enabling two-way communication in real-time between information providers and recipients, with no constraints on time or space. The key advantages to internet marketing are: 1) Lower costs, 2) The ability to measure performance easier, 3) More specific delivery of ads to consumer target, 4) A wider target range to deliver ads, and 5) more flexibility with ad control. The main ad types and assets for internet marketing can be categorized into: 1) Official website, 2) Banner ad, 3) Paid search(Keyword search ad), 4) Blog ad, 5) Social media ad, 6) Video ad, 7) Email ad, 8) Mobile ad, 9) Storefront ad, and 10) Promotional press release.

2.2 Influential Factors on Internet Marketing Adoption

The adoption of new media as well as internet marketing can be regarded as an acceptance of innovative technology which is distinguishable from former techniques. Rogers(2003) theoretically explained this acceptance and diffusion process with The Innovation Diffusion Theory. This model divided the process into five stages: Knowledge - Persuasion - Decision -

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* B&A Consulting, Dept. of Marketing, Deputy General Manager

TEL: +82-2-10-9407-3447,

email: wdj1018@gmail.com

* Gachon University, Dept. of Business Administration

TEL: +82-31-750-5180,

email: hyrjo@gachon.ac.kr

Implementation - Confirmation. During the Knowledge and Persuasion stage, the company lacks information regarding the innovation, but gradually becomes interested in it and then starts to seek related information actively. After that, the company considers practical adoption of the innovation based on the collected information. To recognize the existence of the innovative technology and to seek related information, the company should have a learning orientation so they can comprehend its true value as well as the pros and cons. Learning orientations are especially important to companies in dynamically changing environments because extensive knowledge and in-depth understanding which are retained by learning can effectively reduce the environmental uncertainty they are confront with. Thus, there is a high probability that learning orientations, environmental dynamism and internet marketing related knowledge are closely linked with internet marketing adoption.

Additionally, there are a few previous researches regarding SMEs' internet marketing adoption. Shin et al.(2004)'s study considered seven factors which may affect Korean SMEs' adoption intention for internet marketing: Internet suitability of products, constraints of marketing resource, knowledge about Internet, brand/product reputation, dependency on customers, information level of industry, and competitive intensity. This study empirically proved all these factors except brand/product reputation and competitive intensity had a significant influence on internet marketing adoption. Also, Kim(2007) conducted a study regarding successful factors of Internet export marketing to find out what factors affected the business result after internet marketing adoption. This study considered nine factors: informatization level, competitive intensity, CEO attitude, consumer orientation, marketing capability, product features, internationalization

features, web investment level, and learning experience. All factors except competitive intensity had influence on the business result of the subject companies, which means these factors may influence their intention of internet marketing adoption later on. In both of the studies, competitive intensity has been proven to not have a significant influence on the dependent variables, but this results could vary depending on the characteristics of the companies, industries, or timing of research. Internet knowledge and informatization level, however, won't be considered in this study. These factors aren't apposite to current trends because high-speed internet and ICT have already been generalized in most SMEs these days.

As a whole, this study will consider six variables as factors affecting the intention of internet marketing adoption: learning orientation, environmental dynamism, competitive intensity, customer dependency, organizational stability, internet marketing knowledge and experience.

2.2.1: Learning Orientation

Learning orientation represents how much a company creates or utilizes a knowledge which is valuable and useful, in order to strengthen its competitive advantage. The concept of learning orientation also includes changes in consumer needs or market trends, acquisition and sharing of information related to competitors' activities, and technological development to produce competitive products (Roger et al., 2002). Roger et al.(2001) suggested that active learning can increase innovativeness in a company by three reasons. First, innovations enable companies to possess more advanced techniques. Second, knowledge and capability to understand or foresee consumer needs lowers the risk of missing business opportunities in emerging markets. And third, organizational learning increases

innovativeness in companies. This indicates that the more learning orientation of a company, the more possibility for that company to adopt innovative technologies such as internet marketing. Erlend(2012) considered four variables: commitment to learning, shared vision, open-mindedness, and intra-organizational knowledge sharing as major influential factors for learning orientation. The first three variables are based on Sinkula et al.(1997)'s study, and later intra-organizational knowledge sharing was added and considered as well in Roger et al.(2001)'s study.

2.2.2: Environmental Dynamism

Environmental dynamism represents how many environmental factors near a company change. A change of environmental factors means that variances related to company results increases, and this means the uncertainty about the future increases as well (Lee, 2005). Consequently, it is likely that an increase of environmental dynamism causes more uncertainty and risks for a company. Environmental dynamism is closely related to learning orientation. The company staffs' perception regarding environmental dynamism stimulates their learning orientation, and this plays a role as a moderator which is correlated with the company results (Shin and Kim, 2010).

In Kwon et al.(2004)'s study regarding correlation between environmental dynamism, market orientation, innovation orientation, and company results, it has empirically proven that environmental dynamism have a significant effect on adoption of innovations. Basically, an innovation is a reaction against changes in the environment, so a company could have more innovations as the environmental dynamism increases. As a result, it is likely that a company experiencing frequent or severe changes in the environment would consider an

adoption of innovations like internet marketing.

2.2.3: Competitive Intensity

Competitive intensity represents how the threat of losing competitive advantages would be inflicted on a company. A company would lag behind if its major competitors gain practical advantages by adoption of innovations, and this concern causes competitive intensity that the company perceives (Abrahamson and Rosenkopf, 1993). Shin et al.(2004)'s study has proven that competitive intensity didn't affect internet marketing intention, suggesting internet marketing cannot be regarded as an innovation anymore, considering the recent trend of the Internet already being generalized.

Xiaolin et al.(2011)'s study regarding adoption and management of Internet sales channels, however, has empirically proven that competitive intensity indirectly affected adoption intention of Internet sales channels through a parameter, 'perceived relative advantages.' This variable means perceived benefits from replacing traditional technologies with newer and innovative ones, and in an economic standpoint, it can be expressed by: reduction of cost, increase of sales, reduction of inconvenience, and saving of time or labor (Rogers, 2003). The adoption intention of Internet sales channels, the dependent variable of this study, includes creation and management of corporation websites which is a major part of internet marketing. Consequently, it would be valid to think this study is mainly about intention of internet marketing adoption as well.

2.2.4: Customer Dependency

Compared to large corporations, SMEs are often restricted by resource constraints, vulnerable to changes of external environment, and have difficulties in retaining stable sales channels. Their lack of bargaining power

increases dependency on their retaining customers, and this causes a lot of constraints on marketing activities (Shin et al., 2004). 28% of Korean SMEs have problems with finding a new market or customers (Lee et al., 2009), and even if so, they often become dependent on large corporations or major customers due to a lack of bargaining power. To overcome this situation, SMEs would consider internet marketing (Shin et al., 2004).

internet marketing can be utilized to not only alleviate the problem but create new business opportunities and more profits. Discovering new sales channels via the Internet has no constraint on time or space, and also costs for website creation and management are relatively lower than maintaining offline sales network. Even if dependency on major customers is intense due to characteristics of a company or its field, internet marketing could be usefully utilized (Hong et al., 2002).

2.2.5: Organizational Stability

Utterback (1974) mentioned that a decision on innovation adoption is significantly affected by its cost or the resource capacity of the company to make up any loss from a failure of the adoption. Utterback also suggested that there is no significant correlation between company sizes and the number of innovations they have, but Shin et al.(2004)'s study has empirically proven that a company with resource constrains considers internet marketing adoption more to overcome the difficulties. 'Resource' includes all forms of resources such as material resource, human resource, or information resource. This indicates that the chronic resource constraints of SMEs may affect their adoption of innovative techniques like internet marketing.

Sylvie (2007)'s study has empirically proven that larger companies tend to be more innovative compared to smaller ones. It is

likely that larger companies have more patents and cutting-edge techniques and products, and profits gained by these advantages will create favorable conditions for creation and adoption of new technology. Companies with good profitability generally reinvest a part of their profits to maintain competitive advantages in the market, consistently.

From this point of view, it is likely that a company with a more stable management status and greater profitability would positively consider adoption of innovative techniques, and on the contrary, a company which is unstable and has less profitability would be passive and defensive to take any innovation.

2.2.6: internet marketing Knowledge and Experience

Cragg and King (1993) mentioned resource constraints and lack of technological knowledge as two major factors hindering information technology development of SMEs. A knowledge accumulated through experience is necessary to adopt and utilize new technology effectively, and this experiential knowledge can be acquired by learning useful information which is based on practical experiences (Kolb, 1984). Actual investment of money and manpower is required, however, to utilize and experience innovative techniques like internet marketing in reality. The need of this investment means a risk taking in terms of business management, so it is likely an uncertainty and a perceived risk would increase if the company lacks knowledge and experience related to internet marketing. But if the company has a rich internet marketing experience, it is likely that a variety of cases, knowledge, and know-how to improve its business performance would increase. Consequently, intention of internet marketing adoption would increase in proportion to knowledge and experience regarding internet

marketing.

3. Design of the Research

3.1 Research Model

Based on the description above, the study model could be designed like (Figure 3-1). The independent variables consist of nine factors, including the three sub variables of learning orientation and the two sub variables of internet marketing knowledge: commitment to learning (H1), shared vision (H2), open-mindedness (H3), and environmental dynamism (H4), competitive intensity (H5), customer dependency (H6), organizational stability (H7), internet marketing knowledge (H8), and internet marketing experience (H9). This study is designed to identify influences of each independent variable on the dependent variables: strategic consideration of IM(internet marketing) adoption and intention of IM adoption. ‘Strategic consideration of IM adoption’ means the degree of theoretical consideration to adopt and utilize internet marketing, while ‘intention of IM adoption’ means the degree of actual intention to practically adopt internet marketing, and

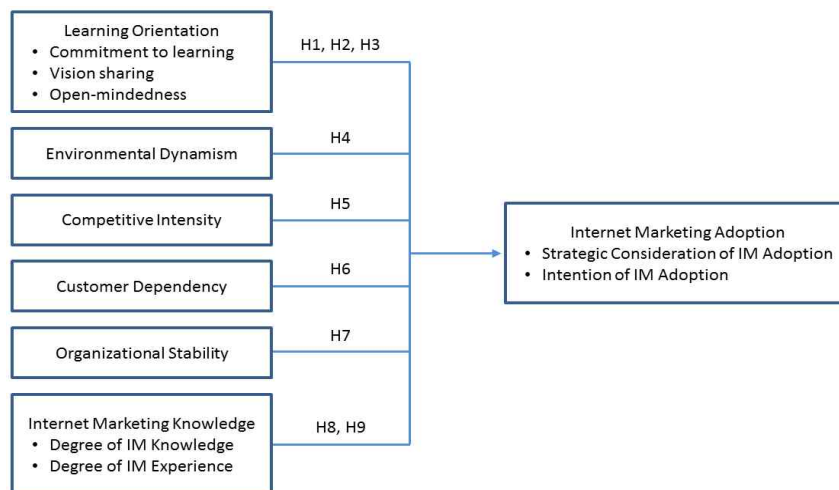
followed after strategic consideration of internet marketing.

3.2 Research Hypothesis

3.2.1: Learning Orientation

Erlend (2012) carried out a study targeting traditional manufacturing firms, to find an influence of learning orientation on their organizational innovativeness and financial results. This study has empirically proven that learning orientation is positively correlated with organizational innovativeness, and organizational innovativeness positively contributes to financial results. If a company 1) emphasizes the importance of learning as a solution to sustain and win competition, 2) shares visions of the company to be accomplished by learning, 3) liberally accepts a variety of opinions and knowledge of employees, internet marketing would be actively adopted and its usefulness would be clearly perceived as well.

On the other hand, if the company 1) underestimates or ignores the importance of learning, 2) shares no vision or has vague ones to accomplish, or 3) fails to set up an atmosphere for learning and sharing



(Figure 1) Research Model

knowledge, intention of internet marketing adoption would be deteriorated.

H1a: Commitment to learning is positively correlated with strategic consideration of IM adoption.

H2a: Shared vision is positively correlated with strategic consideration of IM adoption.

H3a: Open-mindedness is positively correlated with strategic consideration of IM adoption.

H1b: Commitment to learning is positively correlated with intention of IM adoption.

H2b: Shared vision is positively correlated with intention of IM adoption.

H3b: Open-mindedness is positively correlated with intention of IM adoption.

3.2.2: Environmental Dynamism

A company in rapidly changing circumstances needs consistent market researches as well as corresponding countermeasures to reduce its uncertainty.. In many cases, it is necessary to consider both the inbound and outbound markets to understand market trends properly. But this activity requires not only research experts and professional knowledge but also extra expenditures (Hamill, 1997), which could be a burden to SMEs suffering from chronic resource constraints.

There is no constraint of time or space on internet marketing, however, and it allows a company to get immediate feedback from any consumer worldwide, as long as they are connected to the Internet. Also, a lot of insights extracted from big data which is aggregated with elaborate measurement tools could be usefully utilized in business. Thus, it is likely that a company in a dynamically changing environment considers internet marketing to catch consumer needs and to react accordingly.

H4a: Environmental dynamism is positively correlated with strategic consideration of IM

adoption.

H4b: Environmental dynamism is positively correlated with intention of IM adoption.

3.2.3: Competitive Intensity

Competition at a high level means the pressure or threat from external environment is intense. A company under intense competition considers every possible means like internet marketing, to maintain its competitiveness and sustainability. It is likely that a company won't perceive relative advantages of internet marketing if competition level is low, but if the level gets higher, it will actively consider internet marketing as a solution to maintain competitive advantages (Xiaolin et al, 2011). The ways how competitive intensity is perceived by companies could vary, but once these are regarded as a threat to them, it is likely they will consider internet marketing more.

H5a: Competitive intensity is positively correlated with strategic consideration of IM adoption.

H5b: Competitive intensity is positively correlated with intention of IM adoption.

3.2.4: Customer Dependency

Shin et al.(2004)'s study has proven that a company's dependency on customers significantly affect its intention with internet marketing. Shin suggested that SMEs consider and adopt internet marketing to overcome their weak bargaining power and to alleviate their dependency on large companies or major customers. But according to the previous interview with some marketing personnels in firms industry by research team, their opinion was different from that. In reality, if a company's dependency level on its current customers is high, it is likely the company would have difficulties in discovering new

customers. For companies like this, it would be better to maintain a closer relationship with customers than to adopt internet marketing which targets many and unspecified consumers. If a company's dependency level is low, however, it means the company depends on individual consumers more. For companies like this, internet marketing could be very useful when they need to find new customers or anonymous consumers. Consequently, it is likely that customer dependency has a negative significant influence on intention of internet marketing.

H6a: Customer dependency is negatively correlated with strategic consideration of IM adoption.

H6b: Customer dependency is negatively correlated with intention of IM adoption.

3.2.5: Organizational Stability

An adoption of internet marketing could be a new opportunity, as well as a threat at the same time. While entry barriers of internet marketing are low and its costs are reasonable, consistent investment is necessary to practically utilize internet marketing. This would be a huge risk for SMEs due to their resource constraints. When recession continues, most companies cut down their variable expenses like the marketing budget first (Kim and Shin, 2013). This inclination is intensified if a company is smaller, less stable, and has more difficulties with employment. On the contrary, it is likely that a company which is bigger, more financially stabilized, and has a greater profitability would adopt internet marketing more positively as it has more capacities to take any risk caused by expenses for it.

H7a: Organizational stability is positively correlated with strategic consideration of IM adoption.

H7b: Organizational stability is positively correlated with intention of IM adoption.

3.2.6: internet marketing Knowledge and Experience

internet marketing has a variety of advantages such as lower entry barriers, reasonable costs, and easy usability. But companies with poor knowledge regarding internet marketing often underestimate the usefulness of it, and sometimes, they even misunderstand, thinking that they wasted a lot of money as they couldn't get satisfactory results from it. On the contrary, companies with richer knowledge would be more perceptive regarding the usefulness of internet marketing, and have more know-how on how to improve performances of marketing activities. Also, there are companies trying to gain more knowledge through various ways, like creation of learning environment at the company level, recruitment of marketing experts, and so on. Accumulated knowledge effectively lowers entry barriers of internet marketing, which brings more chances to obtain new experiences and knowledge consequently. If not only marketing staffs but also managers and decision makers have a rich knowledge related to internet marketing, its adoption would be considered more positively, and decision making process for it could be done more rationally and effectively.

The uncertainty which is caused by adoption of internet marketing could be effectively alleviated with practical experiences on it. Tailor-made know-how exclusively for a company could be accumulated through these experiential cases, and again it provides insights to improve and optimize the performance of marketing activities. Consequently, it is likely a company with richer experience on internet marketing would consistently utilize it in the present and the future.

H8a: IM knowledge is positively correlated with strategic consideration of IM adoption.

H9a: IM experience is positively correlated

with strategic consideration of IM adoption.

H8b: IM knowledge is positively correlated with intention of IM adoption.

H9b: IM experience is positively correlated with intention of IM adoption.

3.3 Definition and Measurement of Variable

3.3.1 Operational Definition of Variable

Learning orientation refers to the learning climate and the degree of orientation within an organization and is composed of three specific variables including commitment to learning, vision sharing and open-mindedness. Environmental dynamism refers to the degree of changes in an external environment. Competitive intensity refers to the competitive intensity within the industry and in this study it is refined as the degree of a fast supply of a competitive product or service of competitors within the related industry. customer dependency refers to an organization's degree of dependency on its core existing customer and includes the degree of loss due to the loss of the customer and the possibility of replacing the lost customer with a new one. Organizational stability is defined as the scale and stability an organization maintains in the extents of the number of employees and sales. internet marketing knowledge refers to the internet marketing related knowledge and know-how an organization possesses, and in this study it is subdivided into the level of knowledge of and the level of experience in internet marketing.

Dependent variable was composed of 2 factors, which are strategic consideration of internet marketing and intention of adoption. The strategic consideration of internet marketing refers to the degree to which a strategy considering the adoption of internet marketing has been planned in the recent year. The intention of adoption refers to the purpose of the practical adoption of internet

marketing and can be seen as the next step after the strategic consideration.

3.3.2: Measurement Tool and Scale

In the research 7-point Likert-type scale was used to measure each variable. In measuring the variables frequently mentioned in prior studies such as learning orientation(Sinkula et al., 1997), environmental dynamism(Jaworski and Kohli, 1993) and competitive intensity(Shin et al., 2004), the original questionnaire items are used or adding a few questions to verify detailed information. In the case of organizational stability, we used the scale in the study of Sylvie (2007) which mentions that the size (number of employees) of an organization has a significant correlation to the accommodating possibility of an innovation was considered. In addition, questions were added to measure the size of an organization, the financial stability. A measurement tool developed by research team was used for the case of the knowledge level of internet marketing. The research by Shin et al. (2004) used questions such as "I know the internet well" to measure variables for "internet knowledge" but were eliminated in this study considering that the respondent's personal subjectivity might be involved. Instead, a new measurement tool was developed which gathered opinions and advice from six individuals including four internet marketing professionals and two SME business professionals. This measurement tool intended to measure the knowledge level of internet marketing objectively by listing major categories of internet marketing thoroughly and by requesting detailed answers regarding knowledge level and level of experiencing of each individual. Concerning the experience of IM, one may raise the issue that the fact a firm has experience means the company already have introduced IM, so it is not proper to ask experience for the firm already

introduced IM. Rather than that, it is investigating the case that when a company is considering the adoption of IM in the future, whether the firm has similar experience in the past. For dependent variables, internet marketing within a SME were divided into two phases. These two phases are strategic consideration and purpose of adoption. Question items were directly asking the degree of strategic consideration and intention to adopt the internet marketing as a major marketing tool.

4. Result

4.1 Characteristics of Survey and Sample

The survey was conducted on SME with practical experience in internet marketing. Those companies were interviewed before implementing the survey to ensure they are eligible sample for the study. Even though the fundamental law of Korean SME defines SME is the firm that has 300 regular employees or less, this study included firms that possess more than 300 employees, which were regarded as maintaining proper characteristics of SME. 200 questionnaires were distributed to the selected businesses from April to June 2014. After the first distribution, several phone calls were made to encourage responses and 156 responses were received. Out of the 156 received responses, those that were missing answers and were not answered sincerely were eliminated resulting in 135 valid responses. The sample characteristics of the responses are describe on <Table 4-1> and <Table 4-2>. Employees occupying 38.5% of total are also valid respondents to represent their firms as they basically have proper career as well as marketing-related background.

respondents		frequency	percent
gender	male	90	66.7
	female	45	33.3
age	under 29	8	5.9
	30-39	64	47.4
	40-49	39	28.9
	50-59	19	14.1
	over 60	5	3.7
education	under high school	12	8.9
	university/college	86	63.7
	over master degree	37	27.4
job position	CEO	28	20.7
	executive	24	17.8
	division manager	22	16.3
	dept. manager	9	6.7
	employee	52	38.5
sum		135	100

<Table 4-1> Sample Characteristics of Respondents (unit: number of people, %)

responding firms		frequency	percent
year established	before 1980	8	5.9
	1980-1989	7	5.2
	1990-1999	36	26.7
	2000-2009	58	43
	2010 or later	26	19.3
number of employees	less than 10	35	25.9
	10-49	50	37
	50-99	13	9.6
	100-199	20	14.8
	200-300	6	4.4
	more than 300	11	8.1
sum		135	100

<Table 4-2> Sample Characteristics of Responding Firms (unit: place, %)

4.2 Analysis of Descriptive Statistics

The descriptive statistics of the research can be seen on <Table 4-3>. Learning orientation is comprised of commitment to learning, vision sharing and open-mindedness. and commitment to learning scored an average of 4.79 which was significantly higher than the other constructs. An implication can be made that the commitment to learning of the sample businesses are developed to some extent.

Variable		Avg.	SD	Var. Avg.	
independent variable	learning orientation	commitment to learning	5.14	1.34	4.79
			4.74	1.56	
			4.87	1.62	
			4.63	1.69	
			4.9	1.55	
			4.44	1.6	
	learning orientation	vision sharing	4.36	1.28	4.5
			4.46	1.55	
			4.61	1.49	
			4.62	1.52	
			4.3	1.47	
			4.63	1.43	
	learning orientation	open-mindedness	3.81	1.6	4.51
			4.11	1.45	
			4.41	1.47	
			5.23	1.48	
			4.47	1.55	
			5.02	1.6	
	independent variable	environmental dynamism	4.85	1.59	4.66
			4.72	1.44	
			4.41	1.53	
	independent variable	competitive intensity	4.5	1.49	4.96
			5.42	1.64	
	independent variable	customer dependency	5.14	1.57	5.01
			4.87	1.73	
			5.02	1.77	
	independent variable	organizational stability	4.11	1.76	4.33
4.27			1.43		
4.61			1.41		
independent variable	degree of internet marketing knowledge	4.75	1.73	4.14	
		4.28	1.96		
		4.5	1.95		
		4.3	1.98		
		4.01	1.98		
		3.81	1.95		
		3.9	1.97		
		3.98	2.07		
		3.67	2.05		
		4.21	2		
independent variable	degree of internet marketing experience	4.26	2	2.97	
		2.76	2		
		3.25	2.13		
		3.02	2.02		
		2.69	1.85		
		2.45	1.81		
		2.84	1.92		
		2.73	1.95		
		2.51	1.99		
		3.17	2.06		
dependent variable	strategic consideration of IM adoption	4.07	2.01	4.07	
	intention of IM adoption	4.11	1.97	4.11	

<Table 4-3> Descriptive Statistics of Sample (unit: point)

The average score of environmental dynamism was 4.66 and competitive intensity scored an average of 4.96, which means competition of the industry is very high. So we could say that sample firms have been meeting somewhat difficult environment. customer dependency's average was 5.01, scoring the highest out of all the variables

and this shows that the sample firms depend on the customers quite a lot. Because the dependency of existing customers is high, an assumption can be made that these firms find it difficult to gain new customers as well as to negotiate an advantageous price. On the other hand, organizational stability had an average of 4.33. The knowledge level of internet marketing scored an average of 4.14 which shows that the surveyed firms have some knowledge about internet marketing. In terms of advertising types, the most well-known were keyword search advertising, blog advertising and banner advertising, and the respondents' familiarity of these advertising types can be assumed to have played a part. Average experience level of internet marketing was 2.97 which was the lowest and the surveyed firms generally seem to have low experience related to internet marketing and a significant deviation amongst these firms was present.

4.3 Verification of Reliability and Validity

The test to investigate the reliability of measured variables was implemented before hypotheses testing. The result show that all the Cronbach alpha values were higher than 0.7(like commitment to learning(.900), vision sharing(.909), open-mindedness(.785), environmental dynamism(.809), competitive intensity(.808), customer dependency(.902), organizational stability(.767) which means the reliabilities of all variables were secured(see <Table 4-4>. As the next stage, factor analysis was implemented. Exploratory factor analysis was used, which adopted principal component analysis as extraction method and Varimax rotation as rotation method.

independent variable		correlation with whole	cronbach-a (excepted)	cronbach-a
learning orientation	commitment to learning	0.658	0.893	0.900
		0.757	0.878	
		0.693	0.888	
		0.815	0.869	
		0.750	0.880	
	vision sharing	0.706	0.886	0.909
		0.708	0.899	
		0.775	0.889	
		0.752	0.892	
		0.760	0.891	
	open-mindedness	0.730	0.895	0.785
		0.765	0.890	
		0.174	0.714	
		0.397	0.764	
		0.545	0.759	
environmental dynamism	0.619	0.780	0.809	
	0.613	0.782		
	0.747	0.741		
competitive intensity	0.439	0.784	0.808	
	0.439	0.737		
customer dependency	0.803	0.865	0.902	
	0.816	0.850		
	0.802	0.864		
organizational stability	0.647	0.742	0.767	
	0.668	0.718		
	0.510	0.779		

<Table 4-4> Result of Reliability Test

<Table 4-5> shows the result of factor analysis on learning orientation. The result shows that all three constructs were extracted as expected. And for all factor loading score were higher than 0.5, which validates content validity. Communality means how much each variables are explained by extracted factors. Communality of all 18 questionnaire items were over 0.3, so there is no problem to implement successive analysis. Three factors of learning orientation explains 63.71% of total variance, whose eigenvalues are over 1 all. KMO(Keiser-Meyer-Olin) value is 0.911 and satisfies the condition its value should higher than 0.7. The Bartlett's sphericity test shows that p-value is 0.000(<0.05), which means the number of variables and case of sample is adequate to run a factor analysis. Successively exploratory factor analyses on organizational stability, customer dependency, environmental dynamism, competitive intensity were implemented and <Table 4-6> shows the result. And for all factor loading score were

higher than 0.5, so we can conclude all factors were composed properly. And all communality values were over 0.3, so there is no problem to implement successive analysis. All factors explains 63.71% of total variance, whose eigenvalues are over 1 all. KMO(Keiser-Meyer-Olin) value is 0.778 and in the result of Bartlett's sphericity test p-value is 0.000(<0.05).

variable	Q	factor			extrac-tion
		1	2	3	
commitment to learning	1	0.702	0.286	0.073	0.579
	2	0.832	0.179	0.043	0.727
	3	0.805	0.049	0.185	0.684
	4	0.776	0.280	0.281	0.760
	5	0.682	0.350	0.368	0.723
	6	0.738	0.239	0.153	0.625
vision sharing	7	0.394	0.687	0.173	0.657
	8	0.298	0.752	0.237	0.710
	9	0.052	0.837	0.245	0.763
	10	0.144	0.789	0.306	0.737
	11	0.297	0.707	0.247	0.649
	12	0.333	0.728	0.223	0.691
open-mindedness	13	0.216	0.077	0.547	0.322
	14	0.024	0.103	0.700	0.501
	15	0.144	0.327	0.736	0.669
	16	0.240	0.407	0.598	0.581
	17	0.389	0.361	0.629	0.678
	18	0.413	0.285	0.569	0.575
Eigen value		8.420	1.978	1.069	
% variance		46.775	10.992	5.940	
% accumulated		46.775	57.767	63.706	
KMO and Bartlett test		Kaiser-Meyer-Olkin value: .911			
		Bartlett spherical test: .000			

<Table 4-5> The result of factor analysis on learning orientation

variable	Q	factor				extrac-tion
		1	2	3	4	
environmental dynamism	19	0.270	0.626	-0.078	0.486	0.707
	20	0.015	0.874	0.121	-0.023	0.779
	21	0.183	0.857	0.034	0.153	0.793
degree of competitiveness	22	-0.019	0.265	0.139	0.760	0.668
	23	0.202	0.300	-0.007	0.854	0.859
customer dependency	24	0.886	0.080	0.045	0.195	0.831
	25	0.912	0.048	0.050	0.065	0.841
	26	0.908	0.124	0.007	0.044	0.842
organizational stability	27	0.138	0.060	0.842	-0.102	0.743
	28	0.017	0.045	0.871	-0.121	0.776
	29	-0.063	0.117	0.753	0.251	0.648
Eigen value		3.747	2.130	1.924	1.069	
% variance		34.066	19.362	17.487	6.246	
KMO and Bartlett test		Kaiser-Meyer-Olkin value: .778				
		Bartlett spherical test: .000				

<Table 4-6> The result of factor analysis

4.4 Correlational analysis

<Table 4-7> shows the result of correlational analysis among 11 variables of

this study. In specific, independent variables of them are three factors of learning orientation(commitment to learning, vision sharing, open-mindedness), organizational stability, customer dependency, environmental dynamism, competitive intensity, the level of knowledge in internet marketing(IM knowledge), the degree of experience in internet marketing(IM experience). Dependent variables are strategic consideration of internet marketing(IM strategic consideration), and intention of IM adoption(IM intention). As seen in the table, there are significant relationships among most of variables and so it seems that test of causal relationships among variables is meaningful.

	CL	VS	OM	OS	CD	ED	CI	IMK	IME	SCIM	INIM
CL	1										
VS	.595**	1									
OM	.593**	.696**	1								
OS	.119	.098	.069	1							
CD	.036	-.146	.004	.086	1						
ED	.225**	.216*	.321**	.130	.286**	1					
CI	.340**	.334**	.421**	.113	.255**	.669**	1				
IMK	.114	.191*	.185*	.065	-.003	.152	.193*	1			
IME	.202*	.171*	.134	.195*	-.191*	0	.038	.508**	1		
SCIM	.017	.132	.136	.141	-.236**	.089	.164	.426**	.459**	1	
INIM	.132	.250**	.210*	.092	-.194*	.001	.206*	.369**	.417**	.780**	1

***: p< .01, **:p< .05, *: p< .10

<Table 4-7> Result of correlation analysis

4.5 Result of Hypotheses Testing

4.5.1 Multiple regression analysis on IM strategic consideration

The relationships between IM strategic consideration and independent variables were investigated through multiple regression analysis(see <Table 4-8>). The result shows that commitment to learning(t=-1.724, p=0.087), competitive intensity(t=1.839, p=0.068), customer dependency(t=-2.819, p=0.006), IM knowledge(t=2.742, p=0.007), IM experience(t=3.327, p=0.001) were identified as significant variables. Hence, hypothesis H1a, H5a, H6a, H8a, H9a were accepted and

hypothesis H2a, H3a, H4a, H7a were rejected. As we see the level of influences of each independent variables in terms of beta value, IM experience($\beta=0.302$) is highest among them, and IM knowledge($\beta=0.241$), customer dependency($\beta=-0.230$), competitive intensity($\beta=0.193$), commitment to learning($\beta=-0.169$) were shown high respectively. The fitness of the multiple regression analysis model showed good fit(F=6.497, p=0.000).

DV (SCIM)	unstandardized coeff.		standardized coeff.	t	sig.	VIF	F	adj. R ²	test result
	B	se	β						
CL	-0.267	0.155	-0.169	-1.724*	0.087	1.820	6.497***	0.291	accept
VS	-0.042	0.185	-0.025	-0.230	0.819	2.331			reject
OM	0.164	0.194	0.093	0.845	0.400	2.304			reject
EV	-0.004	0.156	-0.002	-0.024	0.980	1.888			reject
DC	0.293	0.159	0.193	1.839*	0.068	2.085			accept
CD	-0.299	0.106	-0.230	-2.819**	0.006	1.254			accept
OS	0.115	0.122	0.073	0.946	0.346	1.120			reject
IMK	0.292	0.106	0.241	2.742***	0.007	1.454			accept
IME	0.400	0.120	0.302	3.327***	0.001	1.561			accept

***: p< .01, **:p< .05, *: p< .10

<Regression function>

$$SCIM = \alpha + \beta_1 \cdot CL + \beta_2 \cdot VS + \beta_3 \cdot OM + \beta_4 \cdot EV + \beta_5 \cdot DC + \beta_6 \cdot CD + \beta_7 \cdot OS + \beta_8 \cdot IMK + \beta_9 \cdot IME + e$$

<Table 4-8> The result of multiple regression analysis (IM strategic consideration)

4.5.2 Multiple regression analysis on IM intention

The relationships between IM intention and independent variables were investigated through multiple regression analysis(see <Table 4-9>). The result shows that customer dependency(t=-1.673, p=0.097), environmental dynamism(t=-2.121, p=0.036), competitive intensity(t=2.901, p=0.004), IM knowledge(t=1.982, p=0.050), IM experience(t=2.968, p=0.004) were identified as significant variables. Hence, hypothesis H4b, H5b, H6b, H8b, H9b were accepted and hypothesis H1b, H2b, H3b, H7b were rejected. As we see the level of influences of each independent variables in terms of beta value, competitive intensity($\beta=0.314$) is highest

among them, and IM experience($\beta=0.278$), environmental dynamism($\beta=-0.219$), IM knowledge($\beta=0.179$), customer dependency($\beta=-0.141$) were shown high respectively. The fitness of the multiple regression analysis model showed good fit($F=5.358$, $p=0.001$).

DV (INIM)	unstandardized coeff.		standardized coeff.	t	sig.	VIF	F	adj. R ²	test result
	B	se	β						
CL	-0.149	0.156	-0.097	-0.956	0.341	1.820	5.358***	0.245	reject
VS	0.172	0.187	0.105	0.918	0.360	2.331			reject
OM	0.112	0.196	0.065	0.571	0.569	2.304			reject
EV	-0.333	0.157	-0.219	-2.121**	0.036	1.888			accept
DC	0.467	0.161	0.314	2.901***	0.004	2.085			accept
CD	-0.179	0.107	-0.141	-1.673*	0.097	1.254			accept
OS	0.037	0.123	0.024	0.300	0.765	1.120			reject
IMK	0.213	0.108	0.179	1.980**	0.050	1.454			accept
IME	0.361	0.122	0.278	2.968***	0.004	1.561			accept

***: $p < .01$, **: $p < .05$, *: $p < .10$

<Regression function>

$$INIM = \alpha + \beta_1 \cdot CL + \beta_2 \cdot VS + \beta_3 \cdot OM + \beta_4 \cdot EV + \beta_5 \cdot DC + \beta_6 \cdot CD + \beta_7 \cdot OS + \beta_8 \cdot IMK + \beta_9 \cdot IME + \epsilon$$

<Table 4-9> The result of multiple regression analysis (IM intention)

4.5.3 Discussion

When we integrate the result of two multiple regression analysis, we can discuss as follows. Independent variables which have consistently significant impact on dependent variables were competitive intensity(+), customer dependency(-), IM knowledge(+), IM experience(+). So it implies that SMEs consider the adoption of internet marketing to avoid severe competition. And the fact IM knowledge and IM experience show high significance means firms that acknowledge the contents about internet marketing tend to perceive the effectiveness well and access is rather easy than other firms. It needs a discussion about environmental dynamism because its coefficient is minus, so it is opposite direction of the hypothesis. So we assume that firms may think in the way that even if firms turn marketing method to utilize internet, customer's propensity does not

change, so they would meet not so easy situation still and there is no expectancy from changing marketing method. Hence, they tend to act to focus on improving the real marketing or sales capabilities rather than changing the marketing method. But this is only assumption, so this issue needs more research in the future. Learning orientation doesn't show significant relationship between dependent variables. Firms with high level of learning orientation seems perform better than other firms, so we suppose that these firms move closer to IM adoption, but the truth seems different from that. Present situation makes firms hard to survive in the industry, so firms in not so easy environment seem to consider the IM adoption as survival means. But it needs more deep analysis to find out the fact clearly.

4.5.4 In-depth Analysis on IM Knowledge

The result of multiple regression analysis shows that IM knowledge and IM experience are very significant factors to dependent variables consistently. So we have decided to investigate the relationships in detail by reviewing the correlations between specific types of IM and dependent variables.

(1) IM Knowledge

At first correlation analysis between knowledge of all specific types of IM and two dependent variables was implemented and the result is in the <Table 4-10>.

IMK \ DV	official website	banner ad	paid search	blog ad	social media ad	video ad	email ad	mobile ad	store-front ad	p.press release
SCIM	0.420***	0.450***	0.503***	0.425***	0.361***	0.294**	0.233*	0.387***	0.276**	0.261**
INIM	0.396***	0.405***	0.454***	0.358***	0.267**	0.244**	0.191*	0.339***	0.225**	0.253**

*: $p < 0.05$, **: $p < 0.01$, ***: $p < 0.001$

<Table 4-10> Result of Correlation Analysis between IM Knowledge and Dependent Variables

If we see only the significance level, all types of IM shows significant relationship between dependent variables. In specific all specific variables were significant at the 0.05 level. IM types which have rather high correlation coefficient($r > 0.35$) were paid search(keyword search ad), banner, official website(or homepage), blog ad. Mobile ad also shows rather high significance($r = 0.387, 0.339$ respectively). Type with highest coefficients for two dependent variables both was paid search(keyword search ad). Social media ad showed high correlation with IM strategic consideration($r = 0.361, p < 0.001$), but relatively low with IM intention($r = 0.267, p < 0.01$).

(2) IM Experience

At second correlation analysis between experience of all specific types of IM and two dependent variables was implemented and the result is in the <Table 4-11>.

IM DV	official website	banner ad	paid search	blog ad	social media ad	video ad	email ad	mobile ad	store- front ad	p.press release
SCIM	0.404***	0.377***	0.476***	0.502***	0.383***	0.337***	0.218*	0.377***	0.243**	0.209*
INIM	0.440***	0.324***	0.400***	0.419***	0.314***	0.297***	0.216*	0.320***	0.248**	0.227**

*, $p < 0.05$, **, $p < 0.01$, ***, $p < 0.001$

<Table 4-11> Result of Correlation Analysis between IM Experience and Dependent Variables

The result was different from that of IM knowledge. Experience of blog ad showed highest significance level for both of two dependent variables. Other variables which have rather high correlation coefficient($r > 0.35$) were paid search(keyword search ad), official website(or homepage).

Variables which have correlation coefficient over 0.3 were social media ad, banner ad, mobile ad. E-mail showed lowest coefficient, and storefront ad, promotional press release were variables with relatively low relationship.

Variable with lowest relationships between both of two dependent variables was e-mail ad. It implies that the effectiveness of e-mail ad has been perceived low to the firms.

5. Conclusion

internet marketing may be used as good means for the firm which suffers from the lack of resources to overcome the weakness and also good means for the firm which rather perform well to create new opportunities. This study was conducted to make sound basis for SMEs to adopt and use internet marketing by investigating the effects of various factors empirically which are related to the intention of adopting the internet marketing. To achieve the purpose, we reviewed previous literature, set up hypotheses by the review and conducted field survey. By the empirical analysis, variables which have high significance level with intention of internet marketing adoption can be found out. And somewhat of current status of firms and aspects of strategic consideration might be comprehended.

Major meanings of this study are:

(1) Significant variables which have effects on the adopting intention of internet marketing of SMEs were investigated.

(2) We divided the internet marketing adopting stages by two of strategic consideration and intention of adoption. Hence, implications according to the adopting stages might be produced.

(3) The conceptual scope of the internet marketing was reset up in order to reflect the recent situation. In specific the scope was broadened from narrow one like considering only the official website or e-commerce to broad one.

(4) To measure the level of IM knowledge and IM experience objectively, new approach was used which ask the level for all the types

of IM in specific.

Major implications of this study are:

(1) Dependent variables which reflect different adopting stages have somewhat similar meanings, but the analysis result shows that independent variables which have effects on them were different, which means factors affecting each stage are different.

(2) For both of dependent variables, competitive intensity has positive effects and customer dependency has negative ones. This means that firms tend to consider adopting the internet marketing more as competitiveness goes severe. On the other hand, firms with higher customer dependency tend not to seek other marketing means like internet marketing.

(3) It was found out that the knowledge and experience of internet marketing are very important factors that affect the adoption of internet marketing. And also deviations of those variables were quite a high, which means knowledge and experience gap exist among firms. By these result we can suggest that firms should try to enhance the capabilities or encourage employees to learn about various internet marketing methods before introducing internet marketing.

Limitations of this study are (1) the study does not consider the difference of technology and/or characteristics of the industry among firms.

(2) Sample size is rather small considering the generalization of the result.

(3) Though unit of analysis of this research is organization, because the percentage of the rank-and-file worker among respondents somewhat high as 38.5%, there would be limitations not to reflect firms overall status in those cases.

Henceforth we expect more meaningful research result would be produced through refined research efforts.

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원 동 준

2007년: 가천대학교 멀티미디어 학과(학사)
 2014년: 가천대학교 경영대학원 중소기업경영전공(경영학석사)

2008년~2010년: JnJ Interactive Account Executive
 2010년~2012년: Isobar Korea Digital Consultant
 2013년 ~ 현재: B&A Consulting 마케팅팀 팀장
 관심분야: 인터넷마케팅, 온라인마케팅 등



조 형 래

1983년 : 한국과학기술원(공학석사)
 2005년 : 한국과학기술원(공학박사-창업론)

1983년~1988년: 과학기술정책평가연구원
 1988년~현재: 가천대학교 경영학과 교수
 관심분야 : 창업론, 인터넷마케팅, 기술경영 등