

An Empirical Study as to an Effect on Policy Satisfaction of Small and Medium-Sized Firms which got Consulting

Jung Ill Kim^{1*}, Yen Yoo You² and Jeong Ryeol Kim³

^{1,2}Department of Knowledge Service and Consulting, Hansung University, Seoul Korea;
kim033777@naver.com, threey0818@hansung.ac.kr

³Department of Economics, Hansung University, Seoul Korea, jrkim@hansung.ac.kr

Abstract

This study aimed to identify the degree of satisfaction with a Korean government SME consulting programme and consultants to provide data to improve the programme through performance measurement. This study focuses on the SME consulting programme because SMEs face a difficult business environment but lack the resources to pro-actively respond to changes in the business environment. Previous domestic studies on consulting focused mainly on theory, and particularly on large businesses. This study used data from a survey of SMEs involved with the SME consulting programme to determine satisfaction with the programme, the consultants, and the factors influencing the programme's performance. Furthermore, it conducted an in-depth analysis of the influence of these factors and provide directions for future developments by measuring the achievements of the business-consulting programme.

Keywords: Component, Consultant, Consulting, Performance Measurement, Police Satisfaction

1. Introduction

Small and Medium-Sized Enterprises (SMEs) have limited abilities to actively cope with the rapidly changing business environment as they lack the funds and human resources to create strategic management plan, as compared to large companies. SMEs in Korea cannot avoid competing with companies in advanced countries for skill, capital, brands, and so on, in today's global environment. Furthermore, they must adapt to the low wages and plentiful labour available in neighbouring developing countries, such as China, in addition to the growth of and attacks from low price products. In Korea, SMEs overcome poor business environments and have a well-developed support system intended to provide these companies with tools to improve their organizations and ability to create concrete, long-range management plans.

Some policies, such as the "Management Consulting Support Project for SMEs" and "SMEs' Information Orientation Consulting Guidance Work", which began in 1999, aim to assist SMEs. Provided that these policies are used, the companies can receive significant assistance for company innovation through management improvement through government-subsidized management consulting. This study investigates how SMEs have benefitted from the government's consulting support business in 2013 and whether they are satisfied with its consulting and consultants. Additionally, the study evaluates the policy and performance of the government consulting business to suggest improvements based on the data from this research.

Existing research into the local consulting market have focused on theatrical research or trends in general consulting for major companies. There have been few studies

*Author for correspondence

into the impact of consulting for SMEs, and especially in the government's consulting support business. The research model in this study covers responses from SMEs that received consulting services through the "Consulting Support Business for SMEs," regarding their consulting experience, satisfaction, and management. Each of these factors has been analyzed in-depth to measure the performance of the consulting policy, which is very important for SMEs, to propose improvements to these national policy projects.

2. Theoretical Considerations

2.1 Definition of Consulting

Consulting is a set of activities undertaken to assist companies with management issues or to find solutions to current problems.

The International Council of Management Consulting Institutes (ICMCI secretariat in Netherlands) defines consulting as "independent advice for all connected with management for a customer who has management responsibility and the actions of providing consulting." The Institute of Consulting (UK) defines consultants as "independent people with experience or who have studied and analyzed an organization, policy, process, or methodological drawback and suggest an appropriate solution," furthermore, consulting aims to help the people accomplish the solution.

In 1998, The International Labour Organization (ILO) defined consulting work as "work to determine problems to assist managers in achieving an organizational objective, or find and seize a new opportunity. It has administrators who have realized the change after promoting studies and a separate professional advisory service that has supported an organization".

2.2 Attributes of Management Consulting

Consulting is a service wherein service providers with specialized knowledge, experience, or techniques satisfy a customer's individual and professional requests. Typically, the service organization moves to a customer based on their relationship, and the act of acquiring the service is concrete, while the services performed are an intangible activity. Kwang-Hoon and Whang¹ present concrete characteristics of expert services¹.

First, they have strict adherence to the law along with ethical restrictions, and even publicly assume responsibility. There still exists a legal and ethical constraint towards an expert service despite the steady slackening of many constraints in marketing activities. Second, customers have a considerable amount of uncertainty in terms of service quality, which varies by the circumstances in which the customer seeks the service, since they expect personalized services. Before purchase, customers have trouble estimating performance and the characteristics of the service. Additionally, it is difficult to accurately evaluate performance and qualities though the customer still generally purchases and uses the service.

Third, a specialist service provider must also take the role of a sales person. Customers tend to prefer to have a friendship with an expert who works with the customer before they make a purchase.

Fourth, internationalization of services has been accelerating. The unique knowledge of a specialized service corporation and high-quality techniques have the potential to serve transnational corporations, and services can be operated worldwide.

Fifth, there is a lack of study and support for marketing. Professional service providers avoid spending time on marketing, as they cannot bill the hours spent to market their own services to anyone.

Sixth, consulting tends toward a personalized service. A professional service has highly frequent interactions with customers and emphasizes investigating and solving each customer's unique problem.

2.3 Previous Studies into Consulting Results

Kim² formulated a hypothesis to verify whether a company's outcomes are influenced by a characteristic, satisfaction, and use of consulting, whether the use of consulting is affected by satisfaction, whether satisfaction is affected by its characteristics, and whether the characteristics, satisfaction, and use of consulting is affected by a company's features and the characteristics of a consulting company².

The findings indicate that this can be used as an important tool to establish a connection between consulting and the management results, and an analytical model based on a company's measured outcomes. Moreover, it can be important for governments and consulting companies to establish methods to improve or innovate their

Table 1. Summaries of definitions of consulting

Institution	The Definition of a Concept of Management Consulting and Consultants
Institute of Management Consulting Engineers	It is a proposal of a professional service that people who have gone through special training and accumulated their own experience have investigated various problems in management and presented a substantive solution, and so the people have helped the solution impose on time.
Institute of Management Consultants - Australia	Management consulting is something that has guided and given advice for goal setting and carrying business out through a better advanced planning, organization, motivation, communication or utilization of resources. A management consultant is someone who has presented such a management advisory service.
Williams and Woodward (1994)	It is a process of service provision for a client that an inside or outside consultant has filled a requisition of the client.
M. Kubr (1996)	It is a service to solve a problem in management and on business, then find a new opportunity, and utilize the opportunity. It is also a separate professional advisory service to help accomplish a purpose sought by the organization of an executive through broadening a chance for learning and implement a change.
Marco Iansiti, Roy Levien (2004)	Deployed consultants who have had knowledge of management and experience for clients fling a worthy query and then propose the answer and give advice. Moreover, to solve the present issue, they build up a network and get paid for its compensation through the superintendence of an organizational change, by extension, consulting is social responsibility activities to create and share knowledge creation.
Kwang-Yong Kim et al.(2009)	Someone who has had technical knowledge and experience clears up and analyses a problem in management from an objective and separate position to propose it for imposing the solution on time. Consulting is an expert advisory service to support achievement of goal sought by an organization.
Ik-Seong Kim (2009)	Consulting is a service that someone who has had sole knowledge or information, professionalism and so on in a particular field has given a client a counsel with a compensation for it.

their services. In addition, this can provide a government with an important source of data that offers business consulting to expand its support for business consulting after proving the validity of the initial support service.

Jeon³ presented a study of how consulting performance factors affect an evaluation score and a measure for raising performance after analyzing performance factors as correlated with a completed evaluation score³. The variables studied were the deposit for consulting, average price for a consultant, period of consulting, the number of placed consultants, the number of company employees, and the number of companies obtaining consulting services from an affiliated consulting company as performance factors. The most influential factors were the average price for a consultant and period of consulting, while the last four factors had no direct effect on the completed score. Thus, the consultant's abilities and the consulting period affect the objective assessment.

The variables expected to affect success factors of consulting are the form of enterprises, size of business, the number of employees, gender of an executive, talent, an intellectual standard, a selected score, satisfaction score, and sales, there could also be other factors related to the

environment, and internal and external resources. Furthermore, consulting can succeed or fail based on the consultant's qualifications, personal acquisition, knowledge, skills, methods, and many other variables related to ethical consciousness, the morality of executives, complexity of the organization of the relevant companies, and the level of consulting expertise.

2.4 Satisfaction with Consulting

Nam⁴ found that companies using consulting services to improve a process were more influenced by their satisfaction with the service and business performance than those who had not, and this tended to spread into different fields that have conducted innovative activity in a specific area. Satisfaction with consulting was significantly correlated with an innovation outcome⁴.

Moon⁵ found that the degree of SME participation had an effect on the use of consulting and the capacity of a consulting organization, and the consultant's ability influenced SMEs' satisfaction with and use of consulting services⁵. Kim, No, Lee, and Do⁶ found that the relationship among company-related factors (form of enterprise,

size of business, number of employees, and sales) and properties of company executives (gender, talent, educational standards) that imposed a coupon system significantly impacted the satisfaction score, which influenced the success of a consulting project⁶, followed closely by the number of employees⁶.

In 2011, Choi found that the satisfaction of companies' purchasing consulting services and imposing a coupon system were affected by client company factors and is directly connected to elements of commitment, output, and factors related to the consulting organisation⁷. Satisfaction with consulting revolves around the consulting organization and the client company, as there are only a few correlations with government-related factors. The client company's satisfaction relates to the degree that the consulting addressed the client's needs and expectations in terms of understanding their requirements and goals, and creating an appropriate proposal. The most satisfied companies were those that received a full explanation after understanding the outcome, trusted in the consultant's professionalism, sincerity, and efforts; the capacity of the consulting organization, and used a methodology and performance system including follow-up management.

According to Jeong⁸, larger companies have a habitual dependence compared to small companies, and the longer the duration, the bigger the impact on each consulting engagement⁸. Additionally, accounting and production management tend to rely more heavily on consulting services than business management and marketing, though the study contains no findings related to relationships with satisfaction. Sim⁹ found⁹ that satisfaction with outcome through consulting is related to the satisfaction with consulting results, results related to cost reductions through management consulting related to satisfaction, upskilling of customer care through management consulting with end-user satisfaction, and workplace environmental improvement through management consulting that positively impacts internal management. Consulting for SMEs is usually short-term. According to an analysis of the consulting field, a system and an area of confirmation, improvement in the field by rank, follows from product management, though there has been no change in consulting companies and, it has been thought that consulting has ordinary effects rather than for maintenance. It illustrates that satisfaction from short-term consulting was higher than for long-term consulting, depending on the form of consulting.

3. Study Design

3.1 Model and Research Hypothesis

3.1.1 Model

A structural equation model is an improved analytical tool using factor analysis and regression analysis to analyze a causal relationship. In particular, it can assist in clarifying the degree of direct and indirect contributions within a theoretical framework. The following are this study's hypotheses.

First, the degree of action has a significant influence on satisfaction with consulting/a consultant.

Second, satisfaction with consulting has a significant influence on business performance and reutilization.

Third, business performance and reutilization have a significant influence on policy satisfaction.

This study uses a model based on these hypotheses. Analysis of a structural equation model is carried out to verify the initial theoretical hypothesis. All channels are analyzed using AMOS of SPSS, and parameter values are presumed with a maximum likelihood function. A researcher assesses the model after an initial run with AMOS. A chi-squared value (χ^2), Goodness of Fit Index (GFI), Adjusted Goodness of Fit Index (AGFI) and Root Mean-Square Residual (RMR) are used to estimate the model. GFI and AGFI values greater than 0.90 determine that a model has a good fit. RMR less than 0.05 determine that the model is appropriate. This study aims to find a suitable model through evaluation indexes of a model because the sample size affects the chi-squared value (χ^2), though this can be calculated under any circumstance.

3.1.2 Model

Figure 1 shows the initial research model. All path-coefficients of the initial model are significant, though this model does not fully explain the data. F6 (policy satisfaction) influences Q11 (intention to rehire consultants and consulting firms) through a survey of normalized residuals. Additionally, there is covariance between E1 and E5, and between E6 and E8. The final model was set after adding this method. According to the estimated result, the model satisfies goodness of fit, with GFI and AGFI values of 0.915 and 0.897, respectively for the initial model illustrated in Figure 1. Furthermore, the model has appropriate goodness of fit, with an RMR index value of 0.040.

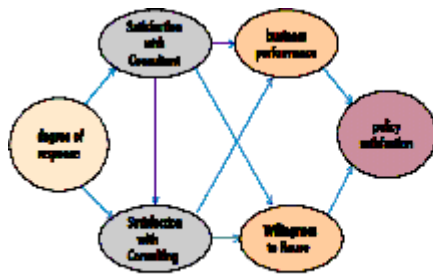


Figure 1. Research model.

3.1.3 Goodness of Fit

Earlier revisions of the model assuming that a plan, production, and distribution influence consumption showed poor goodness of fit. A modified model that excluded the non-validated path-coefficients and added a route related to standardized residuals showed some improvement, though still failed to satisfy goodness of fit. The final model added path coefficients. Table 2 shows a comparison of the goodness of fit for each model.

Table 2. Summary of goodness of fit for each model

Model	χ^2	df	P	GFI	AGFI	RMR	RMSEA
Final Model	427.920	197	0.000	0.915	0.891	0.040	0.053

After examining the goodness of fit of models of the study, the final model met the minimum GFI, AGFI, and RMR index values. Additionally, the final model has a RMSEA under 0.6.

3.2 Structural Equation Model Factor Analysis

Table 3 shows the significance of the path-coefficients in the structural equation model, according to which the degree of action had an influence on satisfaction with consulting/consultants, which in turn influences on business performance and intention to reuse the service. However, consulting satisfaction had an effect on business performance, whereas it did not impact reutilization. Additionally, business performance had no effect on policy satisfaction, which was rather influenced by reutilization.

4.1 Research Design and Analytical Results

4.1.1 Materials and Data Analysis Method

Since 2011, the Korean government has supported consulting for SMEs. This study was conducted with a door to door survey and by e-mail, fax, and telephone for companies that took part in government-supported SME-related consulting in 2013. A total of 620 companies were selected, with a final data set of 420 companies excluding those that did not respond, and left blank or otherwise unexplainable answers. Table 4 summarizes the composition of the questionnaire.

Company characteristics included business area, founding date, company type, and business category. A recognition that the SME support existed before obtaining consulting services and questions regarding determinants were composed of degree of executive interest, degree of composition of TPT, degree of implementation of consulting output, cooperation and degree of support of organizational members, and willingness of executives to understand the consulting response of companies at first. Questions regarding satisfaction consisted of satisfaction with consulting and consultants and government

policy satisfaction. Reutilization was measured in terms of intention to reuse government-supported consulting, and willingness to use the same consultants and consulting firms. Lastly, sales and number of employees at client firms were used to measure business performance. Each question consisted of the degree of action, the degree of reutilization, and satisfaction with the government policy on a 5-point Likert scale.

4.2 Analytical Method

Responses with missing data, duplicate entries, or where there was a lack of confidence in the response were omitted. After encoding a valid sample, a significance level was set at $p < .05$ or $p < .01$, and analyzed using statistical methods such as frequency analysis and structure equation model analysis.

4.2.1 Frequency Analysis

Descriptive statistic determine the rough characteristics, such as frequency of variables, central tendency, a

Table 3. Significance of path coefficients

	action→ consultant	action→ consulting	consultant consulting	consultant→ intention of reutilization	consultant → business performance	consulting → intention of reutilization	consulting → business performance	business performance→ policy satisfaction	intention of reutilization→ policy satisfaction
route	0.706	0.200	0.649	0.640	0.445	-0.128	0.886	0.035	0.354
standard error	0.054	0.047	0.055	0.099	0.200	0.207	0.111	0.025	0.036
t	13.188	4.262	11.903	4.656	2.223	-0.621	7.963	1.439	9.710
P	0.00	0.00	0.00	0.00	0.026	0.535	0.00	0.150	0.00

Table 4. Index and concept of the questionnaire

Factor	Composition of Content (Query)		Number of Queries
Demographic Characteristic Factor	field, company's birth date, company type and category of business	D1, D2, D3, D4	4
Recognition of Consulting and Decision Factor	path towards initial recognition for consulting, determinant to choose consulting firms	Q1, Q2	2
Degree of Action	interest of executives, degree of TFT composition, performance of result, cooperation of members, willingness of executives	Q3_1, Q3_2, Q3_3, Q3_4, Q3_5	5
Satisfaction	satisfaction of consulting, consultants and government policy satisfaction	Q7_1, Q7_2, Q7_3, Q9_1, Q9_2, Q9_3, Q9_4, Q9_5, Q14_1, Q14_2, Q14_3, Q14_4, Q14_5	13
Intention of Reutilization	intention of reutilization for consulting, consultants and consulting firms	Q10, Q11	2
Business Performance	result of financial and employment	Q12, Q13	2
Total			28

distribution chart, and so on after determining a distributed state of the raw data. A frequency analysis can uncover fundamental information and it is generally used to verify a demographic factor since it is possible to calculate the number of chosen instances, percentages, aggregates, and averages.

4.2.2 Factor Analysis

Factor analysis is a statistical method to establish that there is a strong correlation or variables and give meaning to the factors after analyzing the interrelation between questions to investigate unknown characteristics and variables. The variables that are not involved or are of little importance are eliminated. Variables' characteristics can be understood as they are derived as the result of mutually independent characteristics, despite the fact that the factor surfaces after they are bound to related variables. Factor analysis was first used to measure intelligence with a statistical method as a psychological trait of human beings and it has been used to establish latent variables from a structural equation model. There are two types of factor analyses: exploratory factor analysis and confirmatory factor analysis. Exploratory factor analysis assumes that there is no hard information as for some factors, or the number of factors is unknown. Confirmatory factor analysis assumes that there is some information about the number of factors.

4.2.3 Structural Equation Model

A structural equation model uses equations of a covariance structure, and is typically used to determine causality between an observed and theoretical model. Structural equation models are able to determine potential factors without measurement errors using confirmatory factor analysis and a method that links the potential factors via regression analysis. In other words, the structural equation model appropriately combines with factor and regression analysis to find causal relationships.

4.3 Reliability and Factor Analysis

Conventionally, Cronbach's Alpha values of 0.6 are used for exploratory research, 0.8 for fundamental research, and a value greater than 0.9 for applications that have significant implications. The results of the reliability analysis of the factors used in the structural equation model, returned Cronbach's Alpha values between 0.767 and 0.936, raising the issue of internal consistency as the results were high overall.

4.4 Technical Analysis of the Variables

4.4.1 Corporate Demographic Characteristics

There are four corporate characteristics, composed of sector, location, company type, and category of business background variables, and respondents were asked to specify each. The results reported in Table 6 include the frequency and percentile, and exclude responses with missing values.

4.5 Value Chain Analysis of Consulting for SMEs

4.5.1 Definition of Variables

Refer Table 7

4.5.2 Confirmatory Factor Analysis

The structural equation model using confirmatory factor analysis in this study assumes that there was no connection among the measured variables that explain the variable on the confirmative factor analysis.

A maximum-likelihood confirmatory factor analysis was conducted on the confirmed 28 queries to evaluate the overall measurement model. The results show that the measurement model is suitable, with the following values: $\chi^2 = 468.761$, $df = 194$, $p < .000$, $RMR = 0.035$, $GFI = 0.906$ and $AGFI = 0.877$. The model was therefore used in the structural equation model analysis.

4.5.3 Effect of Each Factor

Table 8 reports the effects of each factor from the analysis conducted with AMOS. The comparative results for each factor are based on a standardized coefficient. It shows that the total effect has a significant impact on intentions to reuse the service, which contributed to business performance and satisfaction with the policy. In other words, the actions of SMEs that received consulting services had a significant effect on consulting satisfaction, which in turn impacted business performance when consulting satisfaction was designated as the parameter. Policy satisfaction affects the intent to reuse the service.

Table 5. Reliability analysis on earth factor

Factor	query	Cronbach's α
Degree of Action	continued interest of executives	0.902
	complete charge of organization or composition of TFT	
	comprehension of outcome of consulting firms	
	cooperation of internal members	
	willingness of executives toward consulting result	
Satisfaction of Consultants	working posture of consultants	0.871
	professionalism of consultants	
	countermeasure of consultants	
Satisfaction of Consulting	attainment of goal of consulting	0.936
	consulting result on investment	
	quality of consulting result	
	degree of completion of consulting	
	degree of due date for consulting	
Intention of Reutilization	reutilization on consulting business	0.767
	reutilization of consulting firms and consultants	
Government Policy Satisfaction	fund per one consulting firm	0.887
	business management for enterprise selection, assessment and examination	
	React to Korean Government supporting projects	
	range of consulting tasks	
	period of consulting	

Table 6. Frequency analysis of corporate demographic characteristics

Demographic Query		Frequency (People)	Percentage (%)
Field	management	166	39.3
	skill	170	40.3
	inception	86	20.4
Area	urban	94	22.3
	rural	328	77.7
Company Type	manufacturing	375	88.9
	non-manufacturing	47	11.1
Category of Business	Innovative SMEs	230	54.5
	SMEs	192	45.5

Table 7. Definition of Variables

variable	definition	role
F1	degree of action	predictor
F2	satisfaction of consults	parameter
F3	satisfaction of consulting	parameter
F4	business performance	predictor /reacting factor
F5	intention of reutilisation	predictor /reacting factor
F6	policy performance	reacting factor

Table 8. Effects of variables

Variable	Effect	Whole Effect	Direct Effect	Indirect Effect
Degree of Action	Action → consultant	0.706	0.706	
	Action → consulting	0.659	0.200	0.459
	Action → business performance	0.230	-	0.230
	Action → intention of reutilisation	0.909	-	0.909
	action → policy satisfaction	0.330	-	0.330
Satisfaction of Consultants	Consultant → consulting	0.649	0.649	
	Consultant → business performance	0.362	0.445	-0.083
	Consultant → intention of reutilisation	1.036	0.460	0.576
	Consultant → policy satisfaction	0.380	-	0.380
Satisfaction of Consulting	Consulting → business performance	-0.128	-0.128	-
	Consulting → intention of reutilisation	0.886	0.886	-
	Consulting → policy satisfaction	0.310	-	0.310
Business Performance	business performance → policy satisfaction	0.035	0.035	-
Intention of Reutilization	intention of reutilization → business performance	0.354	0.354	-

5. Conclusion

A structure equation model differs from a regression model by assuming coefficients while simultaneously conducting a multi-regression model, and has the advantage of measuring indirect effects. The model was studied to find the causal relationships of consulting satisfaction that have a direct effect, which are business performance, reutilization, and satisfaction with the government policy. The results from the structural equation model show that satisfaction with consulting exerts influences satisfaction with the policy. Secondly, the intent to use the services again has an effect, followed by satisfaction with the consulting services. In other words, satisfaction with the consulting services has a

significant impact on satisfaction with the government policy. The results from the study can explain the factors impacting the performance of the government policy, which has an effect on reutilization and the government enterprise's business performance for SMEs. This shows which factors have the most strategic importance in increasing satisfaction with the government policy of supporting consulting, and which factors improve the government consulting services business performance, and that this is directly related to whether SMEs reuse this service.

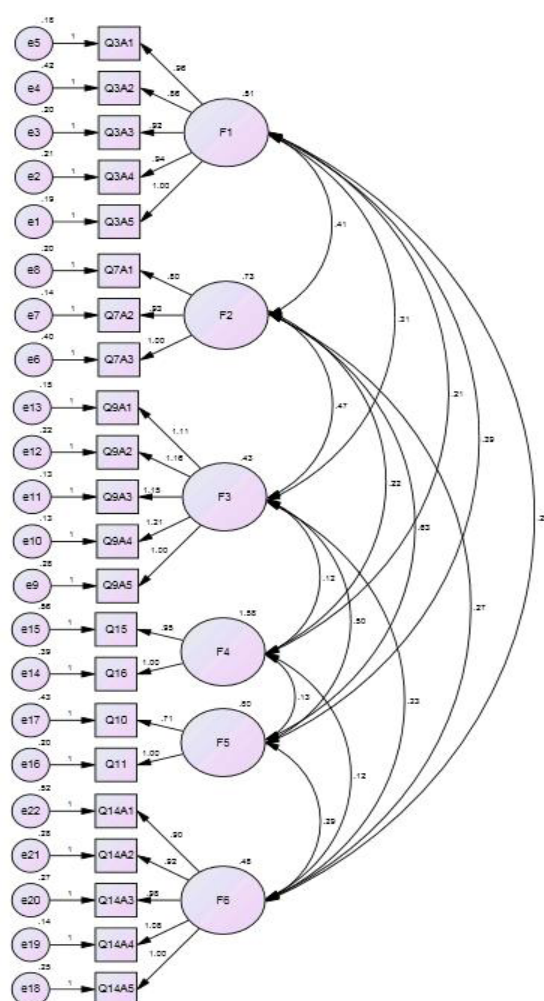


Figure 2. Confirmatory factor analysis results.

6. References

1. Kim K-H, Whang K-S. A study on the quality determinants in management consulting, management science. The Korea Society of Management Science. 2001; 18(1):15–28.
2. Kim I-S. A study on the performance and effects of consulting in domestic SMEs. Korea Social Science Journal. 2008; 18(1):159–86.
3. Jeon S-C. A study on the developing direction of small and medium enterprise consulting support program [Master's Thesis]. Hansung University Knowledge and Consulting Graduate School; 2010.
4. Nam S-E. A study of the impact of government's consulting support program affecting firm's innovation activities [MBA Master's Thesis]. Kyung Sung University Graduate School of Management; 2009. p. 63–5.
5. Moon H-S. A study on the factor involved in the performance and the reuse of consulting as participation in SMEs [Master's Thesis]. Hansung University Knowledge and Consulting Graduate School; 2012.
6. Kim Y-S, No G-S, Lee S-H, Do J-H. Study on the critical success factor of coupon-based consulting. Korea Digital Policy Institute. 2009; 7(S):25–32.
7. Choi J-Y. An empirical study on the achievements of coupon consulting programme for SMEs [Master's Thesis]. Pai Chai University Consulting Graduate Consulting Department; 2011. p. 16.
8. Jeong G-M. Analysis of narcotic effect in the use of consulting services by small and venture businesses [Master's Thesis]. Kyung Hee University Graduate Technology Business Administration; 2008. p. 75–8.
9. Sim J-S. A study on the satisfaction degree and performance in the management consulting for small and medium sized enterprises [Master's Thesis]. Hanyang University Enterprise Business Management Graduate; 2012. p. 87–90.
10. Cho M-H, Seol J-U. Consulting process, New Suggestion; 1999. p. 309–11.