

Use Of SWOT And Delphi Method As A Strategy Making Tool Of Food Industry Management

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ABSTRACT: Nowadays, it is not questionable that the business environment of any organization is more dynamic and tumultuous. Therefore, it is indispensable to the organizations to formulate the distinguished strategy in order to triumph the competitive and turbulent business world. On the other hand, food business is more fragile and susceptible to the turbulent business world. In this essence, the purpose of this work was to formulate the strategies of a firm in food industry. In this study, the SWOT matrix, and Delphi method were used to evaluate the external and internal factors in order to establish more stable and profitable food business policy. By this study 39 experienced managerial personnel of 13 food business factories were employed in order to evaluate the different variables of each factor of Strength, Weakness, Opportunities and Threats. The expert's evaluations were quantified by Likert Scale. There were identified 35 variables of factors of Strength, Weakness, Opportunities and Threats. The less weighted variables were avoided from the SWOT matrix and strategy formulation. SWOT matrix was formed based on the prioritized SWOT variables with four quadrants; maxi – mini (ST strategy), mini – mini (WT strategy), mini – maxi (WO strategy) and maxi-maxi (SO strategy). Finally, it was hoped that this study will be a promising resource to any organization to overcome the external weakness and threats and also to plan their short term and long term business policy.

Keywords : SWOT; Delphi; Strategy; Likert Scale

1. INTRODUCTION

Food industry is a place where agricultural products are processed and converts into food products. Over the past three decades the world has produced more food per capita, not less. And yet several million people have died from hunger related causes in any given year of that recent history. On any given day perhaps a billion individuals are restricted by their economic circumstances to consume less food than they would like. This scenario is not uncommon in Bangladesh. Food is a basic human need and plays a crucial role in the agro-based economy of Bangladesh, where a large proportion of the income of the population is allocated to food. The roll of SMEs of food sector is indispensable for overall economic development of a developing country like Bangladesh. SMEs employ 31 million employments or 41% population of Bangladesh aged 15 or above [1] where more than 30% are engaged in food production sector. Although, the resurgence of the small and medium enterprises (SMEs) began in the early 1970s, but alas! Still now this sector remain as infant in terms of productivity. In order to increase the productivity of these food factories it needs to isolate the strength, weakness, opportunities and threats beyond their growth. A good strategy in food industry is critical to market growth and competitive strength against imported goods, and to expand export opportunities. In this study, it was aimed to conduct the SWOT analysis in 13 SMEs of food factories prior to formulate the Opportunity-Strength (OS) Strategies-use the strengths to take advantage of opportunities; Threat-Strength (TS) Strategies-use strengths to avoid threats; Threat-Weakness (TW) Strategies -Minimize weaknesses and avoid threats; Opportunity-Weakness (OW) Strategies-Overcome weaknesses by taking advantage of opportunities.

2 REVIEW LITERATURE STUDY

2.1 Review of SWOT

The world business environment is more changing; indeed, every professional is responsible beyond this change. In order to remain in competitive business world the company also

needs to change their business policy and strategy at every sphere of time by considering their client's demand and their business goal. In addition, it is more emergence to formulate their business plan by incorporating the strength, opportunities, weakness and threats of their business environment prior to sustain in the competitive business world [2], [3], [4], [5]. The technique is credited to Albert Humphrey, who led a convention at the Stanford Research Institute (now SRI International) in the 1960s and 1970s using data from Fortune 500 companies [6]. In the 1960's and 70's, Albert Humphrey is said to have developed this strategic planning tool using data from the top companies in America at the time. A SWOT Analysis looks at the strengths, weaknesses, opportunities and threats that are relevant to an organization in a new venture. A SWOT Analysis is a tool which allows users to look at the direction of a company or an organization may wish to move towards in the future. A SWOT Analysis is a useful tool, which in alignment with others can help to make decisions. SWOT analysis is a strategic planning method used to evaluate the Strengths, Weaknesses/Limitations, Opportunities, and Threats involved in a project or in a business venture. It involves specifying the objective of the business venture or project and identifying the internal and external factors that are favorable and unfavorable to achieve that objective. At an empirical research level, asserted the existence of a positive relationship between external environmental analysis styles of food industry and overall organizational performance and the ability to gain a competitive advantage. Strandholm and Kumar [7] reported that SWOT is an empirical tool that has an ability to build a positive relationship between external and internal factors of food business that brings the positive impact of respected business. SWOT is considered by Vorhies and Morgan [8] as a tool of proper marketing benchmark for sustainable marketing of any business. Chan, et al. [9] considered the SWOT as a dynamic model of co-specialized resources, strategy formulation and cultural corporation on business performance. To achieve a competitive advantage from a food business in a unique geographical area the SWOT would be an effective tool to assess a number of components like

customer and consumer outlook, communication, distribution, workforce, etc. [10]. Walker [11] reported that SWOT analysis helps to build a strong management of an organization that can enhance their image towards the increased sales and improved relations with environmental regulators and other stakeholders. The prime target of food industry is to produce new and less costly food products. In this regard, about 1990s, the information technology became more emergences to involve in food industry formulation, where SWOT tool was applied to assess the internal and external factors; eventually it had brought the effective and remarkable benefit in new technology assimilation [12]. Langford and Male [13] mentioned that SWOT was used in order to clarify how organizations should response to changing business mode by studying the rate of technological change and product life cycle. Issue management can help industries to identify risk and opportunity. It is defined as having the capacity to act quickly in order to seize opportunity or to avert risk. It is reported by Palese and Crane [14] that SWOT analysis was applied in issue management discipline that reaped the benefits of innovation, team collaboration, and diversity. To achieve the goals and objectives of an organization it is essential to evaluate the strengths and weaknesses in the surroundings, in this regard Glueck and Jauch [15] suggested the SWOT as a potential tool. Seddon, *et al.* [16] mentioned that the motivation for small food industry to adopt quality assurance systems is mainly associated with their desire to acquire new customers and maintain their existing customer base, rather than decreasing costs; to perform this task SWOT could be a dynamic wheel. Reardon, *et al.* [17] suggested that SWOT analysis can be used successfully in small or medium-sized enterprise in order to formulate the short and long term business strategy. Key areas are needed to consider in the identification of strengths and weaknesses of food industries include marketing factors; financial aspects such as the availability of capital, operational aspects, human resources; and relative levels of innovation [18]. Hardie, *et al.* [19] mentioned that relatively low level of innovation exhibited by practitioners is generally considered a weakness. Colatore and Caswell [20] reported that Hazard Analysis and Critical Control Point (HACCP) could be a good strength for food industry and by using SWOT analysis the HACCP implementation cost could be reduced. SWOT Analysis can be employed to the totality of a specific market's enterprises as a cohesive frame facilitating the processes of reaching conclusions, making decisions and shaping business policy [21]. According to the SWOT Analysis, theoretical model strengths and weaknesses are generated from the internal environment of operation of a given enterprise or of a cluster of enterprises, while opportunities and threats are external factors, the results of the influence exercised by both the external environment and the market. Companies' weaknesses can be optimally detected using SWOT Analysis and, as a consequence, inappropriate strategies and their ensuing actions are easier to avoid. Furthermore, the SWOT Analysis tool enables one to grasp the opportunities and threats arising in the wider field of a company's action and operation. In this manner, the company's strengths can be highlighted and available resources can be utilized in the best possible way [22], [23], [24], [25]. Wheelan and Hunger [26] used SWOT to look for gaps and matches between competences and resources and the business environment.

2.2 Review of Delphi Method

Woudenberg [27] reported that Delphi method was developed in the 1950's by the Rand Corporation, Santa Monica, California. The name 'Delphi' was intentionally coined by Kaplan, an associate professor of philosophy at the University of California, Los Angeles working for the RAND Corporation in a research effort directed at improving the use of expert predictions in policy making [28]. According to Adler & Ziglio, [29] and Kreitner & Kinecki [30] Delphi method is favored as a problem solving or strategy making tool when the knowledge about a problem is incomplete and is used with the aim of obtaining the most reliable group opinion. Christie & Barela [31] and Dalkey [32] considered the Delphi as a most desirable means to reach in a consensus on a field where a lack of agreement or incomplete knowledge is apparent. Rowe, *et al.* [33] described the Delphi as a structured communication technique or method, originally developed as a systematic, interactive forecasting method which relies on a panel of experts. Delphi practitioners employ this method primarily in cases where judgmental information is indispensable, and typically use a series of questionnaires interspersed with controlled opinion feedback. Its application is primarily based on namelessness, giving the opportunity to participants to express their opinions freely, eliminating any possible personal conflict. Dalkey & Helmer [34] reported that Delphi technique is well suited as a means and method for consensus building by using a series of questionnaires to collect data from a panel of selected subjects. According to Gregory, *et al.* [35] the Delphi method is a repetitive process used to collect and concentrate the judgments of experts using a series of questionnaires interspersed with feedback. The questionnaires are formulated by focusing the problems, opportunities and solutions. Each subsequent questionnaire is developed based on the results of the previous questionnaire. Chitu and Suzanne [36] considered the Delphi as a method of organizing a group communication process so that the process is effective in allowing a group of individuals, as a whole, to deal with a complex problem. To accomplish this structured communication there is provided: some feedback of individual contributions of information and knowledge; some assessment of the group judgment or view; some opportunity for individuals to revise views; and some degree of anonymity for the individual responses. Although Delphi is a repeated process of 'feedback' until consensus is reached, in most cases – when the sample is small – no more than one round may be needed [37]. The Delphi method is based on structural surveys and makes use of the intuitive available information of the participants, who are mainly experts. Therefore, it delivers qualitative as well as quantitative results and has beneath its explorative, predictive even normative elements [38]. Wechsler [39] considered the Delphi as a survey which is steered by a monitor group, comprises several rounds of a group of experts, who are anonymous among each other and for whose subjective-intuitive prognoses a consensus is aimed at. After each survey round, a standard feedback about the statistical group judgments calculated from median and quartiles of single prognoses is given and if possible, the arguments and counterarguments of the extreme answers are fed back. Turoff & Hiltz [40] and Ludwig [41] considered the Delphi as a technique that is designed as a group communication process that aims at conducting detailed examinations and discussions on pros and cons of a specific issue for the purpose of goal setting, policy formulation, or predicting the occurrence of future events.

Woudenberg [27] described the Delphi as a judgmental process where the judges or experts who are involved on a problem or issue only give their estimations on that problem or issue. The Delphi method is especially useful for long-range forecasting (20-30 years), as expert opinions are the only source of information available. Meanwhile, the communication effect of Delphi studies and therefore the value of the process as such are also acknowledged. The experts are engaged by considering the four requirements: (i) to acquire knowledge and experience through investigation, (ii) to be willing to participate, (iii) to have sufficient time (to participate) and (iv) to possess effective communication skills [42].

3 METHODOLOGY OF THE STUDY

This study was conducted into 13 small and medium size food factories at Sylhet region of Bangladesh. The primary data was collected by taking an interview of 39 managerial personnel who were engaged in the production of visited food factories in a questionnaire and also by author's direct investigation prior to find out the company's strength, weakness, opportunities and threats. Secondary data were collected from regarding journal papers and books. By incorporating the primary and secondary data a strategic plan was formulated in SWOT matrix in order to proper growth of food industry.

3.1 SWOT Analysis

SWOT analysis is one of the most well-known instruments of strategic management. Its name is an abbreviation of the following English words' initials: Strengths, Weaknesses, Opportunities, and Threats. This model presupposes that an organization will work by keeping a strategy used to analyze not to fit the essential aspects of internal and external factors. That's why in the American Literature this model is also known as alignment mode or fit mode [43]. According to Hill and Westbrook [43] the essence of the key-words is the following -

Strengths – represent those competences which offer an organization competitive advantages compared with some similar organizations. Examples of such advantages are: strategic capability, geographic position, the stuff's characteristics, or a relational system with other organizations.

Weaknesses – represent those characteristics which generate competitive disadvantages. Every organization presents a specific combination of strengths and weaknesses. The condition of revaluing strengths and avoiding weaknesses in the strategic process is to identify them in the correct way.

Opportunities – represent a combination of external elements, which give industry significant advantages, in conditions of a certain course it acts.

Threats – represent a combination of external elements, which provoke some significant damage to industry in conditions of keeping the course of its action, a course that exists when these elements appear. SWOT analysis comprising of four factors. These four are categorized into main two factors i.e. internal and external factors. The axis of the internal factors will be SW – strengths and Weaknesses, whereas the axis of the external factors will be OT – Opportunities and Threats. If internal and external factors are divided into two distinct groups, then these can be combined in four ways. This fact suggests four categories of strategies [44]:

SO Strategies – use the strengths of an organization in order to benefit from opportunities of the industry. The strategies are aggressive and follow the creation of a competitive advantage.

ST Strategies – use the strengths of an industry in order to reduce the threats of some unfavorable situations. Threats and risks are connected with a single type of activity; their effects are diminished with the help of diversification strategies.

WO Strategies – use opportunities to improve internal characteristics or to avoid weaknesses. These strategies are those of reorientation and are characterized by redirection of resources in order to create some new products that are imposed by a congenial occasion.

WT Strategies – presuppose avoiding threats of external factors, in conditions when weaknesses of an organization prevail; the position is unfavorable, and the defensive strategy adopted supposes fight for survival and decline of losses.

3.2 Delphi Method

Delphi method is a technique to make a decision based on the survey of respondent's opinion in weight based of any disputed topic. It is widely using in policy making and other critical issues where different expert respondents reveal their views prior to reach in a consensus. In this study, the Delphi method was employed by following procedures-

- Experts from the observed food factories were first identified and asked to participate in the inquiry. Experts were the production managerial personnel who had enough experience prior to evaluate the SWOT variables.
- The questions were refined by the researchers and pursued through a number of sequential questionnaires.
- Participants were asked to provide their judgment on strength, weakness, opportunities and threats of their factories.
- The range of participant's opinions has been identified by Likert Scale.
- The extreme opinions were reassessed by the participants.
- Finally, Strength-Opportunity (SO), Strength-Threat (S-T), Weakness- Opportunity (WO) and Weakness-Threat (WT) strategies were formulated prior to proper management of food industry.

3.3 Likert Scale

To reach in a concrete decision the expert's opinion or aptitudes on a similar issue are evaluated in weighted value. In many cases Likert Scale is used to weigh the expert's opinion. Different types of rating scales have been developed to evaluate the aptitudes of respondents directly on any issue. These ordinal scales measure levels of agreement or disagreement. Among these rating scales, Likert Scale is widely using to measure the respondents aptitudes. The principle of Likert Scale has been developed for measuring the attitudes by asking people to respond to a series of affirmation about a topic, in terms of the extent to which they agree with them, and so knocking into the cognitive and aroused components of attitudes [45]. Likert-type or frequency scales use fixed choice response formats and are designed to measure attitudes or opinions [46], [47]. A Likert-type scale assumes that the

strength or intensity of experience is linear like as from strongly agree to strongly disagree and makes the assumption that attitudes can be measured. Respondents may be offered a choice of five to seven or even nine pre-coded responses with the neutral point being neither agree nor disagree.

4 RESULTS AND DISCUSSION

A Delphi method was used to conduct the survey of taking the expert opinions before the suggestion of future strategic plan of food business. Expert's evaluations were weighted by Likert Scale. In this study, the Likert scale was considered from 1 to 9 points. Each point's remark was documented in Table 1. The

expert's opinions in the field of Strength, Weakness, Opportunity and Threat were quantified by Likert Scale in Table 2, Table 3, Table 4 and Table 5. Regarding experts were reported a number of variables of each factor of Strength, Weakness, Opportunity and Threat. Each variable was evaluated in a numerical (1-9) value by considering the Likert rating which were offered to the experts. Identified different variables of strength factors were arranged in Table 2 as descending order based on expert's weighted evaluation. Similarly, different variables of Weakness, Opportunity and Threat were arranged as descending order in Table 2, Table 3, Table 4 and Table 5 respectively.

Table 1: Likert Scale Ranking

Point	Remark
1	extremely bad
2	very bad
3	moderately bad
4	slightly bad
5	not good not bad
6	Good
7	moderately good
8	very good
9	Excellent

Table 2: Expert evaluation of strengths factor by Likert Scale point

Serial No	Strengths factor	Mean point (Max- 9)
1	Sufficient labor force in food industry	8.25
2	Available raw materials	8.25
3	Congenial geographic location for food industry development	7.50
4	Multiples distribution channels are available	7.50
5	Big market	7.25
6	International cooperation/exchange/ networking are gradually increasing	6.50
7	Considered as a booming sector by the Government	6.50
8	Related research and technology are developing	6.00
9	Low rate of production costs	5.50

Table 3: Expert evaluation of weakness factor by Likert Scale point

Serial No	Weakness factor	Mean point (Max- 9)
1	Limited infrastructure for food related research	8.5
2	Poor inter industry and institution linkages for research and product development	8.5
3	Risky investment policy	8.25
4	Poor transportation facilities	8.25
5	Lack of a clear strategic direction	8.00
6	Not congenial food business policy	8.00
7	Unskilled labor	7.25
8	Lack of training	7.00
9	Lack of long-term investment	6.75
10	Unhygienic condition	6.50
11	Improper marketing chain	6.00

Table 4: Expert evaluation of opportunity factor by Likert Scale point

Serial No	Opportunity factor	Mean point (Max- 9)
1	Relatively cheap labor cost	8.75
2	Increasing consumer demand	8.00
3	Low tax on food business at home	7.50
4	Secured market	7.00
5	Good patronization of Government	6.50
6	Increasing export of food products	6.25
7	Short supply channels	5.50

Table 5: Expert evaluation of threat factor by Likert Scale point

Serial No	Threat factor	Mean point (Max- 9)
1	Unfavorable food research policy	9.25
2	Unstable consumer aptitudes	8.75
3	Rival business	8.50
4	Fragile FDI	8.25
5	Seasonal demand of some products	8.25
6	Safety awareness among consumers	7.25
7	Low paying capacity of customers	6.50
8	Very limited research funding	6.00

4.1 SWOT Matrix

The SWOT matrix pairs the external factors with the internal factors. In the SWOT matrix strengths and opportunities are considered as positive agents while weaknesses and threats are considered as the negative agents towards the future strategy formulation. In this study, by SWOT matrix positive agents were maximized and negative agents were minimized. In SWOT analysis strength and weakness are considered as internal variables while opportunity and threat are considered as external variables. By accounting the external and internal variables future food business managerial strategies were formulated that were documented in Table 6. The strategies

were listed in the four separate quadrants i. e. Maxi - Maxi (S-O); Mini - Maxi (W-O); Maxi - Mini (S-T) and Mini - Mini (W-T) strategies. In maxi – maxi (S-O) strategy favorable strength and opportunity variables were maximized; in Mini - Maxi (W-O) strategy unfavorable weakness variables were minimized while fascinating opportunity variables were maximized; in Maxi - Mini (S-T) strategy desirable strength variables were maximized and unwanted threat variables were minimized and in Mini - Mini (W-T) strategies weakness and threats both are unfavorable variables which were minimized in future food business strategies.

Table 6: SWOT Matrix

SWOT		Internal Strength	Internal Weakness
		1	Sufficient labor force in food industry
	2	Available raw materials	Poor inter industry and institution linkages for research and product development
	3	Congenial geographic location for food industry development	Risky investment policy
	4	Multiples distribution channels are available	Poor transportation facilities
	5	Big market	Lack of a clear strategic direction
	6	International cooperation/exchange/networking are gradually increasing	Not congenial food business policy
	7	Considered as a booming sector by the Government	Unskilled labor
External opportunity		Maxi-Maxi (S-O) strategy	Mini-Maxi (W-O) strategy
1	Relatively cheap labor cost	Sustainable labor force should be ensured by giving them training and facilities	Public and private partnership should be encourage in food business
2	Increasing consum-	Raw materials properly converted to	Inter relationship between industry

	er demand	finished goods prior to mitigate the consumer demand	and research institute should be improved
3	Low tax on food business at home	Food factory should be established in favorable region and business tax also be confined in favor of business expansion	Food business investment should be safe in terms of volatile business environment
4	Secured market	Create new distribution channels prior to secured market	Mode of business transportation should be increased
5	Good patronization of Government	Government should take initiative to keeping the big market	Business strategic plan should be clearly formulated
6	Increasing export of food products	International export policy should be strengthen by keeping continuous co-operation	Food business policy should be formulated as more as safe for the entrepreneur
7	Short supply channels	Short supply channels helps to make the food business more profitable	Training program should be arranged on behalf of Government and entrepreneur prior to create skill labor
External Threats		Maxi-Mini (ST) strategy	Mini-Mini (WT) strategy
1	Unfavorable food research policy	Favorable food research policy should be formulated by the government	Food research should be increased for multiple purposes
2	Unstable consumer aptitudes	Unstable consumer aptitudes should be considered in business plan	Research should be conducted to evaluate the consumer aptitudes
3	Rival business	Unwanted rival business should be controlled by the rules and regulation	Illegal business should be controlled by laws
4	Fragile FDI	Government should be concerned prior to stable FDI	Favorable environment should be ensured for FDI
5	Seasonal demand of some products	Seasonal demand should be considered in production plan	Consumer demand should be considered in strategic plan
6	Safety awareness among consumers	Aseptic production should be ensured	Right awareness should be created among the consumer
7	Low paying capacity of customers	Production cost should be minimizes yet at keeping the quality at best level	Per capita income should be increased by creating job opportunities

In this study, SWOT and Delphi method were used as mutually beneficial tools. While SWOT analysis supports the decision situation, Delphi measures the relative importance of the SWOT factors. By integrating SWOT with Delphi, not only the mutual weighting of SWOT factors, but also the evaluation of alternative strategic decisions can be integrated with ordinary SWOT analysis. By this way, the most crucial weakness of SWOT can be avoided [48].

5 CONCLUSIONS

In this study, the SWOT analysis pinpoints the strengths, weaknesses, opportunities, and threats of a number of small and medium size food enterprises. Delphi method was used to make it more congenial towards the making decision or strategy formulation. This study will help Food Company's top management and operational managers to form their strategic planning for their future food business. In this study, less weighted variables were not considered in SWOT analysis; therefore managerial personnel easily concentrate to significant variables for formulation of future strategies. However, pattern or types of variable may be differs from region to region. Finally, it is hoped that this study will be a milestone for SWOT implementation at any business prior to construct of future food business policy.

REFERENCES

- [1] N. Shahriyar, "SMEs of Bangladesh: A critical study of leather Industry", 2013.
- [2] D. Cartlidge, "New aspects of quantity surveying practice", Oxford: Butterworth Heinemann, 2002.
- [3] P. Smith, "Trends in the Australian quantity surveying profession: 1995 – 2003", International Roundup, Vol. 19, No.1, 1995.
- [4] R. Davis, P. Watson, and C.L. Man, "Knowledge management for the quantity surveying profession", Proceedings of the FIG Working Week. Hong Kong, 2007.
- [5] J. Mbachu, and R. Nkado, "Conceptual framework for assessment of client needs and satisfaction in the building development process", Construction Management & Economics, Vol. 24, No. 1, pp. 31-44, 2006.
- [6] A. Humphrey, "SWOT Analysis for Management Consulting", SRI Alumni Newsletter, 2005.

- [7] K. Strandholm and K. Kumar, "Differences in Environmental Scanning Activities between large and small organizations: The advantage of size", *Journal of American Academy of Business*, Vol. 1, No. 2, pp.416-434, 2003.
- [8] Vorhies, W.M. Douglas, and A. Neil, "Benchmarking marketing capabilities for sustainable competitive advantage", *Journal of Marketing*, Vol. 69, pp. 80-94, 2005.
- [9] Chan, L.M. Lisman, M.A. Shaffer, and E.D. Snape, "In search of sustained competitive advantage: The impact of organizational culture, competitive strategy and human resource management practices on firm performance", *International Journal of Human Resource Management*, Vol. 15, No. 1, pp. 15-35, 2004.
- [10] A. Thompson, and J. Walker "Retail network planning-Achieving competitive advantage through geographical analysis", *Journal of Targeting, Measurement and Analysis for Marketing*, Vol.13, No.3, pp. 250-257, 2005.
- [11] D. Walker, "Sustainability: Environmental Management, transparency and competitive advantage", *Journal of Retail and Leisure Property*, Vol.7, No.2, pp.119-130, 2008.
- [12] Chan, S. Peng, Heide, and Dorothy "Information Technology and the New Environment: Developing and Sustaining Competitive Advantage", *Sam Advanced Management Journal*, pp. 4-9, autumn 1992.
- [13] D. Langford, and S. Male, "Strategic management in construction", Chichester: Wiley-Blackwell, 2008.
- [14] M. Palese, and T.Y. Crane, "Building an integrated issue management process as a source of sustainable competitive advantage", *Journal of Public Affairs*, Vol.2 No. 4, pp.284-292, 2002.
- [15] W.F. Glueck, and L.K. Jauch, "Business policy and strategic management", 5 ed., Singapore: McGraw-Hill, 1988.
- [16] J. Seddon, R. Davis, M. Loughran, and R. Murrell, "BS 5750 implementation and value added: a survey of registered companies", Buckingham: Vanguard consulting limited, 1993.
- [17] T. Reardon, E. Farina, J.M. Codron, L. Busch, J. Bingen, and C. Harris, "Global change in agrifood grades and standards: Agribusiness strategic responses in developing countries", *International Food and Agribusiness Management Review*, Vol. 2, No. 3, 2001.
- [18] A. Gillespie, "Foundations of economics. Oxford University Press", Retrieved February 23, 2010.
- [19] M. Hardie, G. Miller, K. Manley, and S. McFallan, "The quantity surveyor's role in innovation generation, adoption and diffusion in the Australian construction industry", *Proceedings of the QUT Research, Week, 4 – 8 July, Brisbane, Australia, 2005.*
- [20] C. Colatore, and J.A. Caswell, "The cost of HACCP implementation in the seafood Industry: A case study of Breaded Fish" In L. Unnevehr, Ed. *The economics of HACCP: Costs and benefits*, St. Paul, Eagan Press, pp. 45-68, 2000.
- [21] H. Vagianni, Iosifidis, and Th. Petanidou, "The Use of the SWOT analysis in the spatial and developmental planning: the case of the ecotourist planning in Polichnito", on the island of Lesbos. *Topos*, Vol. 20, No. 22, pp. 119-137, 2003.
- [22] R. Bennett, "Corporate strategy. Financial Times," Pitman Publishing, 2nd edition, 1999.
- [23] R. Dyson, "Strategic planning: models and analytical techniques" John Wiley & Sons, 1994.
- [24] G. Boseman, and A. Phatak, "Strategic Management-text and cases", John Wiley and sons, 2nd edition, 1989.
- [25] J. Bourgeois, I. Duhaime, and L. Stimpert, "Strategic Management- A managerial perspective", 2nd edition, 1999.
- [26] T.L. Wheelan, and J.D. Hunger, "Strategic Management and Business Policy", 5th Edition, Addison-Wesley, Reading, MA, 1998.
- [27] F. Woudenberg, "An Evaluation of Delphi, in: *Technological Forecasting and Social Change*", Vol. 40, pp. 131 – 150, 1991.
- [28] A. Kaplan, A. L. Skogstad, and M.A. Girshick, "The Prediction of Social and Technological Events", In *The Public Opinion Quarterly*, XIV, pp. 93-110, 1950.
- [29] M. Adler, and E. Ziglio, "Gazing into the oracle: The Delphi method and its application to social policy and public health", London: Kingsley Publishers, 1996.
- [30] R. Kreitner, and A. Kinecki, "Organizational behavior (2nd Ed.)", Homewood, IL: Irwin, 1992.
- [31] C.A. Christie, and E. Barela, "The Delphi technique as a method for increasing inclusion in the evaluation process", *The Canadian Journal of Program Evaluation*, Vol. 20, NO. 1, pp.105-122, 2005.
- [32] N. Dalkey, "The Delphi method: An experimental study of group opinion", Santa Monica, CA: Rand Corporation, 1969.
- [33] G. Rowe, F. Wright, and Bolger, "Delphi: A re-evaluation of research and theory", *Technological Forecasting and Social Change*, Vol. 39, pp. 235-251, 1991.

- [34] N.C. Dalkey, and O. Helmer, "An experimental application of the Delphi method to the use of experts", *Management Science*, Vol.9, No. 3, pp.458-467, 1963.
- [35] J.S. Gregory, T.H. Francis and K. Jennifer "The Delphi Method for Graduate Research", *Journal of Information Technology Education*, Vol. 6, 2007.
- [36] O. Chitu and D.P. Suzanne, "The Delphi Method as a Research Tool: An Example, Design Considerations and Applications", *Information & Management*, Vol. 42, No. 1, pp. 15–29, December 2004.
- [37] P.M. Mullen, "Delphi: Myths and reality", *Journal of Health Organization and Management*, Vol. 17, No. 1, pp. 7-52, 2003.
- [38] M. Häder, and S. Häder, "Delphi und Kognitionspsychologie: Ein Zugang zur theoretischen Fundierung der Delphi-Methode", in: *ZUMA-Nachrichten*, Vol. 37, No.19. p. 12, November 1995.
- [39] W. Wechsler, "Delphi-Methode, Gestaltung und Potential für betriebliche Prognoseprozesse, Schriftenreihe Wirtschaftswissenschaftliche Forschung und Entwicklung, München", 1978.
- [40] M. Turoff, S.R. Hiltz, "The Delphi method and its application to social policy and public health London, UK: Jessica Kingsley Publishers, pp. 56-88, 1996.
- [41] B. Ludwig, "Predicting the future: Have you considered using the Delphi methodology?" *Journal of Extension*, Vol. 35, No. 5, pp. 1-4, 1997.
- [42] G. J. Skulmoski, F.T. Hartman, and J. Krahn, "The Delphi method for graduate research", *Journal of Information Technology Education*, Vol. 6, pp. 1-21, 2007.
- [43] T. Hill, and R. Westbrook, "SWOT Analysis: It's Time for a Product Recall," *Long Range Planning*, Vol. 30, No. 1, pp. 46-52, 1997.
- [44] R. Dealtry, "Dynamic SWOT Analysis", *Strategic Planning Society*, September, 1992.
- [45] R. Likert, "A Technique for the Measurement of Attitudes", *Archives of Psychology*, Vol. 140, pp. 1–55, 1932.
- [46] A. Bowling, "Research Methods in Health", Buckingham: Open University Press, 1997.
- [47] N. Burns, and S.K. Grove, "The Practice of Nursing Research Conduct, Critique, & Utilization", Philadelphia: W.B. Saunders and Co., 1997.
- [48] D. Lei, J.W. Slocum, "Strategic and Organizational requirements for Competitive Advantage", *Academy of Management Executive*, Vol. 19, No.1, pp. 31-45, 2005.