

Strategic Planning in Construction Companies in Gaza Strip

Khalid El-Hallaq¹

Bassam A. Tayeh²

¹Civil Engineering Department, Islamic University of Gaza, Gaza, Palestine, khalag@iugaza.edu.ps

²Civil Engineering Department, Islamic University of Gaza, Gaza, Palestine, btayeh@iugaza.edu.ps

Abstract--This paper presents a study that aims to explore the reality of the strategic planning in the construction companies in Gaza Strip. The clarity of the scientific concept of strategic planning has been investigated, in addition its significance, the degree of implementation and use, also the participation involvement in setting strategic plans and ability to adapt with their internal and external changing environment to be considered. This study relied mainly on the field study methods, where a special questionnaire was designed and distributed on a sample of "149" construction company, therefore, a full comprehensive survey was adopted. A "66" questionnaire out of "90" were retrieved and were processed and analyzed. The results of the study recommended the necessity of starting up with the use of strategic planning as an administrative tool to help these companies to adapt with their internal and external environments, also to provide more training courses for top management on strategic management and planning, and to emphasize on the sharing principle when setting strategic plans, where different administrative levels are involved.

Index Terms: Construction Companies; Gaza Strip; Strategic planning; Strategy

1. INTRODUCTION

Palestine is a developing country in the Asia region that suffers from economic and financial problems due to the current unstable political situation. The construction industry has played an important role in Palestinian economic growth [1]. The industry has contributed approximately 5-8% of the national Gross Domestic Product (GDP).

Technology has been continuously improving, causes high business pressures that affect organizations' current and future competitiveness. These pressures cause common and rapid changes on all industries. Construction industry is also affected by these changes and firms which operate in the construction industry are challenged with increased global competition. In this global environment, it is clear that construction firms will have to be vigilant and forward looking to survive [2]. Tactical considerations will need to be replaced by, or at least put in the context of, strategic ones.

The need to adopt a strategic perspective to business operations has been recognized in other industries of the economy for over four decades. More recently, frameworks and priorities have shifted to a greater extent from the short-term and tactical to the long-term and strategic [3]. However, this shift is relatively slow in the construction industry when compared with other ones.

The concept of strategy is also important in the construction industry especially in this global competitive environment.

When industry conditions and high competition is considered, the concept of strategy and the need for strategic planning is obvious in the construction industry in Gaza Strip.

This paper presents the investigation of the perspectives of contractor companies in Gaza Strip to the concept of strategy and strategic planning by describing the current strategic planning practices in construction industry in Gaza Strip.

2. LITERATURE REVIEW

2.1 The concept of strategy

In the literature, the concept of strategy is based on two different sources in terms of the origin of the word. One of them is "stratum" in Latin, which means the path or line. The second one is "strategos" in Greek, which defined as the art of the general. The concept of strategy firstly recognized at the end of the 18th century when war tactics became increasingly important. Hence, the strategy concept owes its progress as a scientific discipline to the military field. Today, the concept of strategy is used to define achieving goals in various fields such as sports, politics, economics and etc. Moreover, it has recently started to have an important place especially in the field of management. In this context, Johnson and Scholes (1999) defines strategy as follows: "Strategy is the direction and scope of an organization over the long-term: which achieves advantage for the organization through its configuration of resources within a challenging environment, to meet the needs of markets and to fulfill

stakeholder expectations". Therefore, strategy needs to focus on how an organization competes, how to position itself in the industry and how to turn its strengths to a strategic advantage.

At this point, it is important to also mention about the concept of strategic planning. If the strategy is an overall approach and plan, strategic planning is the overall planning that facilitates the good management of a process. Furthermore, strategic planning is an organization's process of defining its strategy, or direction, and making decisions on allocating its resources to pursue this strategy. In this context, there are some important concepts which are related to the concept of strategy and strategic planning. These concepts are mission, vision, goals and objectives. These concepts are the key components of strategic planning. The first component is the mission. A strategic plan starts with a clearly defined mission which defines the fundamental purpose of an organization, briefly describing why it exists and what it does to achieve its vision. Mintzberg (1994) defines a mission as follows "A mission describes the organization's basic function in society, in terms of the products and services it produces for its customers". The second one is the vision which outlines what the organization wants to be. The vision is a long-term view and concentrates on the future. Other key components are goals and objectives. After determination of the organization's mission and vision, it is also important to determine goals and objectives which help the organization to guide, measure and evaluate its future strategies. Therefore, goals are general guidelines that explain what you want to achieve. They are usually long-term and represent global visions. On the other hand, objectives form implementation steps to attain the identified goals. Unlike goals, objectives are specific, measurable, and have a defined completion date.

2.2. Strategic planning in the construction industry

The concept of strategy and strategic planning is also very important in the construction industry. Several studies have been done in order to put forward the importance of strategic planning and strategic management in the construction industry. One of them is the review of the application of strategic planning by enterprises in the construction industry [2]. It is found that all construction enterprises would ultimately have to consider strategic concepts to be able to operate effectively in the emerging industry context. Another study presents a methodological procedure for strategic planning in a construction company for the development of a competitive strategy [6]. The procedure consists of four steps such as examination of the company's mission, surveying the company's business environment, analyzing the company's main resources, and development of a strategy. Another methodology is described in order to analyze construction firms' long-term strategies [7]. This methodology provides a systematic approach to study and ana-

lyze external and internal scenarios for a construction firm doing strategic planning.

The need for a strategic perspective has also been stressed by some country-specific studies, such as that in the UK construction industry. One of them is the study which sought to evaluate business strategies adopted by construction engineering firms within the UK in order to ascertain how they are coping with evolving market conditions [8]. Other study aimed to review the current use of strategic management and examined how strategic management practices were changed within UK construction organizations [9]. Another study reviewed recent literature on the strategic management process and considers several paradoxes viewed from a construction perspective [9]. It is found that for many construction organizations the key to success depends upon developing strategies that have an optimal balance within these paradoxes. Moreover, studies on this subject have been varied through different perspectives such as frameworks for corporate strategy. For instance, a new conceptual model for corporate strategy in the construction industry is developed which adopts an open, generic format to cater to the diversities of success and failure factors in construction and the different theories related to strategy development [10]. Another study is aimed to provide a structured and integrated framework of corporate strategy in order to help practitioners and researchers identify critical issues related to the Chinese construction industry and analyze its dynamics from a holistic viewpoint [11]. Furthermore, a survey was conducted to determine how widespread strategic planning is used as a management tool by contractors in Ghana [12].

There are also studies in Turkey in order to determine the importance of strategy and strategic planning in the construction industry. One of them is the investigation of the international competitiveness of Turkish construction companies using Porter's diamond framework [13]. Another study is aimed to propose a conceptual framework for the analysis of a strategic perspective and present results of a questionnaire carried out to explore the strategic perspectives of Turkish contractors [14]. Two more study carried out in the Turkish construction industry is a study that aims to define the present position of Turkish construction companies in terms of strategic management [15,16].

3. METHODOLOGY

To achieve the research objective, a questionnaire survey was used to collect factual profiles, perceptions and attitudes of the respondents [17,18]. The research focused on professionals from the Palestinian Contractors Union (PCU) categories that are classified under the building categories in Gaza Strip. These categories are "1st, 2nd, 3rd, Building categories" that have valid registration. The small categories (4th and 5th) were not considered due to the low practical

and administrative experience of these companies in construction works and the low experience of their subcontractors. Based on the list of registered contractors at the PCU in January 2011, the size of population for the 1st, 2nd, 3rd, building categories was 149 companies.

To determine the sample size for each population of contracting companies, Kish (1965) equation was used.

$$n = n' / [1 + (n' / N)]$$

n' is the sample size from infinite population, which can be calculated from this formula

$[n' = S^2 / V^2]$. The definitions of all variable can be defined as the following:

n : sample size from finite population.

N : Total population (149 contracting companies).

V : Standard error of sample population equal 0.05 for the confidence level 95%, t

Table 1: Sample Size and Response Rate of The Study Populations

Population Category	Total Population	Calculated Sample Size	Distributed questionnaire	Number of respondents	Response Rate
Contracting companies	149	45	90	66	73%

Moser and Kalton (1971) showed that a response rate of less than 30% is likely to produce results subject to non-response bias. Based on this, they obtained response rates of 73% are reasonable and will reflect good results and outputs.

The good design of the questionnaire is a key to obtain good survey results and warranting a high rate of return. The questions of the research questionnaire are constructed based on:

- Literature review.
- Several interviews with consultants to obtain many basic important thoughts which can be useful for creating questions.

A questionnaire survey was undertaken to determine the regarding factors affecting the use of strategic planning in construction companies in Gaza Strip. A six page questionnaire, accompanied by a covering letter was sent to six consultants to judge and help creating it. The questionnaire comprised of two sections to accomplish the aim of this research, as follows:

- 1) **Section One:** General information about the companies.
- 2) **Section Two:** Factors affecting the use of strategic planning in construction companies.

Four previous studies [21-24] were incorporated in this research to compile a comprehensive list of factors. The previous studies were used to build a comprehensive list of factors affecting strategic planning in construction companies. It was decided to divide the factors into six main groups which are:

1. Factors related to the use of the company's strategic plan-

= 1.96.

S^2 : Standard error variance of population elements, $S^2 = P(1 - P)$; maximum at $P = 0.2$

The sample size for the contractors' and subcontractors' population can be calculated

from the previous equations as follows:

$$n' = S^2 / V^2 = (0.16) / (0.05)^2 = 64$$

$$n = 64 / [1 + (64 / 149)] = 45$$

Although the calculated sample size for construction companies is 45, the questionnaires were distributed to 90 contracting companies to overcome the risk of low participation from the respondents and to ensure higher reliability and benefits of the study. Fortunately, the response rate was 73% for contracting companies. As shown in **Table 1**.

ning,

2. Factors related to corporate Structure,
3. Factors related to the prevalence of a culture of strategic planning in the company,
4. Factors related to the application of the strategy,
5. Factors related to the optimal use of available resources, and
6. Factors related to the monitoring and evaluation of Strategy.

In order to fit into conditions in the Palestinian construction industry, a pilot study was performed for preliminary questionnaire. Six experienced experts were involved in this pilot study. All respondents were experienced industry professionals; with an average working experience in the construction industry of 25 years. The designations of the respondents were managing directors, general managers, and senior project managers. Therefore, it is expected that the data collected from them are reliable. The six respondents were asked to critically review the design and structure of the questionnaire. Their valuable comments and suggestions were used to revise the questionnaire. All suggested comments and modifications were taking into consideration. Minor changes, modifications, and additions were accommodated based on pilot study findings to develop the final questionnaire. The questionnaire was validated by the criterion-related reliability test that measures the correlation coefficients between the factors selected for in each group and for all groups as one entity, and structure validity test (Spearman test). Cronbach's a coefficient of internal con-

sistency reliability tests for level of frequency responses was also used.

The relative index technique has been widely used in construction research for measuring attitudes with respect to surveyed variables. Several researches [24,25] used the relative importance index in their analysis. The respondents were asked to gauge the identified interface problems on a five-point Likert scale (1 for the strongly disagree to 5 for the strongly agree). Based on the survey response, a relative importance index was tabulated using the following equation:

$$\text{Relative Importance Index} = \frac{\sum w}{AN} = \frac{5n_5 + 4n_4 + 3n_3 + 2n_2 + 1n_1}{5N}$$

Where W is the weighting given to each factor by the respondent, ranging from 1 to 5, (n1 = number of respondents for strongly disagree, n2 = number of respondents for disagree, n3 = number of respondents for neutral, n4 = number of respondents for agree, n5 = number of respondents for strongly agree). "A" is the highest weight (i.e. 5 in the study) and N is the total number of samples. The relative importance index ranges from 0 to 1.

4. RESULTS AND DISCUSSION

Table 2 shows that the average mean equal 3.82 and the weight mean equal 76.36% which is greater than " 60%" and the value of t test equal 14.152 which is greater than the critical value which is equal 2.00 and the p- value equal 0.000 which is less than 0.05, that means the company's use strategic planning largely.

Table 2: Determining the use of the company's strategic planning

Items	Mean	standard deviation	Weight mean	t-value	P-value
1-The company provides adequate time to prepare their strategic plans.	4.08	0.751	81.52	11.643	0.000
2-Managers are able to provide the time needed for the strategic planning process.	3.92	0.730	78.48	10.288	0.000
3-Management believes in the importance of clarifying the concept of strategic planning for workers.	3.85	0.864	76.97	7.981	0.000
4-The company has a clear message in the mind of the director.	4.00	0.911	80.00	8.913	0.000
5-The company has a future vision.	3.98	0.920	79.70	8.699	0.000
6-The company has the flexibility to meet the changes that occur in the environment and adaptation.	3.95	0.812	79.09	9.550	0.000
7-Management depends on a variety of information sources including personal experience in the preparation of the strategic plan.	4.03	0.859	80.61	9.746	0.000
8-The company compare and choose between strategic alternatives.	3.77	0.675	75.45	9.304	0.000
9-The company evaluated and follow-up strategies in place.	3.83	0.796	76.67	8.507	0.000
10-Appropriate standards are developed in order to control the performance in the implementation of strategic plans.	3.89	0.844	77.88	8.609	0.000
11-The company moves to focus on projects with very short term, rather than large projects that require a long period of time.	3.23	1.174	64.55	1.573	0.121
12-The company has a strong tendency to diversify its investment activities in the areas of different.	3.62	1.019	72.42	4.951	0.000
13- The company uses in the preparation of the plan for the SWOT to know the strengths and weaknesses and the risks and opportunities.	3.52	1.099	70.30	3.809	0.000
14-The company has a strong willingness to invest in opportunities and carrying out the risk of.	3.77	0.856	75.45	7.337	0.000
All items	3.82	0.470	76.36	14.152	0.000

*Critical value of t at df "65" and significance level 0.05 equal 2.00.

From Table 4.2, it is shown that, The first factor " The company provides adequate time to prepare their strategic plans" was ranked first and confirmed by the mean reaching 4.08

and the weight mean 81.52%, indicating that contractors agree completely that they devote sufficient time to develop strategic plans.

Table 3 shows that the average mean equal 3.72 and the weight mean equal 74.37 % which is greater than “60%” and the value of t test equal 12.080 which is greater than the critical value which is equal 2.00 and the p- value equal 0.000 which is less than 0.05, that means In developing the strategic plan is reviewed and revised the organizational structure in line with the strategic plan.

Table 3: Corporate Structure (Organizational Structure)

Items	Mean	standard deviation	Weight mean	t-value	P-value
15- In developing the strategic plan is reviewed and revised the organizational structure in line with the strategic plan.	3.89	0.787	77.88	9.228	0.000
16- It Identify aspects of the activity in the organizational structure according to the Strategic Planning.	3.83	0.815	76.67	8.308	0.000
17- There is an administrative post and wide to identify those points in your company.	3.65	0.813	73.03	6.509	0.000
18-There are mechanisms to enable management to perform a monitoring role in the implementation of the strategic plan.	3.80	0.728	76.06	8.963	0.000
19- Serve the functional sites present in the company's strategic planning process.	3.82	0.893	76.36	7.445	0.000
20- Influenced by strategic planning staff turnover rate in the organizational structure.	3.64	0.939	72.73	5.508	0.000
21- Management is largely responsible for the failure to implement plans, programs and contracts for their projects.	3.39	1.108	67.88	2.889	0.005
All items	3.72	0.483	74.37	12.080	0.000

*Critical value of t at df "65" and significance level 0.05 equal 2.00.

From Table 4.3, it is shown that, The first factor also" In developing the strategic plan is reviewed and revised the organizational structure in line with the strategic plan" was ranked first and confirmed by the mean reaching 3.89 and the weight mean 77.88%, That most construction companies in the development of the strategic plan review and modify the organizational structure in line with the strategic plan.

Table 4 shows that the average mean equal 3.55 and the

weight mean equal 71.07%which is greater than “60%” and the value of t test equal 8.371 which is greater than the critical value which is equal 2.00 and the p- value equal 0.000 which is less than 0.05, that means Encourage company management personnel at all organizational levels to participate in strategic planning and Staff working in the company as a team to prepare a strategic plan

Table 4: The prevalence of a culture of strategic planning in the company

Items	Mean	standard deviation	Weight mean	t-value	P-value
22- The company encourage management personnel at all organizational levels to participate in strategic planning.	3.74	0.966	74.85	6.246	0.000
23- The company links it's management policy strategic culture of the local community.	3.68	0.826	73.64	6.708	0.000
24- The company discuss its management strategic plan with the employees without imposing dictates.	3.20	0.996	63.94	1.607	0.113
25- Staff working in the company as a team to prepare a strategic plan.	3.79	0.937	75.76	6.833	0.000
26- Employees provides the information necessary for the implementation of the strategic planning activities.	3.61	0.820	72.12	6.001	0.000
27- The company aspire the management staff constantly on the future plans.	3.53	0.964	70.61	4.468	0.000
28- The company evolve its management staff to	3.44	1.040	68.79	3.433	0.001

Items	Mean	standard deviation	Weight mean	t-value	P-value
study obstacles to strategic planning.					
29- The plan focuses the company's strategy to raise the level of services provided by.	3.67	0.934	73.33	5.801	0.000
30- Company is committed to working in the decisions of senior management.	3.82	0.858	76.36	7.750	0.000
31- The company's management develop a sense of the company's management to work in.	4.03	0.976	80.61	8.575	0.000
32- The discussion of ideas about working in the company is transformed to personal differences.	2.59	1.240	51.82	-2.680	0.009
All items	3.55	0.537	71.07	8.371	0.000

*Critical value of t at df "65" and significance level 0.05 equal 2.00.

From Table 4.4, it is shown that, The tenth factor also" The company's management develop a sense of the company's management to work in" was ranked first and confirmed by the mean reaching 4.03 and the weight mean 80.61%, This high percentage shows the interest of overall management of the development of a sense of belonging for the Construction companies because of its importance to the success of

the administration's policies in the strategic planning process, and coincided a al- madhon (2007), Lashway (1997), the study Bliss (1999) this result with the result of Schaffer & Taylor (1984) and el jondi (1999). Through the development of performance and the involvement of employees and study.

Table 5 shows that the average mean equal 3.84 and the weight mean equal 76.82% which is greater than "60%" and the value of t test equal 11.591 which is greater than the critical value which is equal 2.00 and the p- value equal 0.000

which is less than 0.05, that means company's specific strategy is implemented immediately and Plans that are developed are applied to a significant.

Table 5: The application of the strategy

Items	Mean	standard deviation	Weight mean	t-value	P-value
33-When you use your company's specific strategy is implemented immediately.	3.89	0.767	77.88	9.466	0.000
34- Plans that are developed are applied to a significant (more than 75%).	3.79	0.691	75.76	9.264	0.000
All items	3.84	0.589	76.82	11.591	0.000

*Critical value of t at df "65" and significance level 0.05 equal 2.00.

From Table 4.5, it is shown that, The first factor also" When you use your company's specific strategy is implemented immediately " was ranked first and confirmed by the mean reaching 3.89 and the weight mean 77.88%, This high per-

centage shows that The construction companies, the implementation of strategic plans, which put them in as soon as possible so as to changes in the external environment of constantly changing.

Table 6 shows that the average mean equal 6.82 and the weight mean equal 76.49% which is greater than "60%" and the value of t test equal 12.155 which is greater than the critical value which is equal 2.00 and the p- value equal 0.000 which is less than 0.05, that means Administrative leaders

are trained are able to maximize the utilization of resources and possibilities available.

Table 6: The optimal use of available resources

Items	Mean	standard deviation	Weight mean	t-value	P-value
35- limited resources available to the company.	4.05	0.732	80.91	11.597	0.000
36-There is participation by the various levels involved in the inventory of resource requirements.	3.86	0.762	77.27	9.204	0.000
37- providing the resources required for the exercise of strategic planning.	3.73	0.833	74.55	7.094	0.000
38-Employees are informed of the availability of the resources available.	3.77	0.908	75.45	6.914	0.000
39-the company works to stimulate the use of available resources.	3.82	0.875	76.36	7.592	0.000
40-Employees are trained on how to use the resources available.	3.82	0.783	76.36	8.493	0.000
41-Administrative leaders are trained to be able to maximize the utilization of resources and possibilities available.	3.73	0.937	74.55	6.304	0.000
All items	3.82	0.551	76.49	12.155	0.000

*Critical value of t at df "65" and significance level 0.05 equal 2.00.

From Table 6, it is shown that, The first factor also " limited resources available to the company " was ranked first and confirmed by the mean reaching 4.05 and the weight mean 80.91%, this result coincided a attallah (2005) and also got the highest rank in her study.

weight mean equal 79.09 % which is greater than "60%" and the value of t test equal 11.774 which is greater than the critical value which is equal 2.00 and the p - value equal 0.000 which is less than 0.05, that means there is a wide participation of management in the evaluation and review strategic plans.

Table 7 shows that the average mean equal 3.95 and the

Table 7: Monitoring and Evaluation Strategy

Items	Mean	standard deviation	Weight mean	t-value	P-value
42-There is a wide participation of management in the evaluation and review strategic plans.	4.09	0.872	81.82	10.160	0.000
43-Your company to pursue other companies that produce or provide the same services.	3.91	0.836	78.18	8.832	0.000
44-The plan is reviewed after putting them on a regular basis (every year - six months -.....).	3.86	0.910	77.27	7.714	0.000
All items	3.95	0.659	79.09	11.774	0.000

*Critical value of t at df "65" and significance level 0.05 equal 2.00.

From Table 7, it is shown that, The first factor also " limited resources available to the company " was ranked first and confirmed by the mean reaching 4.09 and the weight mean 81.82%, this refers that most construction companies are encouraged to participate in the evaluation and review of strategic plans through the work of a periodic review of plans.

5. Conclusion

- The study showed that the percentage (76.36 %) of those surveyed agree that the strategic planning is used in the construction companies, which is a large use.

- The study showed that (74.37%) of the study sample there a relationship between strategic planning in construction companies and the organizational structure of the college, and that fit with the strategic planning process.
- The study showed that the percentage (71.07%) of a sample of the study support a relationship between Strategic planning in the construction companies and the prevalence of a culture of strategic planning , to serve the process Planning and development of the construction company.
- Construction companies have plans with short and long term and have the vision, mission and goals

are clear. The study showed that the overall management has a clear understanding and conviction of strategic planning and it sought to achieve competitive advantage.

- Utilization of available resources is the best use to maximize the return from the use and maintenance of the survival of companies, but to varying degrees do not indicate the use of strategic planning in a Good way. Providing the resources required for the exercise of strategic planning was ranked last between the answers of respondents, as well as the extent of participation by the levels of inventory requirements required resources, the availability of personnel and information resources available.
- Construction companies have effective channels of communication and evaluation with a good monitoring between senior management and other management levels.

REFERENCES

- [1] PASSIA, "The Palestinian Academy Society for the Study of International Affairs". Jerusalem, 2008.
- [2] M. Betts and G. Ofori, "Strategic planning for competitive advantage in construction". *Construction Management and Economics*, VOL. 10, pp. 511-532, 1992.
- [3] M. Betts, *Strategic management of IT in construction*. London: Blackwell Science, 1999.
- [4] G. Johnson, and K. Scholes, *Exploring corporate strategy*. London: Prentice Hall Europe, 1999.
- [5] H. Mintzberg, *The rise and fall of strategic planning*. New York: Prentice Hall, 1994.
- [6] A. Warszawski, "Strategic planning in construction companies". *Journal of Construction Engineering and Management*, VOL. 122, NO. 2, pp.133-140, 1996.
- [7] P. Venegas, and L. F. Alarcon, "Selecting long-term strategies for construction firms". *Journal of Construction Engineering and Management*, VOL. 123, NO. 4, pp. 388-398, 1997.
- [8] S. Yisa, and D. J. Edwards, "Evaluation of business strategies in the UK construction engineering consultancy". *Measuring Business Excellence*, VOL. 6, NO. 1, pp. 23-31, 2002.
- [9] A. D. F. Price, and E. Newson, "Strategic management: consideration of paradoxes, processes, and associated concepts as applied to construction." *Journal of Management in Engineering*, VOL. 19, NO. 4, pp. 183-192, 2003.
- [10] C. Y. J. Cheah, and M. J. Garvin, "An open framework for corporate strategy in construction." *Engineering, Construction and Architectural Management*, VOL. 11, NO. 3, pp. 176-188, 2004
- [11] C. Y. J. Cheah and D. A. S. Chew, "Dynamics of strategic management in the Chinese construction industry". *Management Decision*, VOL. 43, NO.4, pp.551-567, 2005
- [12] A. Dansoh, "Strategic planning practice of construction firms in Ghana". *Construction Management and Economics*, VOL. 23, pp.163 168, 2005.
- [13] O. Oz, "Sources of competitive advantage of Turkish construction companies in international markets". *Construction Management and Economics*, VOL. 19, pp. 135-144, 2001.
- [14] I. Dikmen, and M. T. Birgonul, "Strategic perspective of Turkish construction companies". *Journal of Management in Engineering*, VOL. 19, NO. 1, pp. 33-40, 2003
- [15] A. Kazaz, , and S. Ulubeyli, "Strategic management practices in Turkish construction firms". *Journal of Management in Engineering*, VOL. 25, NO. 4, pp. 185-194, 2009.
- [16] P. I. Cakmaka, and E. Tasb, "Strategic planning practices of contractor firms in Turkey". *Social and Behavioral Sciences*, VOL. 58, pp. 40 – 46, 2012.
- [17] R. Fellows, and A. Liu, *Research methods for Construction*. Blackwell Science Ltd., Osney Mead, Oxford OX2 OEL, UK, 1997.
- [18] G. D. Israel, *Determining sample size*, Department of agriculture, Institution of food and agricultural science, University of Florida, 2003.
- [19] L. Kish, *Survey sampling*. New York. NY: Wiley, 1965.
- [20] C.A., Moser, and G. Kalton, *Survey methods in social investigation*. Heinemann Education, 1971.
- [21] E. Al-kharouby, *Developed method is concerning risks of strategic planning for infrastructure*, Master thesis, Islamic University, Gaza, (2004).
- [22] S. Attalla, *The reality of the strategic planning in the construction sector: field study: the construction companies in the Gaza Strip*, Master thesis, Islamic University, Gaza, 2005.
- [23] M. El Mobaed,, *The relationship between strategic planning and and growth in small industrial businesses in Palestine*. Master thesis, Islamic University, Gaza, 2006.
- [24] M. Al-Farra," *management characteristics in Gaza's manufacturing establishments: a comparative study*". *Islamic University journal*, Vol. 12, No.1, 2004.
- [25] A. Enshassi, M.A. Faisal, and B. Tayeh, "Major causes of problems between contractors and subcontractors in the Gaza Strip". *Journal of Financial Management of Property and Construction*, VOL. 17, pp. 92-112, 2012.