



MARKETING MANAGEMENT FUNCTIONS OF CONSTRUCTION COMPANIES: EVIDENCE FROM TURKISH CONTRACTORS

Gul Polat¹, Umit Donmez²

¹Department of Civil Engineering, Istanbul Technical University, Istanbul, Turkey

²Yuksel Construction Co., Ankara, Turkey

E-mails: ¹polatgu@itu.edu.tr; ²umit_donmez@yahoo.com

Received 07 Apr. 2009; accepted 08 Feb. 2010

Abstract. Globalization, the restructuring of the world economy, changes experienced in project financing and delivery systems, the pervasive utilization of information and communication technologies (ICT), and the intensity of the competition prevailing in the market compel contractors to rethink the competitive forces and client expectations, which in turn necessitate a well planned marketing orientation for business planning. The Turkish construction industry is not different from the global construction industry in the context of intense competitiveness as Turkish contractors do not only undertake projects in the domestic market but also in foreign markets including the Commonwealth of Independent States, Africa, Middle East, Europe, Asia, etc. They also often face intense competition from local and foreign companies such as U.S., Chinese, Japanese, French, Spanish, German, U.K., and Korean contractors. Given the intense competition, effective marketing of their services is imperative for Turkish contractors in achieving competitive advantage. This study explores the marketing management functions of Turkish construction companies and the extent to which they carry out traditional marketing practices via a questionnaire survey of 71 Turkish contractors. The survey results revealed that Turkish contractors made use of marketing management functions to some extent, yet responding contractors did not attach adequate importance to differentiating their products/services from the products/services offered by their competitors. Since achieving client satisfaction by means of product and/or service differentiation is the ultimate goal, Turkish contractors should carry out all of the traditional marketing practices in order to differentiate themselves in the market, and thereby create competitive advantage.

Keywords: marketing management, construction companies, questionnaire, Turkey.

1. Introduction

The construction industry is typically characterized by extreme competitiveness, high uncertainty and risks, and generally low profit margins when compared to other industries (Mochtar and Arditi 2001). Given these conditions, construction companies constantly seek ways to outbid their competitors and explore new and/or less crowded areas of construction that may provide more jobs and higher profits. In this context, marketing may help construction companies to differentiate themselves from their competitors, cultivate and/or keep clients, and thereby create competitive advantage (Arditi *et al.* 2008; Chen and Mohamed 2008).

Researchers and practitioners have offered several definitions for marketing. For instance, Pettinger (1998) defined marketing as the competitive process by which goods and services are offered for consumption at a profit. Harris *et al.* (2006) suggested a more detailed definition and described marketing as “the management function that organises and directs all those business activities involved in assessing and converting customer purchasing power into effective demand for a specific product or service, and in moving the project or service to the final customer or user so as to achieve the profit target or other objectives set

by the company”. Akin to this definition, the American Marketing Association Board of Directors offered the following description in 2007: “marketing is the activity, set of institutions, and processes for creating, communicating, delivering, and exchanging offerings that have value for customers, clients, partners, and society¹.”

Marketing mainly deals with customers and aims to manage profitable customer relationships. There are mainly two goals of marketing, which are: 1) attracting new customers by promising superior value than competitors do, and 2) keeping and growing current customers by delivering satisfaction (Kotler and Armstrong 2009).

Drucker (1993) emphasized the importance of marketing for an enterprise with the following statements: “Because the purpose of business is to create a customer, the business enterprise has two – and only these two – basic functions: marketing and innovation. Marketing and innovation produce results; all the rest are costs. Marketing is the distinguishing, unique function of the business”.

Marketing does not only deal with sales but also covers all areas of the enterprise (Kotler and Keller 2008). Since the discipline of marketing deals with ways to cre-

¹ Marketing definition approved in October 2007 by the American Marketing Association.

ate and/or keep customers, it often overlaps with the discipline of strategic planning. That is why; marketing principles should be adopted by the entire organization rather than just the marketing staff.

According to Arditi and Davis (1988), construction marketing consists of a number of activities such as expanding into new markets; creating and evaluating job potentials; cultivating clients; marketing research and analysis; prequalifying with clients; estimating project cost; submitting proposals; entering into contracts; negotiating changes and claims; developing new technology or different contract forms, etc.

Although effective marketing promises several benefits to construction companies including increase in profits, increase in sales, increase in client satisfaction, development of company image, development of products/services, entrance to new markets, creation of new markets, improvement of customer loyalty, improvement of reputation, improvement of total quality, etc. (Dikmen *et al.* 2005), it is commonly acknowledged that marketing has been either wholly ignored or grossly misunderstood in the construction industry (e.g., Yisa *et al.* 1995; Mochtar 2000; Harris *et al.* 2006; Arditi *et al.* 2008) and that contractors allocate limited resources for marketing activities (Arditi *et al.* 2008).

There are three main reasons behind this neglect. First, the construction industry differs from other industries in many ways. For instance, the environment in which construction companies operate is turbulent and fluctuating as the construction industry is highly influenced by other industries and any social or political uncertainties (Bennett 2005). This dynamic nature of the industry prevents construction companies from any long and medium term planning (Bennett 2005). Due to the unique nature of the construction industry, construction companies often have to ask their prospective clients to buy a product that does not exist (Shearer 1990) and they cannot create demand for work (Bennett 2005).

Second, the hit-rate in competitive bidding is predominantly determined by how low a contractor can bid relative to other bidders (Šiškina *et al.* 2009; Plebankiewicz 2009), so contractors often neglect marketing activities (Nassar 2003; Skitmore and Smyth 2007; Arditi *et al.* 2008). Besides, some marketing activities such as organizing social events, providing client entertainment, etc. may easily be perceived as bribery and kickbacks in a bidding environment (Mochtar 2005).

Third, many construction professionals cling to the belief "Do the job right and it will sell itself" and they often fail to realize that marketing is much more than promotional activities, such as printing brochures and advertising (Peck 1994; Yisa *et al.* 1995). According to Pearce (1992), managers with a product-based thinking tend to neglect marketing principles and tend to look for opportunities that fit their capabilities rather than adapting their capabilities to suit current and future market opportunities. This may be the result of the education system in universities that mostly produce technically competent engineers who are deficient in management skills (Harris 1991).

Yet, globalization, the restructuring of the world economy, changes experienced in project financing and delivery systems, the pervasive utilization of information and communication technologies (ICT), and the intensity of the competition prevailing in the market compel contractors to rethink the competitive forces and client expectations, which in turn necessitate a well planned marketing orientation for business planning (Dikmen *et al.* 2005; Jaafar *et al.* 2008). Indeed, recent studies reveal that contractors have recently realized that passiveness does not work in the current market conditions; so they have begun to adopt basic marketing principles for improving their corporate image, scoring higher in pre-qualification criteria, and creating and/or finding new markets (e.g., Pryke and Smyth 2006; Arditi *et al.* 2008; Plebankiewicz 2009).

The Turkish construction industry is not different from the global construction industry in the context of competitiveness. Indeed, Turkish contractors often face intense competition from local and foreign competitors in the national and international markets. There are approximately 100,000 contractors registered with the Ministry of Public Works and Settlement in Turkey. If one considers unregistered companies, this number goes up to 200,000, greater than the total number of E.U. contractors (Yemar Report 2009). Turkish contractors do not only undertake projects in the domestic market but also in international markets. For instance, in 2007, the total amount of construction projects carried out by Turkish contractors in Turkey was approximately \$62.5 billion, and \$19.5 billion in foreign markets (Yemar Report 2009). In those markets, Turkish contractors compete against foreign contractors, such as U.S., Chinese, Japanese, French, Spanish, German, U.K., and Korean contractors (Yemar Report 2009). Given these conditions, it is obvious that effective marketing is imperative for Turkish contractors in creating competitive advantage. In this respect, this study attempts to find out the marketing management functions currently in use by Turkish construction companies and the extent to which these companies make use of traditional marketing practices. For this purpose, a questionnaire survey of 71 Turkish contractors was carried out.

2. Marketing management

Marketing management is a business discipline, which mainly focuses on the practical application of marketing techniques and the management of a firm's marketing resources and activities (Kotler and Keller 2008). There are four main steps in a successful marketing management process, which are; (1) understanding the marketplace and customer needs and wants, (2) designing a customer-driven marketing strategy, (3) constructing a marketing program that delivers superior value and building profitable relationships, creating customer delight, and (4) capturing value from customers to create profits and customer equity (Kotler and Armstrong 2009).

Since marketing aims to create and/or keep customers and improve business performance, it basically focuses on customer needs and wants (e.g., Palmer 2000; CIM 2005). Thus, the first step in a marketing manage-

ment process is to *understand the marketplace and the customer needs and wants*. For this purpose, a company should continuously carry out marketing research and analysis activities, which mainly focus on analyzing business opportunities in the market, collecting information about potential customers, competitors and the marketing environment, and then analyzing the company's strengths and weaknesses. Having gathered such information, a company should *design a customer-driven marketing strategy*. In this stage, a company divides the market into major segments, selects the target market that the company can best serve, and develops differentiating and positioning strategy for the target market. Following this stage, a company should *construct a marketing program that delivers superior value and builds profitable relationships, creating customer delight*. A marketing program should include decisions on marketing resources necessary to achieve marketing objectives and marketing techniques to be used to pursue marketing objectives in the target market. This stage focuses on how to best implement the chosen strategy and it involves implementing the 5Ps of the Modified Marketing Mix theory, which include Product, Price, Place, Promotion, and People. Implementation of the five parameters of the modified marketing mix theory in the construction industry will be discussed in detail in the following section. After implementing the marketing program and building strong relationships with customers and marketing partners, a company should *capture value from customers to create profits and customer equity*. Marketing managers should constantly measure progress against marketing objectives in order to ensure that the implementation of marketing programs achieves the desired marketing objectives in a cost-efficient manner. A company may employ a variety of metrics, such as customer metrics (e.g., customer loyalty/satisfaction, brand image, etc.), market metrics (e.g., market share, sales volume, etc.), financial metrics (e.g., sales value, profits, etc.), etc., in order to measure marketing performance (Kotler and Keller 2008; Kotler and Armstrong 2009).

3. Modified marketing mix theory in construction

The 4Ps of the Marketing Mix theory were developed by McCarthy in 1960. According to McCarthy (1960), companies should create a successful mix of (1) the right product (Product), (2) sold at the right price (Price), (3) in the right place (Place), and (4) using the most suitable promotion (Promotion) when marketing their products or services. The marketing mix theory is successfully used in the manufacturing industry. However, it is commonly acknowledged that it provides little help to the construction industry due to the fact that construction is mainly service-oriented (Arditi and Davis 1988; Peck 1994; Maloney 2002; Cheah and Garvin 2004; Skitmore and Smyth 2007; Polat and Donmez 2010). Smyth (2000) and Winter and Preece (2000) suggested that a marketing theory that fits the specific characteristics of the construction industry should be developed by modifying the existing marketing theories from similar industries (e.g., service industry,

etc.). The 5Ps of the modified marketing mix theory are successfully used in the service industry. It is the extended version of the marketing mix theory and consists of five parameters, namely Product, Price, Place, Promotion, and People (Judd 1987). The modified marketing mix theory includes the people parameter besides the four parameters of the marketing mix theory. The people parameter refers to building strong customer relationships and achieving customer satisfaction. Arditi *et al.* (2008) acknowledge that the modified marketing mix theory adequately addresses the characteristics of the construction industry. The five parameters of the modified marketing mix theory (5P) are applied to construction in the following ways (Arditi *et al.* 2008; Polat and Donmez 2010):

Product: The product refers to the physical product and/or service offered to the customer. In the case of physical products, it also involves any services or conveniences that are part of the offering. The construction product includes both the product itself (i.e., the constructed facility) and the service provided by the construction company during the construction (Maloney 2002; Mochtar 2005). Contractors often face difficulties in achieving product differentiation as clients are generally not able to assess construction quality until the end product finally materializes (Forsythe 2008). However, achieving service differentiation is much easier. Service differentiation can be measured in terms of the quality of a construction company's technical performance (Mochtar 2005), the extent of the innovative customization involved in the contract (Gerwick and Woolery 1982), and the provision of extended services such as financing and leasing (Schaufelberger and Wipadapisut 2003).

Price: Contractors are often compelled to offer the lowest price in order to achieve competitive advantage against their rivals as the hit-rate in competitive bidding is predominantly determined by how low a contractor can bid relative to other bidders in the traditional contracting environment (Nassar 2003; Skitmore and Smyth 2007; Arditi *et al.* 2008; Šiškina *et al.* 2009; Plebankiewicz 2009). Thus, price is the most important basis for differentiation amongst contractors. Pricing decisions should take into account both profit margins and the probable pricing response of potential competitors. The accuracy of the estimates is critical in pricing decisions (Sonmez and Ontepeli 2009).

Place: Place decisions are those associated with channels through which products are distributed from the manufacturer or service provider to the customer. In the construction industry, the place parameter typically refers to the new markets into which the contractors intend to expand (Dikmen *et al.* 2005; Arditi *et al.* 2008).

Promotion: Promotion decisions involve means for communicating and selling to potential customers. Typical promotional techniques used in mass consumer markets cannot be precisely applied in the construction industry due to the high transaction cost, long transaction time, and uniqueness of construction (Arditi *et al.* 2008). In the construction industry, the promotion parameter refers to information services, advertising, publicity, brochures and

publications, corporate identity program, pricing strategy, customized contracts and additional services, and education, support and participation of all employees (Arditi and Davis 1988; Cheah and Garvin 2004).

People: People decisions involve means for building strong customer relationships and achieving customer delight. In this context, the people parameter refers to relationship marketing, which helps contractors to develop long term and sustained relationships with clients so that their needs can be targeted and satisfied in return for customer loyalty (Nassar 2003; Love *et al.* 2004; Bennett 2005; Egemen and Mohamed 2006; Skitmore and Smyth 2007; Smyth and Edkins 2007; Forsythe 2008).

Arditi *et al.* (2008) identified a total of 25 marketing activities, which represent the five parameters of the modified marketing mix theory in the construction industry. Out of these 25 marketing practices, 7 are related to the product parameter, 3 practices represent price parameter, and 9 practices constitute promotion parameter. Place parameter includes 1 practice and people parameter consists of 5 practices.

4. Research methodology

In order to identify the marketing management functions of Turkish contractors and the extent to which these contractors carry out traditional marketing practices, a questionnaire of 18 questions was developed (please see the Appendix), and a survey was conducted like those in the similar studies carried out by Yisa *et al.* (1995), Mochtar and Arditi (2001), Dikmen *et al.* (2005), and Arditi *et al.* (2008). The data were collected via mail, e-mail, and fax. The contact persons were top managers or directors of marketing. The research sample was mainly drawn from the companies registered in the Turkish Contractors Association (TCA).

TCA was founded in 1952 to represent the leading construction companies in Turkey. According to official figures obtained from the website of TCA (www.tmb.org.tr), Turkish contractors have completed over 4,300 projects in 69 countries since the early 1970's and their business volume abroad has reached approximately \$105 billion. TCA has currently 143 members and their business volume constitutes nearly 70% of the national and 90% of international contracting work done so far by Turkish contractors.

The questionnaires were sent to the randomly selected 100 contractors registered in TCA. In addition to these 100 contractors, 10 large-scale construction companies, whose major field of activity is residential building projects, were also included in the survey. Of the 110 questionnaires that were sent, 71 were returned duly filled out, which corresponds to a response rate of 65%.

Questions 1 to 8 record the general characteristics of the respondent company, such as number of technical personnel, total turnover, type of work (i.e., building, civil, industrial, or other type), type of contract the company undertakes (i.e., open bid, invitational bid, and negotiated contracts), the company's role in contracts executed (i.e., prime contractor, joint venture partner, subcontractor, or other role), percentage of private sector clients in

the total number of clients, and existence of a quality assurance system. Question 8 was meant to identify whether the respondent contractor undertakes projects in international markets.

Questions 9 to 12 aim to find out construction companies' attitudes towards marketing. These questions ask about organization and management style of marketing through structure, the number of marketing staff, existence of a marketing professional, and marketing expenditure as percentage of annual turnover. The rank of individuals saddled with the responsibility of marketing gives an indication of how important strategic marketing is to the company's goals. Also, the more involved the entire organization is in marketing, the easier it will be to achieve the company's marketing goals. The size of the funds a company allocates to marketing activities and the number of marketing staff are significant measures of the importance attached to marketing by the company.

Question 13 to 18 were asked to identify the marketing management functions of the construction companies, such as the marketing research and analysis activities pursued by the company, the existence of a target market, the existence of a marketing plan, time range for marketing plans, advertising channels used by the company, and marketing activities carried out by the company. Twenty-five marketing activities representing the 5P's of marketing in the construction industry identified by Arditi *et al.* (2008) were used in the questionnaire.

Having conducted the questionnaire survey of 71 Turkish contractors, principal component analysis (PCA) was carried out in order to find the weights of marketing activities in each marketing parameter (i.e., product, price, place, promotion, and people). PCA linearly transforms an original set of variables into a smaller set of uncorrelated variables with minimum loss of the information in the original variables (Kellow 2006). The value of the i^{th} marketing parameter (principal component) is calculated using the following expression:

$$PC_i = a_{x1i}X_1 + a_{x2i}X_2 + a_{x3i}X_3 + \dots + a_{xpi}X_p, \quad (1)$$

where a_{xpi} are the factor scores and X_i the marketing activities (Field 2005). Factor scores have a mean of "0" and a standard deviation equal to "1".

An index is calculated by normalizing the factor scores in order to determine the weights of the different marketing activities in each marketing parameter. The weight of the j^{th} marketing activity in the i^{th} marketing parameter (i.e., principal component) is calculated as follows (Ruiz-Tagle 2006):

$$w_{ji} = \frac{a_{xji}}{\sum_{j=1}^p a_{xji}}. \quad (2)$$

Only one principal component was extracted using the statistical package SPSS® in the form presented in Eq 1 as the goal was to calculate the weights of marketing activities in each marketing parameter, and then the weights of the marketing activities in each marketing parameter were calculated using the factor scores such as in Eq 2. The factor scores calculated using the statistical

Table 1. Weighted Importance Ranking of the 5P's of Marketing by Turkish Contractors

5P Parameters and Constituent Marketing Activities	Factor Scores of Marketing Activities	Weights of Marketing Activities	Average Ratings of Marketing Activities*	Weighted Importance Ratings of the 5P Marketing Parameters*
Product-Related Activities				1.75
Seeking client satisfaction	0.764	16.38%	1.91	
Providing extended services	0.609	13.05%	1.96	
Offering customized contracts	0.156	3.34%	1.84	
Training for interpersonal skills	0.850	18.22%	1.89	
Offering competitive salaries	0.747	16.01%	1.78	
Recruiting high quality personnel	0.762	16.33%	1.69	
Conducting customer surveys	0.777	16.66%	1.27	
Price-Related Activities				
Providing free preliminary estimates	0.817	42.86%	1.38	1.91
Training estimators	0.737	38.67%	2.43	
Pursuing partnering agreements	0.352	18.47%	2.00	
Place-Related Activities				2.10
Seeking geographical expansion	–	–	2.10	
Promotion-Related Activities				1.82
Advertising	0.718	13.06%	1.80	
Product branding	0.413	7.51%	2.14	
Printing brochures and newsletters	0.048	0.87%	1.59	
Maintaining company website	0.802	14.58%	2.16	
Making gifts with company logo	0.695	12.64%	1.68	
Soliciting prospective clients	0.482	8.77%	1.93	
Participating in trade shows	0.688	12.51%	1.61	
Issuing news releases	0.867	15.77%	1.68	
Employing professional marketers	0.786	14.29%	1.73	
People-Related Activities				1.45
Providing client entertainment	0.751	19.27%	1.28	
Providing event/travel tickets	0.786	20.17%	1.00	
Organizing social events	0.690	17.71%	1.66	
Making charitable donations	0.812	20.84%	1.79	
Setting up scholarships/endowments	0.858	22.02%	1.53	

*Scale 0–3: 0 = Not Important, 1 = Fairly Important, 2 = Important, 3 = Very Important

package SPSS®, the weights of each marketing activity, their average importance scores, and the weighted importance scores of the 5P marketing parameters are presented in Table 1.

After carrying out the PCA, reliability analysis was also conducted in order to see whether a set of marketing activities consistently reflect the marketing parameter it is measuring. This test was carried out for four of the five marketing parameters (i.e., product, price, promotion, and people). Since the “place” parameter consists of only one marketing activity, it does not require a reliability analysis. Cronbach’s alpha (α) is the most common measure of scale reliability (Field 2005). The standardized Cronbach’s alpha is calculated using Eq. 3.

$$\alpha = \frac{N}{(N-1)} \times \left(\frac{\sigma_x^2 - \sum_{i=1}^N \sigma_{yi}^2}{\sigma_x^2} \right), \quad (3)$$

where N is the number of marketing activities, σ_x^2 is the variance of the observed total test scores, and σ_{yi}^2 is the variance of activity i .

A value of at least 0.60 for Cronbach’s alpha assures that the scale is reliable in exploratory studies (Sekaran 2000). Deleting one or more of the variables defining the construct may sometimes help to increase the value of Cronbach’s alpha (Field 2005).

Reliability analysis, which was also conducted by using the statistical package SPSS®, indicated Cronbach’s alpha values of 0.8 for the product construct, 0.6 for price, 0.9 for promotion, and 0.8 for people. Reliability analysis also revealed that deleting one or more marketing activity would not increase the values of Cronbach’s alpha coefficients.

5. Research findings and discussion

General characteristics of the respondent construction companies should be considered when interpreting the survey results. Drawing responses from a wide range of construction companies was necessary in order to reflect the actual state of the Turkish construction industry. Table 2 summarizes the general characteristics of the respondent construction companies. Responses were drawn from small-scaled construction companies employing less than 50 technical personnel to large-scaled construction companies employing over 100 technical personnel. The respondent companies range from those with total turnover between \$0–50,000,000 to those with over \$500,000,000.

Overall, 90% of the respondents were involved in building work alone or building work in addition to civil, industrial or other types of work, while the remaining 10% were not involved in building activities. As shown in Table 2, 10% of the respondents got their work

through negotiation, whereas 90% got their work through competitive bidding. The survey results indicated that 69% of the respondents were prime contractors as opposed to only 9% joint venture partners, and only 10% subcontractors. 63% of the respondent companies' clients were mainly from the private sector and 79% of the respondent companies utilized a quality assurance system. When the contractors were asked whether they were involved in international projects, 92% stated that they did.

Table 2. General Characteristics of Respondents

Characteristic	Percentage of Respondents
Number of Technical Personnel	
1–24	18
25–49	23
50–99	14
100–500	45
>500	–
Total Turnover (\$ Millions)	
0–50	18
50–100	11
100–500	22
500–1,000	33
>1,000	16
Type of Work	
Building	90
Civil	61
Industrial	60
Other	9
Type of Contract	
Open Bid	48
Invitational Bid	42
Negotiated	10
Contract Role	
Prime Contractor	69
Joint Venture Partner	9
Subcontractor	10
Other	12
Percentage of Private Sector Clients in Total Number of Clients	
<50%	37
≥50%	63
Existence of Quality Assurance System	
Yes	79
No	21
Involvement in International Projects	
Yes	92
No	8

Question 9 was asked to understand the current organization and management style of the respondent companies relative to marketing functions. The results show that 41% of the respondents did not have a formal marketing department; in these companies, marketing activities were managed by a top level manager that has other additional responsibilities. Only 32% had a formal marketing department headed by a top level manager, and 15% had a formal marketing department headed by an employed marketing executive. It was also noted that 6% did not have a formal marketing department but marketing activities were managed by in-house staff in addition to other responsibilities, and 6% used external marketing

agents (Table 3). It was encouraging to see that marketing activities were managed by a top level manager in 73% of the respondent companies.

Table 3. Organization and Management Style of Marketing Function

Organization and Management Style	Percentage of Respondents
Marketing is managed by a top level manager in addition to other responsibilities	41
Marketing is managed by a structured marketing department headed by a top level manager	32
Marketing is managed by a structured marketing department headed by an employed marketing executive	15
Marketing is managed by in-house staff in addition to other responsibilities	6
Marketing is managed by marketing consultants	6

Question 10 was meant to find the number of employees who are wholly dedicated to marketing functions. The responses to this question are shown in Table 4.

Table 4. Number of Marketing Staff

Number of Marketing Staff	Percentage of Respondents
1	21
2–5	36
6–10	21
11–25	11
>25	11

The resu-5 staff who were mainly responsible for marketing, 21% employed 1staff, 21% employed 6–10 staff, 11% employed 11–25 staff, and 11% employed more than 25 staff. When the contractors were asked whether they employed marketing professionals, 20% of the respondents reported that they employed marketing professionals who have professional qualifications in marketing. The number of marketing staff is one of the indicators of how much importance a construction company attaches to marketing. Thus it is also encouraging to see that 43% of the contractors employed more than 5 staff, who were wholly dedicated to marketing.

When the contractors were asked how much money they allocated to marketing activities as percentage of their annual turnover, Table 5 shows that the majority of respondents (52%) allocated 1–3%.

This finding is consistent with the findings of the former studies of Arditi and Davis (1988), Yisa *et al.* (1995), FMI (2005), and Arditi *et al.* (2008) as they found that construction companies allocate on the average 1.51% of their annual revenue to marketing. It was also interesting to see that 25% of the responding contractors did not budget any funds for marketing activities. The possible explanation for this finding may be that some contractors allocate a small marketing budget as they carry out few marketing activities (Arditi *et al.* 2008).

Table 5. Marketing Expenditure as Percentage of Annual Turnover

Marketing Expenditure as Percentage of Annual Turnover	Percentage of Respondents
0	25
1–3	52
3–5	18
5–7	1
7–10	4
>10	–

Question 13 was meant to find out the marketing research and analysis activities pursued by contractors. The responses to this question are shown in Table 6. On a scale of 0–4 (where 0 = never, 1 = rarely, 2 = sometimes, 3 = usually, and 4 = always), the respondents scored on average 2.70 (higher than “sometimes” and close to “usually”) in reading newspapers/journals. They scored on average 2.58, 2.45, and 2.35 (higher than “sometimes”) in reading trade publications, talking to managers within the company, and talking to current and prospective clients, respectively. Their average score in analyzing competitors’ marketing strategies was 1.96 (lower but close to “sometimes”).

Table 6. Marketing Research and Analysis Activities

Type of Activity	Average Score ²
Reading newspapers/journals	2.70
Reading trade publications	2.58
Talking to managers within the company	2.45
Talking to current and prospective clients	2.35
Analyzing competitors’ marketing strategies	1.96
Talking to subcontractors/suppliers	1.52
Purchasing information from research agency	1.07

When the contractors were asked whether they had a target market, 61% of the respondents reported that they had. Contractors were asked whether they had formal marketing plans. The majority of the respondents (52%) stated that they did not have formal marketing plans, whereas the remainder had. The contractors, who had formal marketing plans, were asked about the time range for their marketing plans. While 51% of the respondents reported developing annual marketing plans, 49% of the respondents reported that they had project-based marketing plans.

When the contractors were asked which channels they used for advertising, Table 7 shows that newspapers, magazines and journals, and the Internet are the most popular advertising channels. And finally, Question 18 was meant to find to what extent Turkish contractors carried out marketing practices. Table 1 shows the importance that the respondent contractors attached to each parameter of the modified marketing mix theory. The survey results indicate that training estimators, maintain-

ing the company website, product branding, seeking geographical expansion, and pursuing partnering agreements are five of the most important marketing activities carried out by contractors as they have average scores equal to or greater than 2.

Table 7. Advertising Channels Used by the Respondent Companies

Advertising Channels	Percentage of Respondents
Newspapers, magazines, journals	79
Web banners, web popup	73
Radio, cinema, TV commercials	45
Billboards	30
Stadiums, concert halls, show centers	14
Sides of buses, taxis, etc., and in-flight advertisements	11
Other.	18

The survey results indicate that the place parameter, which has only one marketing activity, is of paramount importance to contractors. “Seeking geographical expansion” scores 2.10, which is higher than “important” (Table 1). This finding is reasonable given the fact that 92% the respondent contractors did business in international markets. This may result from the aforementioned intense competition prevailing in the Turkish construction industry. Indeed, the intense competition compels contractors to expand into new markets and increase the chance of getting new awards in those markets (Clough and Sears 1994).

The price parameter scores 1.91 and ranks closely behind product-related marketing activities. As mentioned above, price is the most important factor in the traditional contracting environment as the hit-rate is predominantly determined by how low a contractor can bid relative to other bidders (Nassar 2003; Skitmore and Smyth 2007; Arditi *et al.* 2008). In terms of price-related marketing activities, “training estimators” ranked first followed by “pursuing partnering agreements” (Table 1). As mentioned above, pricing is a very effective marketing tool in the construction industry and plays a significant role in winning competitively bid jobs. In many instances, pricing in construction is based on cost plus a percentage mark-up (Gerwick and Woolery 1982; Mochtar 2005). This method requires a good estimate of the actual costs of construction by accounting for quantities and unit costs of equipment, labour and materials and making reasonable adjustments for risks and uncertainties (Mochtar 2005). The expertise of estimators is crucial in this process (Polat and Donmez 2010). Thus, it is reasonable that contractors attach great importance to train estimators, which could help to provide clients with better prices. Moreover, “partnering” has the potential for cost savings, and thereby offering more competitive prices. “Providing free preliminary estimates to prospective clients” came in third and had a score that was below 2. The relatively low score of this activity may be because of the fact that this practice is commonly used by small contractors who predominantly negotiate their jobs and is never used for competitively bid jobs (Arditi *et al.* 2008). This

² Scale 0–4: 0 = Never, 1 = Rarely, 2 = Sometimes, 3 = Usually, 4 = Always.

finding is reasonable given the fact that only 10% of the respondents are negotiating contractors.

Promotion-related marketing activities came in third and had a score of 1.82 (Table 1). In terms of promotion-related marketing activities, maintaining company website (2.16), product branding (2.14), and soliciting prospective clients (1.93) were three of the most important activities to contractors. This finding confirms that most companies are using any means to make their company known, publicize their products and/or services, and thereby attract new clients. This may result from that contractors have recently realized the reality that the days of passiveness are over (e.g., Pryke and Smyth 2006; Arditi *et al.* 2008; Polat and Donmez 2010).

The product parameter scores 1.75 and ranks behind promotion. It is somewhat discouraging to see that all the product-related marketing activities have average scores below 2 (Table 1). "Seeking client satisfaction", "providing extended services", "training for interpersonal skills", and "offering customized contracts" are four of the most important product-related marketing activities to contractors and they have average scores close to 2 (Table 1). The relatively higher scores of these four marketing activities indicate that contractors have begun to understand the importance of improving service quality and thereby providing a lasting relationship with their clients.

Akin to product-related marketing activities, the importance that contractors attach to people-related marketing activities is not very high. All the activities have average scores below 2. This finding confirms that activities carried out for improving public relations such as providing clients with event/travel tickets and providing client entertainment may easily be perceived as bribery and kickbacks in a bidding environment (Mochtar 2005). On the other hand, social activities such as making charitable donations, organizing social events, and setting up scholarships/endowments are relatively less contentious. That is why contractors use them more than the other activities to provide better public relations (Arditi *et al.* 2008).

6. Conclusions

Globalization, the restructuring of the world economy, changes experienced in project financing and delivery systems, the pervasive utilization of information and communication technologies (ICT), and the intensity of the competition prevailing in the market compel contractors to rethink the competitive forces and client expectations, which in turn necessitate a marketing orientation for business planning. Marketing may help construction companies to differentiate themselves from their competitors, cultivate and/or keep clients, and thereby create competitive advantage. Effective marketing promises several benefits to construction companies including higher profits, increased sales, better client satisfaction, enhanced company image, extensive products/services, entry to new markets, creation of new markets, improved customer loyalty, improved reputation, improved total quality, etc.

The Turkish construction industry is not different from the global construction industry in the context of competitiveness. This study attempts to find out marketing the management functions utilized by Turkish contractors and the extent to which these contractors carry out traditional marketing practices. For this purpose, a questionnaire survey of 71 construction companies was carried out.

It was encouraging to see that marketing was managed by a top level manager in 73% of the respondent companies, 43% of the contractors employed more than 5 staff wholly dedicated to marketing, and 75% of the respondents formally budgeted for marketing activities. The findings indicated that reading newspapers/journals, reading trade publications, talking to managers within the company, and talking to current and prospective clients were four of the marketing research and analysis activities that contractors commonly pursued, and newspapers, magazines, journals, web banners, and web popups were the most popular means of communicating with current/prospective clients.

The weighted importance scores of the 5P parameters of the modified marketing mix were ranked by the respondents as: Place, Price, Promotion, Product, and People (Table 1). "Training estimators" (score: 2.43) was recognized as the most important marketing activity by Turkish contractors while "providing event/travel tickets" (score: 1.00) was considered to be the least important marketing activity. It was somewhat discouraging to see that responding contractors did not attach high importance to product-related marketing activities. Since achieving client satisfaction by means of product and/or service differentiation is the ultimate goal, Turkish contractors should accommodate all of the 5P parameters of the modified marketing mix theory in order to differentiate themselves in the construction market, and thereby create competitive advantage.

References

- Arditi, D. and Davis, L. 1988. Marketing of construction services, *Journal of Management in Engineering* 4(4): 297–315. doi:10.1061/(ASCE)9742-597X(1988)4:4(297)
- Arditi, D.; Polat, G. and Makinde, S. A. 2008. Marketing practices of U.S. contractors, *Journal of Management in Engineering* 24(4): 255–264. doi:10.1061/(ASCE)0742-597 X(2008)24:4(255)
- Bennett, R. 2005. Marketing policies of companies in a cyclical sector: an empirical study of the construction industry in the United Kingdom, *Journal of Business & Industrial Marketing* 20(3): 118–126. doi:10.1108/08858620510592731
- Cheah, C. Y. J. and Garvin, M. J. 2004. An open framework for corporate strategy in construction, *Engineering, Construction and Architectural Management* 11(3): 176–188. doi:10.1108/09699980410535787
- Chen, L. and Mohamed, S. 2008. Impact of the internal business environment on knowledge management within construction organizations, *Construction Innovation: Information, Process, Management* 8(1): 61–81.

- CIM 2005. Marketing and the 7Ps: a brief summary of marketing and how it works. The Chartered Institute of Marketing, London.
- Clough, R. H. and Sears, G. A. 1994. *Construction Contracting*. John Wiley and Sons Inc., NY.
- Dikmen, I.; Birgonul, M. T. and Ozcenk, I. 2005. Marketing orientation in construction firms: Evidence from Turkish contractors, *Building and Environment* 40: 257–265. doi:10.1016/j.buildenv.2004.07.009
- Drucker, P. 1993. *Management: Tasks, Responsibilities, Practices*. HarperCollins, London.
- Egemen, M. and Mohamed, A. N. 2006. Clients' needs, wants and expectations from contractors and approach to the concept of repetitive works in the Northern Cyprus construction market, *Building and Environment* 41(5): 602–614. doi:10.1016/j.buildenv.2005.02.021
- Field, A. 2005. *Discovering Statistics Using SPSS*. 2nd Edition. Sage, London.
- FMI 2005. *FMI's 2004 – 2005 Business Development and Marketing in the Construction Industry Report*. [online]. Available from Internet: <http://www.fminet.com/global/Articles/BDMReport.pdf>.
- Forsythe, P. 2008. Modelling customer perceived service quality in housing construction, *Engineering, Construction and Architectural Management* 15(5): 485–496. doi:10.1108/09699980810902767
- Gerwick, B. C. and Woolery, J. C. 1982. *Construction and Engineering Marketing for Major Project Services*. John Wiley and Sons, New York.
- Harris, F.C. 1991. Some views on education and training in the construction industry, *Technical Information Service: The Chartered Institute of Building*, No. 140.
- Harris, F.; McCaffer, R. and Edum-Fotwe, F. 2006. *Modern Construction Management*. Blackwell Publishing, Oxford.
- Jaafar, M.; Aziz, A. R. A. and Wai, A. L. S. 2008. Marketing practices of professional engineering consulting firms: implement or not to implement? *Journal of Civil Engineering and Management* 14(3): 199–206. doi:10.3846/1392-3730.2008.14.17
- Judd, V. C. 1987. Differentiate with the 5th P: People, *Industrial Marketing Management* 16(4): 241–247. doi:10.1016/0019-8501(87)90032-0
- Kellow, J. T. 2006. Using principal components analysis in program evaluation: some practical considerations, *Journal of Multidisciplinary Evaluation* 5(September): 89–107.
- Kotler, P. and Armstrong, G. 2009. *Principles of Marketing*. Pearson, London.
- Kotler, P., and Keller, K. 2008. *Marketing Management*. Prentice Hall, NJ.
- Love, P. E. D.; Huang, J. C.; Edwards, D. J. and Irani, Z. 2004. Nurturing a learning organization in construction: a focus on strategic shift, organizational transformation, customer orientation and quality centered learning, *Construction Innovation: Information, Process, Management* 4(2): 113–126.
- Maloney, W. M. 2002. Construction product/service and customer satisfaction, *Journal of Construction Engineering and Management* 128(6): 522–529. doi:10.1061/(ASCE)0733-9364(2002)128:6(522)
- McCarthy, J. E. 1960. *Basic Marketing: A Managerial Approach*. Richard D. Irwin, Homewood, IL.
- Mochtar, K. 2000. *Market-Based Pricing in Construction*. PhD. Dissertation, Illinois Institute of Technology, Chicago, IL.
- Mochtar, K. 2005. Marketing expenditures in the Indonesian construction industry, *Dimensi Teknik Sipil* 7(1): 64–71.
- Mochtar, K. and Arditi, D. 2001. Role of marketing intelligence in making pricing policy in construction, *Journal of Management in Engineering* 17(3): 140–148. doi:10.1061/(ASCE)0742-597X(2001)17:3(140)
- Nassar, K. 2003. Construction contracts in a competitive market, *Engineering, Construction and Architectural Management* 10(3): 172–178. doi:10.1108/09699980310478421
- Palmer, A. 2000. *Principles of Marketing*. Oxford University Press, New York.
- Pearce, P. 1992. *Construction Marketing: A professional Approach*. Telford, London.
- Peck, W. F. 1994. Making the most of marketing, *Journal of Management in Engineering* 10(6): 17–21. doi:10.1061/(ASCE)9742-597X(1994)10:6(17)
- Pettinger, R. 1998. *Construction Marketing: Strategies for Success*. Macmillan Press, London.
- Plebankiewicz, E. 2009. Contractor prequalification model using fuzzy sets, *Journal of Civil Engineering and Management* 15(4): 377–385. doi:10.3846/1392-3730.2009.15.377-385
- Polat, G. and Donmez, U. 2010. ANP-based marketing activity selection model for construction companies, *Construction Innovation: Information, Process, Management* 10(1): 89–111.
- Pryke, S. D. and Smyth, H. J. 2006. *Management of Complex Projects: A Relationship Approach*. Blackwell Publishing, Oxford.
- Ruiz-Tagle, M. T. 2006. Patterns of environmental management in the Chilean manufacturing industry: an empirical approach, in *Proceedings of Corporate Responsibility Research Conference*, Trinity College, Dublin, Ireland.
- Schaufelberger, J. E. and Wipadapisut, I. 2003. Alternate financing strategies for build-operate-transfer projects, *Journal of Construction Engineering and Management* 129(2): 205–213. doi:10.1061/(ASCE)0733-9364(2003)129:2(205)
- Sekaran, U. 2000. *Research Methods for Business*. Hermitage Publishing Services, New York, NY.
- Shearer, C. 1990. The marketing of consulting engineering services, *Structural Engineer* 68(9): 177–180.
- Šiškina, A.; Juodis, A. and Apanavičienė, R. 2009. Evaluation of the competitiveness of construction company overhead costs, *Journal of Civil Engineering and Management* 15(2): 215–224. doi:10.3846/1392-3730.2009.15.215-224
- Skitmore, M. and Smyth, H. 2007. Pricing construction work: a marketing viewpoint, *Construction Management and Economics* 25(6): 619–630. doi:10.1080/01446190701280710
- Smyth, H. J. 2000. *Marketing and Selling Construction Services*. Blackwell Science, London.
- Smyth, H. and Edkins, A. 2007. Relationship management in the management of PFI/PPP projects in the UK, *International Journal of Project Management* 25(3): 232–240. doi:10.1016/j.ijproman.2006.08.003
- Sonmez, R. and Ontepeli, B. 2009. Predesign cost estimation of urban railway projects with parametric modelling, *Journal of Civil Engineering and Management* 15(4): 405–409. doi:10.3846/1392-3730.2009.15.405-409
- Yemar Report. 2009. *Report on the Turkish Construction Sector*. Yapi Endustri Merkezi Yayinlari, Istanbul.

Yisa, S. B.; Ndekugri, I. E. and Ambrose, B. 1995. Marketing Function in U.K. construction contracting and professional firms, *Journal of Management in Engineering* 11(4): 27–33.
doi:10.1061/(ASCE)0742-597X(1995)11:4(27)

Winter, C. and Preece, C. N. 2000. Relationship marketing between specialist subcontractors and main contractors – comparing UK and German practice, *International Journal for Construction Marketing* 2(1): 1–11.

Appendix. Questions in the questionnaire

1. What is the number of technical personnel working in your company?
 - 1–24 50–99 100–500
 - 25–49 >500
2. What is the total turnover of your company (\$ millions)?
 - 0–50 100–500 500–1,000
 - 50–100 >1,000
3. In what type of work does your company engage? (Please check all that apply)
 - Building construction
 - Civil engineering construction
 - Industrial construction
 - Other, please specify.....
4. What types of contracts does your company undertake?
 - Open bid Invitational bid
 - Negotiated
5. What was your company’s role in contracts executed?
 - Prime contractor Joint venture partner
 - Subcontractor Other, please specify.....
6. What is the percentage of private sector clients in the total number of clients? ___%
7. Does your company have a quality assurance system?
 - Yes No
8. Is your company involved in international projects?
 - Yes No
9. What is the organization and management style of marketing function?
 - Marketing is managed by a top level manager in addition to other responsibilities.
 - Marketing is managed by a structured marketing department headed by a top level manager.
 - Marketing is managed by a structured marketing department headed by an employed marketing executive.
 - Marketing is managed by in-house staff in addition to other responsibilities.
 - Marketing is managed by marketing consultants.
10. What is the number of marketing staff working in your company?
 - 1 6–10 11–25
 - 2–5 >25
11. Does your company employ marketing professionals?
 - Yes No
12. What percentage of the annual turnover is allocated to marketing activities?
 - 1 6–10 11–25
 - 2–5 >25
13. On a scale of 0–4, where 0 = never, 1 = rarely, 2 = sometimes, 3 = usually, and 4 = always, how frequently does your company carry out the following marketing research and analysis activities?

- Reading newspapers/journals _____
 - Reading trade publications _____
 - Talking to managers within the company _____
 - Talking to current and prospective clients _____
 - Analyzing competitors’ marketing strategies _____
 - Talking to subcontractors/suppliers _____
 - Purchasing information from research agency _____
14. Does your company have a target market?
 - Yes No
 15. Does your company have formal marketing plans? (If No, please answer Question 17)
 - Yes No
 16. What is the time range for your marketing plans?
 - We have annual marketing plans
 - We have project-based marketing plans
 - Other, please specify.....
 17. Which of the advertising channels does your company use? (Please check all that apply)
 - Newspapers, magazines, journals
 - Web banners, web popup
 - Radio, cinema, TV commercials
 - Billboards
 - Stadiums, concert halls, show centers
 - Sides of buses, taxis, etc., and in-flight advertisements
 - Other, please specify.....
 18. On a scale of 0–3, where 0 = not important, 1 = fairly important, 2 = important, 3 = very important, please rate the following marketing activities.

- Product-Related Activities
- Seeking client satisfaction _____
- Providing extended services _____
- Offering customized contracts _____
- Training for interpersonal skills _____
- Offering competitive salaries _____
- Recruiting high quality personnel _____
- Conducting customer surveys _____
- Price-Related Activities
- Providing free preliminary estimates _____
- Training estimators _____
- Pursuing partnering agreements _____
- Place-Related Activities
- Seeking geographical expansion _____
- Promotion-Related Activities
- Advertising _____
- Product branding _____
- Printing brochures and newsletters _____
- Maintaining company website _____
- Making gifts with company logo _____
- Soliciting prospective clients _____
- Participating in trade shows _____
- Issuing news releases _____
- Employing professional marketers _____
- People-Related Activities
- Providing client entertainment _____
- Providing event/travel tickets _____
- Organizing social events _____
- Making charitable donations _____
- Setting up scholarships/endowments _____

STATYBOS ĮMONIŲ RINKODAROS VALDYMO FUNKCIJOS: TURKIJOS RANGOVŲ PAVYZDYS**G. Polat, U. Donmez****S a n t r a u k a**

Globalizacija, persitvarkanti pasaulio ekonomika, kvalifikacijos pokyčiai projektų finansavimo ir tiekimo sistemose, plačiai naudojamos informacinės ir ryšių technologijos bei konkurencijos rinkoje vyraujantis intensyvumas verčia rangovus persvarstyti konkurencines jėgas ir vartotojų lūkesčius, o tam reikia gerai suplanuotos valdymo orientacijos verslui planuoti. Turkijos statybos pramonė nesiskiria nuo pasaulinės statybos pramonės intensyvaus konkurencingumo kontekste. Turkijos rangovai ne vieni imasi projektų vidaus bei užsienio rinkose, įskaitant Nepriklausomų valstybių sandraugą, Afriką, Vidurio Rytus, Europą, Aziją ir t. t. Jie taip pat dažnai susiduria su didele vietinių ir užsienio kompanijų konkurencija, tokių kaip JAV, Kinijos, Japonijos, Prancūzijos, Ispanijos, Vokietijos, Didžiosios Britanijos ir Korėjos rangovai. Atsižvelgiant į intensyvią konkurenciją, efektyvų jų paslaugų valdymą, Turkijos rangovams būtina pasiekti konkurencinį pranašumą. Šiuo tyrimu analizuojamos Turkijos statybos bendrovių rinkodaros valdymo funkcijos ir apimtys, taikant tradicinę rinkodarą. Apklausoje apžvelgta daugiau nei 70 Turkijos rangovų anketų. Apklausoje rezultatai atskleidė, kad Turkijos rangovai tam tikru mastu pasinaudojo rinkodaros valdymo funkcijomis, tačiau jie neskyrė pakankamai svarbos išskirdami savo produktus ir paslaugas, konkurentus ir jų teikiamas paslaugas. Kadangi pagrindinis tikslas – vartotojų, naudojančių produktą, pasitenkinimas ir (arba) paslaugų išskirtinumas, Turkijos rangovai turėtų ištirti visus tradicinės rinkodaros įpročius, norėdami išskirti save rinkoje ir taip sukurti konkurencinį pranašumą.

Reikšminiai žodžiai: rinkodaros valdymas, statybos įmonės, apklausa, Turkija.

Gul POLAT serves as Associate Professor in the Faculty of Civil Engineering at Istanbul Technical University, Turkey. She conducted her PhD studies at Istanbul Technical University and Illinois Institute of Technology in Chicago. Her main areas of research interest include off-site manufacturing (e.g., precast concrete systems), marketing management, process modeling (e.g., simulation methods), business process reengineering, resource management, and most aspects of construction management. She has been involved with several research projects funded by Istanbul Technical University (ITU), Feyzi Akkaya Fund for Supporting Scientific Activities (FABED), and other construction industry agencies. Her research work over the years has resulted in 47 technical papers in refereed journals and proceedings. She is a member of Turkish Chamber of Civil Engineers and Lean Thinking Association.

Umit DONMEZ graduated from Istanbul Technical University with a degree in civil engineering in 2006. He received his master of Construction Management from Istanbul Technical University in 2008. He has been working as a contract and claim management engineer at Sariguzel Dam and Hydroelectric Power Plant project executed by Yuksel Construction Company since 2009. His research work has resulted in 5 technical papers in refereed journals and proceedings.