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Strategic Management Practices in the Construction Industry: A Result Study Based on SPSS Tool

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Abstract

Since the establishment of the first national strategic development plan in the early 1970s, the construction industry has played important role in terms of the economic, social and cultural development of India. This study aims to get results based on SPSS tool and make related conceptual model to enable our construction enterprises. This model is based on dynamic capability framework (Teece, Pisano & Shuen, 1997; Teece, 2007). The result of the study provides empirical evidence in support of the nation that a competitive advantage is achieved via the implementation of a dynamic capability framework as an important way for a construction enterprise to improve its organisational performance. This study also demonstrates the context of the multistage nature of the model which provides a rich understanding of the dynamic process by which asset-capability should be exploited in combination by the construction firms operating in varying levels of hostility.

Keywords: Strategic management, Dynamic capability frame work, construction industry.

Introduction

The history of strategy and strategic management covers a broad timeline from ancient Greece to the twenty-first century. Organizations, practitioners, and researchers from every sector of the professional world have focused on strategy as a primary topic at some point (Chinowsky 2000). As a central component of long-term planning, the development of strategies is integrated into every face of business organizations. However, the development of these strategies does not occur instinctively. The development of strategic concepts requires an environment that fosters strategic thinking and focus. However, in contrast to manufacturing organizations that focus on the long-term viability of a product, the construction industry is generally focused on the production of a single and unique end product. While this project-based focus receives significant consideration from construction professionals, less attention is paid to strategic, or enterprise wide, management issues. Specifically, existing literature and research reports provide far fewer avenues for construction professionals to obtain strategic management knowledge (Goodman 1998). In response to this issue, the current research effort was undertaken to examine strategic management practices in the construction industry, which aims to sustain the firm's advantages and want to increase them. This paper introduces the findings from a primary component of this study, the characterization of strategic management practices in public and private organizations focused on the built environment. The paper introduces the need for this emphasis, the focus groups selected for the survey, the data tabulations, and the analysis of the data collected. Finally, the paper addresses the need for action

Research Objectives

1. Explore a number of strategic factors and their characteristics and interrelationships that may potentially affect the competitive advantage and the functioning of a firm.

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2. Build a conceptual model that captures the linkages with specific factors, competitive advantage & performance

Questionnaire Survey work

SECTION I –

COMPANY CHARACTERISTICS

The section is designed to assess performance levels, competitive advantage, value and rareness of the firm's product, services, and environment.

Please circle or mark the single most appropriate response for each the parameters below:

A. PERFORMANCE

Compared the performance other organization that do the same kind of work, over the past 3 years in terms of

Sr. No.	Parameters	Lowest ↔Highest			
1	Marketing/Advertising	1	2	3	4
2	Growth in sales	1	2	3	4
3	Profitability	1	2	3	4
4	Market share	1	2	3	4

B. COMPETITIVE ADVANTAGE

B-1. The manner in which firm combines Assets and Capabilities enables to **reduce its costs** at competitive level.

Sr No	Assets and Capabilities Related to	Strongly Agree	Agree	Neither	Disagree	Strongly Disagree
1	Technological	1	2	3	4	5
2	Complementary	1	2	3	4	5
3	Financial	1	2	3	4	5
4	Reputational	1	2	3	4	5
5	Structural	1	2	3	4	5
6	Institutional	1	2	3	4	5
7	Market	1	2	3	4	5

B-2. The manner in which firm combines Assets and Capabilities enables it to defend against all known **competitive threats & to achieve targets**

Sr No	Assets and Capabilities Related to	Strongly Agree	Agree	Neither	Disagree	Strongly Disagree
1	Technological	1	2	3	4	5
2	Complementary	1	2	3	4	5
3	Financial	1	2	3	4	5
4	Reputational	1	2	3	4	5
5	Structural	1	2	3	4	5
6	Institutional	1	2	3	4	5
7	Market	1	2	3	4	5

SECTION II –

DEMOGRAPHIC DETAILS

This part of the questionnaires is designed to collect demographic information about the firm.

1)	Establishment year of the firm/organization.
I	<5 years
II	5 – 10 years
III	10 – 15 years
IV	15 – 20 years
V	>20 years

2)	A sector in which the firm belongs to
I	Privately owned firm
II	Public listed firm
III	An independent business
IV	A business unit (SBU) of corporation
V	A corporate parent

3)	The core area of the firm
I	Construction sector only (Contracting or consulting Company)
II	Diversified in sectors strong related to construction (include EPC)
III	Diversified in sectors unrelated to construction
4)	Type of construction projects involved
I	Architecture/Engineering Design/ Environment
II	Civil Engineering
III	Mechanical
IV	Electrical
V	I & II both
VI	All
5)	Total full time employees in the firm/organization.
I	< 100 people
II	100 – 150 people
III	150 – 300 people
IV	300 – 500 people
V	>500 people
6)	What is the annually turnover of the firm?
I	<10 corers

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II	10 – 50 corers
III	50 – 100 corers
IV	100 – 200 corers
V	>200 corers
7)	Types of client that has the highest percentage in total number of projects - is
I	Government
II	Private Sector
III	Both
IV	Null
8)	The competitive advantage strategies
I	Lower cost strategy: the ability of a company or a business unit to design, produce and market a comparable/services which are more efficiently more economical compare its competitors
II	Differentiation Strategy: the ability to provide unique and superior value to the buyers/client in terms of quality, special features or after sales services

9)	Which type of strategies are designed to fulfil the goals?
I	Objective based strategy
II	Work based strategy
III	Organizational based strategy
IV	Combined strategy
10)	How do you manage strength of the firm?
I	By providing skill labour
II	By implementing latest technology
III	By motivation
IV	By providing good atmosphere
V	By providing all above
11)	What type of organization structure followed by the firm?
I	Vertical organization structure
II	Horizontal organization structure
III	Hybrid organization structure
12)	Which type of strategic issues occurred in your company?
I	Occurred in top management decision
II	Involve the allocation of large amounts of company resources
III	Based on future oriented
IV	Based on external factors
13)	The area which needs to improve to uplift / scaling up the firm
I	Labour
II	Financial resources
III	Brand image
IV	Management capabilities
V	Latest technology
VI	All of the above

14)	What are major threats to a company for future success?
I	Entrance of new competitor
II	Slow market growth
III	Major technology change
IV	Changing regulations

Survey Detail

The development of a survey to obtain data from construction firms which are located in the central Gujarat region (Ahmedabad, Nadiad, Anand, and Baroda). I just go for 72 firms in this area and collected data related to that survey work. Here most firms gave a positive response related to study. The respondents answering the survey all satisfied the criterion of holding an executive position. Of the construction company respondents, 40 identified themselves as vice-presidents, one as secretary, and the remaining individuals identified themselves as president, chairman, or chief executive officer (CEO). Of the agency respondents, 25 identified themselves as heads of agencies, with the remaining respondents primarily identifying themselves as department heads or planning specialists.

Analysis and Result

Q1 (Establishment year of the firm)

	Frequency	Percent	Cumulative Percent
1	26	34.7	34.7
2	8	10.7	45.3
3	15	20.0	65.3
4	11	14.7	80.0
5	15	20.0	100.0
Total	75	100.0	

Q2 (Sector in which the firm belongs to)

	Frequency	Percent	Cumulative Percent
1	49	65.3	65.3
2	10	13.3	78.7
3	9	12.0	90.7
4	6	8.0	98.7
5	1	1.3	100.0
Total	75	100.0	

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Q3 (The core area of the firm)

	Frequency	Percent	Cumulative Percent
1	32	42.7	42.7
2	25	33.3	76.0
3	18	24.0	100.0
Total	75	100.0	

Q4 (Type of construction projects involved)

	Frequency	Percent	Cumulative Percent
1	15	20.0	20.0
2	18	24.0	44.0
3	6	8.0	52.0
4	7	9.3	61.3
5	17	22.7	84.0
6	12	16.0	100.0
Total	75	100.0	

Q5 (Total full time employees in the firm)

	Frequency	Percent	Cumulative Percent
1	38	50.7	50.7
2	17	22.7	73.3
3	15	20.0	93.3
4	5	6.7	100.0
Total	75	100.0	

Q6 (Annual turnover of the firm)

	Frequency	Percent	Cumulative Percent
1	37	49.3	49.3
2	20	26.7	76.0
3	9	12.0	88.0
4	9	12.0	100.0
Total	75	100.0	

Q7 (Types of clients that has the highest % in total number of projects)

	Frequency	Percent	Cumulative Percent
1	9	12.0	12.0
2	12	16.0	28.0
3	40	53.3	81.3
4	14	18.7	100.0
Total	75	100.0	

Q8 (The competitive advantage strategies)

	Frequency	Percent	Cumulative Percent
1	19	25.3	25.3
2	56	74.7	100.0
Total	75	100.0	

Q9 (Which type of strategies are designed to fulfil the goals)

	Frequency	Percent	Cumulative Percent
1	9	12.0	12.0
2	17	22.7	34.7
3	18	24.0	58.7
4	31	41.3	100.0
Total	75	100.0	

Q10 (How do you manage strength of the firm)

	Frequency	Percent	Cumulative Percent
1	1	1.3	1.3
2	10	13.3	14.7
3	16	21.3	36.0
4	11	14.7	50.7
5	37	49.3	100.0
Total	75	100.0	

Q11 (what type of organization structure followed by the firm)

	Frequency	Percent	Cumulative Percent
1	9	12.0	12.0
2	18	24.0	36.0
3	48	64.0	100.0
Total	75	100.0	

Q12 (which type of strategies issues occurred in your firm)

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	Frequency	Percent	Cumulative Percent
1	6	8.0	8.0
2	13	17.3	25.3
3	16	21.3	46.7
4	40	53.3	100.0
Total	75	100.0	

Q13 (the area which need to improve to scaling up the firm)

	Frequency	Percent	Cumulative Percent
1	9	12.0	12.0
2	3	4.0	16.0
3	11	14.7	30.7
4	10	13.3	44.0
5	9	12.0	56.0
6	33	44.0	100.0
Total	75	100.0	

Q14 (what is major threats to a company for future success)

	Frequency	Percent	Cumulative Percent
1	11	14.7	14.7
2	23	30.7	45.3
3	24	32.0	77.3
4	17	22.7	100.0
Total	75	100.0	

Location

	Frequency	Percent	Cumulative Percent
Ahmedabad	24	32.0	32.0
Anand	18	24.0	56.0
Baroda	19	25.3	81.3
Nadiad	14	18.7	100.0
Total	75	100.0	

Fill up by

	Frequency	Percent	Cumulative Percent
Engineer	47	62.7	62.7
Manager	13	17.3	80.0
Owner	15	20.0	100.0
Total	75	100.0	

Table Factor Analysis: Competitive Advantage

Constructs / **Items**	**Cost**	**Opportunity**	**Threat**
Technological Assets and Capabilities	.557	.786	.786
Complementary Assets and Capabilities	.610	.804	.804
Financial Assets and Capabilities	.612	.843	.843
Reputational Assets and Capabilities	.602	.805	.805
Structural Assets and Capabilities	.682	.847	.847
Institutional Assets and Capabilities	.705	.734	.734
Market Assets and Capabilities	.577	.666	.666

Extraction Method: Principal Component Analysis.

This above table shows the items loaded appropriately on the proper factors using a cut-off score 0.5. In terms of the total variance, sixty percentage of the cumulative variance is explained by the set of the items, and the Eigen value for this item was over the threshold of 1.00 which is typical for this type of analysis.

Table Factor Analysis: Performance

Construct	**Item**	**Loading**
Performance	Marketing	.721
	Sales Growth	.579
	Profitability	.805
	Market share	.867

Extraction Method: Principal Component Analysis.

Factor Analysis for survey items of performance exemplifies convergent validity where all loadings values are above the 0.5 threshold as suggested by Tosi et al. (1973). The KMO and Bartlett's Test strongly supports the measure of sampling adequacy (sig. $p < 0.005$)

Conclusion

This research study has introduced the Dynamic Capabilities Framework for construction enterprises in selected region which has been never adopted previously by others. The ain contribution of this study derives from the filling gap between the theoretical construct and practical evidence of dynamic capabilities within the construction

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industrial context. As conclude above this study provides evidence support of the concept that adoption of dynamic capabilities framework is important to construction enterprises in sustaining their competitive advantage.

Although this study provide insight the dynamic capabilities framework, in particular the asset/capability – competitive advantage – performance relationship. It has some limitations.

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