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Strategic Management Tools and Techniques and Performance in Indian Cement Industry (A Case Study of Select Cement Companies)

Sunil Kumar
Research Scholar,
SRM University, NCR Campus, Modinagar Uttar Pradesh, India.
Orcid ID: 0000-0003-0785-3789.

Abstract:

The purpose of this study is to investigate the current level of strategic management tools and techniques and their utilization to explore and identify the impact of management tools on organizational performance in Indian Cement Industry. The research paper is based on a questionnaire survey obtained from cement companies. The study investigates the relationship between management tools and techniques and organizational performance. The findings show the level of management tools and techniques and their utilization and possibilities influencing performance. The study indicates that, there is positive significant relationship between management tools and techniques, their utilization and organizational performance.

Keywords: Management tools and techniques, Organizational Performance relationship, Indian Cement Companies.

INTRODUCTION

In today's fast changing economic situation, every company is trying to assess its performance regularly. In order to survive, cement companies are taking steps to expand by accessing new markets, making product and price more attractive, satisfying customers, developing new strategies. Thus, managers and executives of the companies are looking for suitable tools and techniques in order to investigate the internal and external cost of the products/service, get market information, Product costs, analyse customer needs and wishes, predict and assess organizational performance, as well as to ensure competitive advantage in production activities.

Organizational performance is a central issue in strategic management research. Some authors have analysed the organizational performance in terms of corporate strategy (Venkataman & Ramanujam, 1986, Carton & Hofer, 2006, Chenhal & Langfield-Smith, 2007).

A study by Iserisay et.al (2008) is based on the group of 25 tools, concludes, that adoption of management tools influences organizational performance. The findings of the study show a significant positive relationship between competitive positioning, system integrity, customer equity, performance capabilities, financial results and adoption of management tools and techniques. Efendioglu and Karabulut (2010) presented another performance based issue like: average sales growth per year, average profit per year and found a strong positive relationship.

Strategic Management tools and techniques can be applied in different areas, such as:

- General Management,
- Marketing Management,
- Operations Management,
- Financial Management,
- Human Resource Management,
- Efficiency and effectiveness.

Tools and techniques used in general management assist managers and executives in decision-making process. Other tools used in marketing management process are responsible for identifying and satisfying customer needs. Tools and techniques used in operations management aim to ensure competitive advantage in production, distribution and project management activities. The area of financial management involves tools, which provide the basis for decision making and precedicting performance of the company. Therefore, it can be concluded that management tools and techniques are powerful lever, which can help managers to define and develop proposed solution to the existing problem inside the organization.

Table 1: Strategic Management tools and techniques:

1. SWOT Analysis
2. Cost Benefit Analysis
3. Customer Satisfaction Analysis
4. Analysis of Customer Complaints
5. Analysis of Employee Views and Attitude
6. Market Segmentation based on Customer needs and wishes.
7. Price Analysis.

8. Market Share Analysis.
9. Benchmarking.
10. Level of Service Analysis
11. Life Cycle Analysis
12. Porter's Forces
13. PEST Analysis
14. Portfolio Methods
15. Balance dacorcard
16. Value Chain Analysis
17. Activity Based Costing
18. Critical Success Factors

Source: Literature Review.

LITERATURE REVIEW

Jost and Zschoche (2016) explicitly focus on the firm's ability to change as precondition for sustaining a competitive advantage. By doing so, they are concerned with the critical relation between strategy, structure, and the firm performance.

Kessler and Brendel (2016) puts the business model topic into the spotlight. The authors analyse, how firms are able to coevally utilize planned obsolescenece and product service systems in order to adequately respond to ecosystem changes. Renter (2016) also focuses on service-driven market changes and deals with the important issues of service procurement. The author developed measures for information and communication technology- based process innovation a topic that is highly relevant in realm of the ongoing digitalization debate. The proposed measures are grounded in a relational, resource based perspective.

The Evolution of Strategic Management Research:

Gallardo-Vazquez and Sanchez- Hernandez (2014) analysed the extent to which the information on social responsibility in the hands of the managers of small and medium size enterprises (SMEs) informs a positive predisposition toward the performance for respersible actions toward the natural environment.

Dabic et.al. (2014), reviews the research on MNEs and application of Strategic management approaches. In long period, the research on the strategy of MNEs was noted in internationalization theory, based on transaction cost logic. The authors delve further into an understanding of how strategic thinking has impacted upon research into the strategy of MNEs. Following a review of the content of over a thousand papers published between 1975 and 2012, their paper maps the intellectual structure and its changes, concluding that the link between human capital and knowledge is essential for explaining, how MNEs develop their strategies. The authors posit that this provides support for co-evolutionary theory, which involves the simultaneous development of argument from different theories according to the research's objectives and context. This theory is a promising line of research under the approaches based on resources and knowledge. Strategy's contextual dependence suggests that different contexts require diverse approaches.

The genesis and challenges of the strategic balance approach:

Researchers have applied the strategic balance idea in a variety of contexts, mainly using it as a key independent variable to explain organizational outcomes. These studies suggest that managers face challenges in balancing their asset strategies (Deep house 1999), Strategic alliance portfolios (Das and Teng, 2000), innovation activities (Roberts and Amit, 2003), Strategic group positioning (McNa- Mara, Deep House and Luce, 2003), multi market contact (Stephan et.al., 2003) and imitation versusinnovation (Liberman and Asaba, 2006). Research has also shown that managerial success in balancing these competing forces is associated with a variety of organizational outcomes such as strategic alliance stability (Das and Teng, 2000), return on assets (McNawara et.al., 2003), market entry (Stephan et.al., 2003), and stock market value (Zo H and Amit, 2007) other studies have adopted strategic balance as the dependent variable, examining its antecedents (e.g., Semadeni and Andersen, 2010) or conceptualized it as a mediator/mechanism explaining some indirect effects on organizational performance (e.g., Delgado-Garcia and Fuenre-Subente-Sabate, 2010; Hilor and Hembrick, 2005).

Thus, while strategic balance research has significantly enhanced understanding of how firms cope with the oppositional demands for similarity and difference, the challenges identified suggest the utility of a broader and more dynamic research agenda on optimal distinctiveness. Such research needs to account for the complexity of organizational environments the precisely which firms strategically differentiate themselves to enhance performance outcomes, and the mediating mechanism of stakeholder perceptions.

Toward a New Optimal Distinctiveness Research Agenda:

The development of the institutional logics perspective has provided a more elaborate theoretical approach to the study of organizational heterogeneity by focusing on how field and markets are comprised of various constellations of norms and beliefs that differentially shape firms, and can provide opportunities for strategic repositioning to appeal to different stakeholders (Durand et.al, 2013, Thornton et.al, 2013). Recent research has emphasized how varied combinations of logics lead to differential strategic positions, stakeholders evaluations and outcomes (Lee and Louunsbusy, 2015; Zhao and Wsh, 2016).

Table 2, lists the three dimensions on proposed research agenda and present their implications for selected strategic management topics.

Table 2: Dimensions of a renewed agenda on optimal distinctiveness and related research questions for select topics in strategy research.

Dimensions	Research questions for select topics in strategy research
Crchestion	(a) Ambidexterity • How is the ability to manage internal paradoxes affected by efforts to achieve strategic position that are optimally distinctive? (b) Competitive advantage of incumbents versus new entrants • How do institutional and economic force jointly shape strategic positioning and perceptions of optimal distinctiveness for incumbents and new entrants? • Can incumbents achieve optimal distinctiveness by compensating for their technical deficiency via institutional legacies? • Can new entrant achieve optimal distinctiveness by compensating for their institutional deficiency via technical competence?
Stakeholder multiplicity	Product Market Scope: • How do firms exploit stakeholder multiplicity to achieve optimal distinctiveness by developing operations in diverse geographics or maintained diverse product mix tailored to different kind of stakeholders? • How do firms make value chain decision to manage product market scope to achieve optimal distinctiveness?
Managing temporality	Market Entry: • What is the contingent effectiveness of various positioning strategies for new product markets under temporally shifting legitimacy and differentiation expectations?

Source: Literature Review.

Rational of the Study:

Summing up, the relationship between SMTT and OP was not sufficiently examined in previous studies, therefore the purpose of this study is to investigate the level of strategic management tools and techniques utilization and techniques as well as to examine and identify the impact of management tools utilization on organizational performance in cement industry in Indian context. Previous studies suggested that adoption of SMTT (Strategic Management Tools & Techniques) improving financial and non-financial outcomes. Some researches provided evidence that particular management tool improves financial performance, some SMTT, such as cost-benefit analysis, activity based costing, balanced score card, customer profitability analysis etc. were proposed as tools that support organizational performance by improving customer satisfaction and retention, increasing market share, learning the position of company on comparison with competitors, enhancing profits.

From the theoretical point of view as based on previous research findings, utilization of various management tools and techniques helping companies to reflect internal and external competitive environment, structure strategic management activity, support decision making process, customer requirements, improving financial performance outcomes, rationalizing production costs and reflect new priorities.

Therefore, in order to predict that there will be a relationship between strategic management tools and techniques and organizational performance, the following hypothesis are formulated :

Hypothesis One:

H1: The greater number of strategic management tools and techniques used by managers in Indian Cement Companies leads to a better (a) Sales growth, (b) Return on Assets, (c) Return on Equity and (d) Cash Flow.

Hypothesis Two:

H2: The greater number of STT used by managers in Indian Cement Companies leads to a better (a) Market-Share, (b) Product quality, (c) New Product offers, (d) Customer Satisfaction, (e) Company's ability to innovate (f) Organizational adaption to change, (g) Employee Satisfaction

Research Methodology:

This research used the questionnaire technique that belongs to the survey strategy. The on-line questionnaire method used to collect data, in order to test the hypothesis. The study also, taken financial data, from the published sources like balance sheet and profit and loss accounts etc. The reliability of this study can be ensured, that, at early stage discussions with academic colleague and managers are carried out to collect information on the problem area. After which, the questions and measures of the variables in the questionnaire are drawn from the intensive literature review. Regarding this, the research area was classified in order to conduct the research.

The methodology begins with a sampling and data collection. This is followed by performance measures used in the research. Finally, the last section describes the sample characteristics of the research.

Sampling and Data Collection:

The research study is based on a sample of five top cement companies in India, selected on the basis of market share (Acc Ltd., Ambuja Cement, L&T, Ultratech Cement Ltd. And India Cement) and 50 managers. The questionnaire includes three parts- the first involves questions concerning the organization details and next part indicates the utilization level of STT in companies and last part raises questions concerning performance from managers perceptions.

Test of Hypothesis:

According to the research studies of literature review, there are only a few empirical studies, those investigate relationship between strategic management tools and techniques and organizational performance. On the other hand, same of empirical studies have concluded that relationship between SMTT and organizational performance remains unanswered.

The present study is based on 11 financial and non-financial outcomes of five cement companies. Correlation analysis issued to know the strength and direction of linkage between variables. Its value varies between +1 and -1. A positive value of 'r' indicates a positive relationship between variables i.e. greater use of SMTT, gives better performance as indicated in the table. In other words, if one variable increases, the other variable also increases, while negative value of 'r' also indicates a negative relationship between variables. It means, if one variable increases, the other variable decreases. The correlation coefficient can be calculated by the following formula:

$$r = \frac{\sum dxydy - \frac{\sum dx \times \sum dy}{n}}{\sqrt{\sum d^2x - \frac{(\sum dx)^{2}}{n}} \times \sqrt{\sum d^2y - \frac{(\sum dx)^{2}}{n}}}$$

where, n = number of pairs of data,

dx = (x-A),

x = values of 1st set of data (SMTT)

dy = (y-A),

y = values in the second set of data. (Financial Performance of Cement Companies).

The correlation analysis, Table 3, revealed that the relationship between number of SMTT utilized by managers and organizational performance outcomes is statistically significant ($p < .001$) for a two tailed test, based on a sample of 50 managers of five cement companies. The findings of the study indicate that there is no negative relationship between variables.

The result of testing hypothesis H1 shows a significant relationship between financial measures (namely- Sales growth, Return on assets, Return on equity and cash flow) and utilisation of strategic management tools and techniques. Summing up, in this study, it is found that financial and non-financial performance outcomes are affected by SMTT utilisation. Such results are not fully confirmed by previous studies examining this relationship.

Table 3: Correlation between the number of SMTT

Company Performance Utilised and Company Performance		
Financial Performance		
Sales growth	Correlation coefficient sign (2-failed) N	.297 50
ROA	Correlation coefficient sign (2-tailed) N	0.09 50
ROE	Correlation coefficient sign (2-tailed) N	.297 50
Cash Flow	Correlation coefficient sign (2-tailed) N	0.654 50
Non-Financial Performance		
Market Share	Correlation coefficient sign (2-tailed) N	.292 50
Product Quality	Correlation coefficient sign (2-tailed) N	.230 50
New Product	Correlation coefficient sign (2-tailed) N	.264 50
Customer Satisfaction	Correlation coefficient sign (2-tailed) N	.356 50
Company ability to innovate	Correlation coefficient sign (2-tailed) N	.259 50
Org. adoption to change	Correlation coefficient sign (2-tailed) N	.288 50
Employee Satisfaction	Correlation coefficient sign (2-tailed) N	.223 50

Source: Own Calculations of data with SPSS**.**

CONCLUSION

Present study provides empirical evidence regarding SMTT utilisation as well as exploring relationship between SMTT utilisation and organizational performance in Indian Cement companies. To have a more balanced impression of organizational performance, the study used the combination of financial and non-financial outcomes. The need of non-financial measures has been mentioned in many studies. Academics have mentioned many benefits of using non-financial measures, such as reflecting and affecting financial value of the companies, helping to link actions with financial results and focusing on long-term organisational strategies. It is found that there is a strong a positive relationship between SMTT utilisation and financial and non-financial performance outcomes.

Limitations of the study:

Several limitations should be mentioned with regard to this study one of the limitations is the fact that, the study observed only a few cement companies. Another limitation is that the study did not examine moderating effects that may influence the management tools and techniques performance relationship, such as company size, environment turbulence, etc. Studies, which measure organisation performance obviously are facing difficulties with determination of performance measures.

Scope of Future Research:

The scope of future research may be extended by examining other different management tools and techniques and organizational performance outcomes, which may reflect additional interesting relations in a longer time series.

Despite these limitations, the study provides the evidence how strategic management tools and techniques can affect organizational performance. The study considered a broad range of SMTT. This is advantages over prior studies those considered only two or three management tools and relied only on financial performance outcomes. In conclusion, it is believed that, this study will motivate researchers to conduct additional research.

REFERENCES

Books & Journals:

[1] Dabic, M. Gonzalez-Coureiro, M., Furrer, O, 2014. Research on the strategy multinational enterprises; key approaches and new avenues. Busters Research Quarterly 17 (2), http://idx.doi.org/10.1.16brq.2013.09.001.

[2] Motina-Azorin, J.F. 2014. Micro foundations of strategic management: toward micro- macro research in the resource based theory. Business Research Quarterly 17 (2). http://dx.doi.org/10:1016/jorg.brq.2014.001.

[3] Abdul Hussaien, M.H. & Hamza, S. (2012). Strategic Management Accounting Techniques in Romanian Companies. An Empirical Study. Studies in Business and Economics, 126-140.

[4] Arfonina, A. & Chalupsky, V. (2012). The current strategic management tools and techniques: The evidence from Czech Republic Journal of Economics and Management, 17(4), 1535-1544. http://dx.doi.org/10.11118/actaun 2013.

[5] Aldehayyat, J.Khattab, A & Anchor, J. 1040833 (2011). The use of Strategic Planning tools and techniques by Hotel in Jordan. Management Research Review, 34(4), 477-490.

[6] E.Fendioglu, A. & Karabelur, A. (2010). Impact of Strategic Planning on Financial Performance of companies in Turkey. International Journal of Business Management, 8 (4), 3-12. DOI:10:5539/igbm.v5 n.4p3.

[7] India Tsu, C.M. Mwamgi, M.S., & Mandere, E. & Mandere E.N. (2014). The Application of Porter's Five forces Model on organization performance: A care of Cooperative Bank of Kenya Ltd. European Journal of Business and Management, 6 (16), 75-85, from http://www.liste.org/journals/index.php/E.JBM/article/view/13364.

[8] Williams, P., & Naumann, E., (2011). Customer Satisfaction and Business Performance: A firm level analysis, Journal of Service Marketing, 25(1), 20-32. DOI:http/dx.doi.org/10.1108/08876041111107032.

[9] Landien, S.M. & Dakbock, B. (2015) Path dependence as a barrier to Business model change in manufacturing frims: insights from a multiple- Case Study. Journal of Business Economics, online First, DOI: 10.1007/811573-015-0793-1.

[10] Newell, S. & Marabelli, M. (2015). Strategic Opportunities and Challenges of algorithmic decision-making a call for action on the long-term societal effects of 'Datification', Journal of Strategic Information System, 24(1), 3-14.

[11] Dasicva, C.M. & Trkman, P.C. (2014). Business Model what is and what it is not. Long Range Planning, 47(6); 379-389.

[12] Schneider, S., & Spietu, P.C. (2013). Business Model Innovation towards an integrated future research agenda. International Journal of Innovation Management, 17 (01), 1340001-1-134001-34.

[13] Teeoe, D.J. (2010). Business Models, Business Strategy and Innovation. Long Range Planning, 43 (2-3) 172-194.

[14] Madsen, T.L., Walker G. (2015). Competitive heterogeneity, cohorts, and persistent advantage. Strategic Management Journal (Forthcoming).

[15] Annual Reports of Cement Companies (2012-2016).