

Effect Analysis on Strategy Implementation Drivers

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Abstract: Currently, the strategy implementation is believed to be a dynamic activity within strategic management process. The main objective of this research is to examine the structural relationships between strategy implementation and performance within the small and medium manufacturing firms. In order to implement strategy effectively, it is crucial to consider several organizational issues. The literature indicates that, several researchers have identified three fundamental factors in Strategy Implementation: the structure, leadership style and resources. The current research particularly discusses the main drivers of strategy implementation, prevailing in the smaller industries. In this regard, empirical relationships are established relating strategy implementation and performance of the firm. We provide a structural equation model on the relationship among drivers of strategy implementation and organization performance and also sensitivity analysis on the drivers.

Key words: Strategy implementation • Performance • Structural equation modeling • Factor score weights

INTRODUCTION

Strategy Implementation has been increasingly the focus of numerous studies, particularly because the process from project formulation to project implementation is not effective and therefore not adequate in today's business background [1]. Currently, the project implementation in SMEs is assumed as a dynamic activity within strategic management process, which is possible to be responsible for any changes within the general culture, structure and/or management system of the whole organization. Furthermore, the project implementation in project management is investigated [2-4]. Implementation has been described as "...total of the activities and choices required for a strategic plan ... the process by which strategies and policies are put into action..." [5]. Generally speaking, well-formulated projects merely provide superior performance for the firm when they are efficiently implemented [6-8]. This article interrogates how productive *Strategy Implementation* can be. In order to achieve the objective the researchers have presented a hypothesized model (Figure 1).

In the context of SMEs, the role of top management as strategic makers has more influence on implementation of the strategy and they have authority in decision-making that consequently affect the entire organization structure. For a correct and appropriate management and strategy implementation, the managerial skill is undoubtedly crucial. As a matter of fact, successful strategies are directly associated with an efficient strategy implementation [9].

Failure strategy implementation efforts causes enormous costs in the organization [1, 6]. Besides wasting a considerable amount of time and money, failure strategy implementation efforts cause lower employee morale, a diminished trust and faith in senior management. Moreover they result in making yet more inflexible organization, because when an organization fails to change it will encounter more employee cynicism in its next attempt [1]. Emphatically, the main issue here is how organizers should carry out strategy implementation effectively. Among various organizational factors, leadership, structure and human resource play a

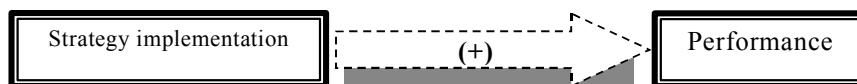


Fig. 1: Conceptual model

significant part in strategy implementation [10]. What follows is a discussion of the three above mentioned factors.

Leadership: Not only the formulation of strategy but also top managers play a crucial part in the implementation [11]. Recent researches have established that, top executive's main role is to make sure the smooth procedure of the whole executive structure and furthermore to communicate successfully with that executive structure. Karami recommends investigations into the research by which the top management team incorporates middle management in strategy formulation and/or efficiently disseminates objectives and strategies through the management structure [10].

Above all, there has been an evaluation of approaches to strategy implementation, from more autocratic to more participative. Bourgeois and Brodwin examined the management practices of companies and established that, CEOs approaches to strategy implementation can be categorized into one of five basic descriptions [12].

These Categories Are Including:

- Commander,
- Organizational change,
- Collaborative,
- Cultural,
- Coercive

The first two descriptions provide traditional approach to strategy implementation. Here the CEO formulation strategy first and think about strategy implementation later. The next two approaches present more current attempts in improving strategy implementation by extending the base of participation into the planning process. The final approach, however, makes use of manager's natural inclination to develop opportunities as they are encountered. In the same manner, the function of CEOs in strategy implementation has been investigated and it was demonstrated that, CEOs play various roles as commander, architect of implementing the planned strategy, co-coordinator, coach and primer-setter roles in strategy implementation [1].

Structure: Organizational structure is generally known as a fundamental part of effective strategy implementation. As Chandler's work, "Strategy and Structure", was published in 1962, this year is considered as an important year in the field of strategic management [13-15]. year is considered as an important year in the field of strategic

management [13-15]. Chandler declares that strategy is the determination of the fundamental long-term goals and objectives of an enterprise. He, furthermore, states that the adoption of courses of action and the allocation resources essential for carrying out the goals and structure is the design of organization through which the enterprise is managed [16]. In spite of the fact that organizations modify their development to be in accordance with technological, economic and demographic changes, new strategies creates administrative problem and economic inefficiencies. Accordingly, structural changes are needed to address those issues and to increase performance [17]. Some scholars believe that organizational structure deals with how the strategy is implemented and they consider it as the next step after strategy making [18].

Human Resources: According to the new resource based view of the firm, resources are described as the set of assets and capacities, both tangible and intangible, which when competitively superior, scarce and appropriate, have the potential to generate value from diversification [19]. The term resources, generally known as core competencies, in fact includes a broader variety of assets which can contribute to the competitive advantage of various businesses. Moreover, resources are referred as the criteria building blocks of strategy which identify both what a firm wants to do and also what it can do. Resources are input into a firm's production process for instance capital equipment, the skills of individual employees, patents, finance and talent managers. The resource base approach to strategy implementation assumes human resource as a distinctive source of competitive advantages of the firm [20, 21]. Scholars have declared that, there should be a relationship between a firm's strategy and the use of its human resources [22]. The notion surrounding the significance of human resource is particularly based on the idea that people management can be an essential source of sustained competitive advantage; Indeed, the majority of recent studies agree that HR acts as a factor in identifying the performance of the firm [22, 23].

Performance: It is argued that the financial performance construct is one of the main constructs in strategy and organizational research simply because nearly every model attempts to relate the constructs of interest of performance. Indeed, one needs to question the value of any particular course of action if it does not have an influence on performance. Likewise, based on Venkatraman and Ramanujam, financial performance improvement is central to strategy research [24].

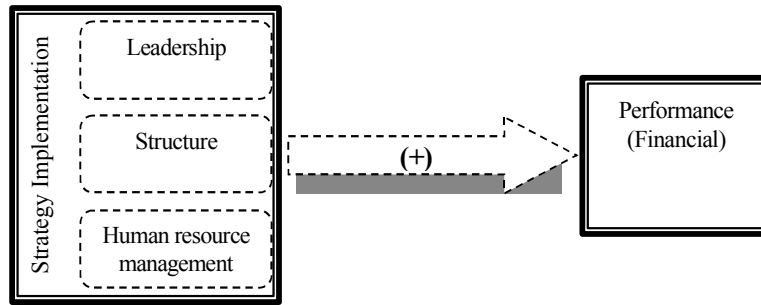


Fig. 2: Conceptual model

Table 1: Variables of study

| Type | Variable | Measurement | Code | Alpha |
|------------|-------------------------|--|-------|-------|
| Exogenous | strategy implementation | Quality of leadership | Zq152 | 0.63 |
| | | Attention to structure | Zq153 | |
| | | Attention to HRM | Zq154 | |
| Endogenous | performance | Cost of product | Zq251 | 0.71 |
| | | Average return on assets over the last three years | Zq252 | |
| | | Average per cent change in sales over last three years | Zq253 | |

Table2: Assessment of normality

| Variable | Skew | Kurtosis |
|--------------|--------|----------|
| Zq154 | -.242 | -.457 |
| Zq153 | -1.191 | 1.250 |
| Zq152 | -.895 | .027 |
| Zq253 | -.285 | -.370 |
| Zq252 | -.561 | .144 |
| Zq251 | -.393 | -.206 |
| Multivariate | ---- | 4.623 |

Methodology and the Survey: The objective of the study was to evaluate the relationship between the multidimensionality of strategy implementation drivers and performance of smaller industries by looking at the discussion of sample, data collection, variable measurement and also statistical tests used in this study. The data used in this study has been collected as a part of PhD level research work that aimed at exploring and developing performance of smaller industries.

According to food and agriculture organization of the united nations(FAO) [25], Iran is the top producer among world pistachio producers. And south of Iran is produces near 65 percent of Iran's pistachio [26].

In research survey which held on south of Iran, questionnaires were distributed to the randomly selected entrepreneurs of pistachio processing industries in middle east with less than 250 employees ; This criterion has widely been used in literature in defining small and medium manufacturing firms [27, 28]. In this study,

entrepreneurs and small manufacturing firms are the main target. The role of entrepreneurs is essential to the commitment in strategic management and implementation of strategies. They are responsible in possessing the fundamental principles and terminology of strategy implementation. Therefore, entrepreneurs were selected to be the target population in this study.163 questionnaires were returned with showing the response rate of 24.7%.

Based on the literature review as mentioned above, we proposed a framework to examine the relationship of strategy implementation drivers and performance. In this theoretical model as shown in Figure 2, strategy implementation drivers (leadership, structure and human resource management) are observed variables for estimation exogenous which is strategy implementation and performance is a indigenous respectively.

Cronbach alpha was used to prove reliability of latent variables and measurement variables. The result of reliability test is shown in table 1. Table 2 shows normality proves of latent variable data tested by skewness and kurtosis tests.

Effective construction research requires proper application of social science research methods. The use of proper statistical analysis is crucial and there is a need to perform multivariate analysis in order to eliminate spurious relationships [29] .To our literature review, structural equation modeling (SEM) is increasingly being applied for strategy and performance modeling researches. Also as our model have observed and latent

variables, it is suggested using structural equation modeling [30]; So SEM was used for path analysis to test the unidimensionality of each construct. All SEM analysis was conducted using AMOS software package version 16, using maximum likelihood estimation.

RESULTS

The standardized path diagram relating strategy implementation and performance is shown in Figure 3. The coefficients indicating the association between the variables of strategy implementation and performance in path model are provided in Table 3.

There are six common measures could be used to evaluate the goodness of fit of a measurement model, they are: using the ratio of χ^2 statistics to the degrees of freedom (df), comparative fit index (CFI), adjusted goodness-of-fit index (AGFI), goodness-of-fit index (GFI), normed fit index (NFI) and root mean square error of approximation (RMSEA). An acceptable model fit must be below three and an RMSEA value of lower than 0.05 is considered as 'close-fit' whereas lower than 0.08 is considered as 'reasonable-fit'[31]. From the attained result, all the values are consistent to model-fit (i.e. $\chi^2/df = 2.956$; p -value, 0.003; GFI, 0.976; AGFI, 0.938; NFI, 0.955; CFI, 0.969; RMSEA, 0.078) indicate more than

Table 3: Fitness factors(model1)

| Model-fix index | Recommended value [31] | Structural model |
|------------------------------|------------------------|------------------|
| χ^2 -test statistics/df | = 3.00 | 2.956 |
| GFI | = 0.80 | 0.976 |
| AGFI | = 0.80 | 0.938 |
| NFI | = 0.80 | 0.955 |
| CFI | = 0.90 | 0.969 |
| RMSEA | = 0.08 | 0.078 |

the respective common acceptance level from the previous study made [31]. The readings confirm that the path model provides a good fitness with the data collected. Factors of fitness present in table 3.

In Table 4, the hypotheses model was found to be supported (P -value < 0.05): the strategy implementation practice has a significant link to firm performance.

Result of sensitivity analysis shows that, all the strategy implementation drivers make significant contributions to firm performance i.e. increase in coefficients of these drivers increases the level of strategy implementation and to the financial performance of the firm. Result of sensitivity analysis is shown in table 5.

Sensitivity analysis shows when the measured variable 'attention to HRM' or 'Attention to structure' or 'quality of leader ship' goes up by standardized one unit, the value for the exogenous performance goes up by 0.005, 0.010 and 0.007 respectively.

Table 4: Hypothesis testing results

| | Path coefficient | Standard error | Critical ratio | p-value |
|---------------------------------------|------------------|----------------|----------------|---------|
| Strategy implementation → Performance | 0.172 | 0.082 | 2.102 | 0.036 |

Table 5: Factor Score Weights

| | Attention to HRM | Attention to structure | Quality of leadership |
|-------------|------------------|------------------------|-----------------------|
| Performance | 0.005 | 0.010 | 0.007 |

Table 6: Fitness factors(model2)

| χ^2 -test statistics/df | GFI | AGFI | NFI | CFI | RMSEA |
|------------------------------|-------|-------|-------|-------|-------|
| 0.790 | 0.998 | 0.988 | 0.995 | 1.000 | 0.000 |

Table 7: Fitness factors(model3)

| χ^2 -test statistics/df | GFI | AGFI | NFI | CFI | RMSEA |
|------------------------------|-------|-------|-------|-------|-------|
| 2.330 | 0.993 | 0.964 | 0.986 | 0.992 | 0.064 |

Table 8: Fitness factors(model4)

| χ^2 -test statistics/df | GFI | AGFI | NFI | CFI | RMSEA |
|------------------------------|-------|-------|-------|-------|-------|
| 3.688 | 0.989 | 0.944 | 0.978 | 0.984 | 0.092 |

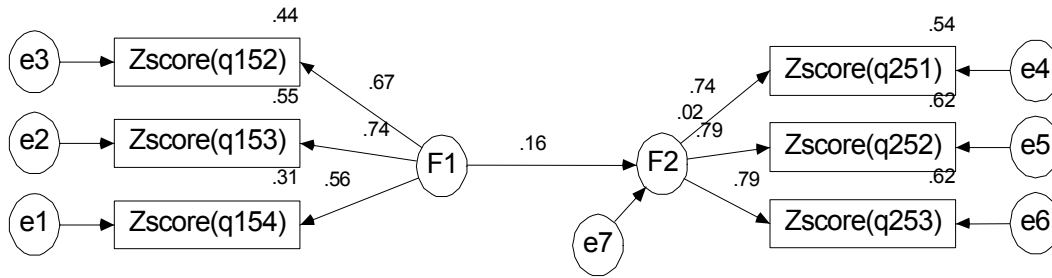


Fig. 3: Structural equation model (model1)

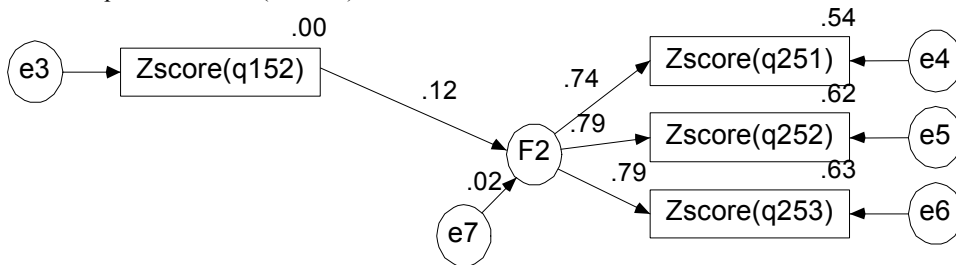


Fig. 4: Relation between quality of leadership and performance(model2)

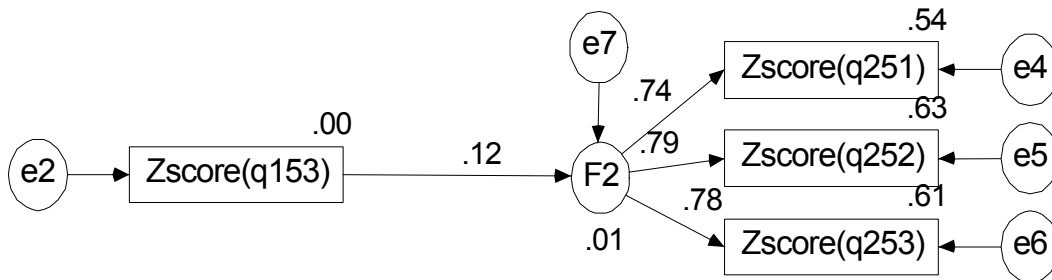


Fig. 5: Relation between attention to structure and performance(model3)

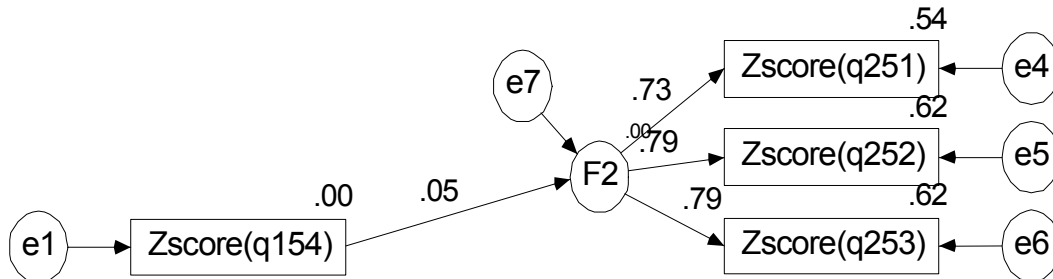


Fig. 6: Relation between attention to HRM and performance(model4)

We also separately try to model relation between the drivers of strategy implementation and performance; the results are shown in figure 4, 5 and 6 and fitness of models are shown in table 6, 7 and 8 respectively.

DISCUSSION

It is assumed that performance in firms is associated with the utilization of structural features that should support the strategy. In addition, it is argued that the

leadership style of the entrepreneur is likely to have a considerable impact on implementation of strategy. It is worth noting that a successful strategy realization is identified by the coherence of decisions and actions of all employee resources at all levels of the organization and not simply by the people who originally described the strategy. A mechanism is required to direct all employees and other resources towards the same strategy implementation mainly for the purpose of ensuring that strategy is realized at all levels of the organization.

Overall, the findings confirmed the research hypothesis and indicated that strategy implementation play a positive role financial performance of firms. This research was confined to the exploration of samples of small manufacturing companies in Iran; the respondents were also limited to Entrepreneurs. One more theoretical limitation of this study was associated with the social factors. Forces outside the organization, for instance manager's culture, could influence human resource practices; therefore, the findings of this study cannot be generalized to other countries, even though we do believe that these principles are applicable to any situation. A number of suggestions are recommended for future research. So far, only a few researches have focused on the impacts of human resource practices on entrepreneur's ability. A remarkable area for further research could be to examine the cultural impacts on entrepreneur's strategic ability and firm performance. Moreover, studies could be carried out with subjects from diverse fields for future verifications. Although this research has demonstrated association between manufacturing strategy implementation and performance, it would be a significant research topic to investigate the effects of other aspects of strategic management and performance dimensions, for instance strategy formulation, environmental scanning and strategy control.

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REFERENCES

1. Heracleous, L., 2000. The role of strategy implementation in organization development. *Organization Development J.*, 18(3): 75-86.
2. Grundy, T., 1998. Strategy implementation and project management. *International J. Project Manage.*, 16(1): 43-50.
3. Cleland, D. and L. Ireland, *Project management: strategic design and implementation*. 2006: McGraw-Hill Professional.
4. Hauc, A. and J. Kova, 2000. Project management in strategy implementation--experiences in Slovenia. *International J. Project Manage.*, 18(1): 61-67.
5. Wheelen, T., J. Hunger. and D. Hunger, *Strategic management and business policy*. 12 ed. 2009, United States: FT Prentice Hall.
6. Noble, C., 1999. Building the strategy implementation network. *Business Horizons-bloomington*, 42: 19-28.
7. Smit, P., *Strategy Implementation: Readings*. 2000: Juta and Company.
8. Li, Y., S. Guohui and M. Eppler, 2008. Making Strategy Work: A Literature Review on the Factors influencing Strategy Implementation. ICA working paper 2/2008.
9. Jiang, Q., *Strategic Management in East Asia SMEs: The Case Study of SMEs in China and Indonesia in Business Administration 2009*, Jönköping University. pp: 85.
10. Karami, A., 2005. Senior managers and strategic management process, in *management school*. University of Bradford: U.K. pp: 390.
11. Kakabadse, N. and A. Kakabadse, 2000. Critical review-outsourcing: A paradigm shift. *J. Management Develop.*, 19(8): 670-728.
12. Bourgeois, L. and D. Brodwin, 1998. Linking planning and implementation. Wit, B. de/Meyer, R., pp: 682-691.
13. Hoskisson, R., *et al.* 1999. Theory and research in strategic management: Swings of a pendulum. *J. Manage.*, 25(3): 417-456.
14. Geiger, S.W., Ritchie, William J. Marlin and Dan, 2006. Strategy/Structure Fit and Firm Performance. *Organization Development J.*, 24(2): 10.
15. *Business Strategy/History of Business Management until the 1970s*. wikibooks 2010 7 February 2010 [cited 2010 77 october 2010]; http://en.wikibooks.org/wiki/Business_Strategy/History_of_Business_Management_until_the_1970s].
16. Chandler, A., *Strategy and structure*. 1962. Cambridge, ma: mit Press.
17. Lakshmanrao, H.K., Chandler's Thesis. *Human Resource Management* 2008 December 15, 2008 [cited 2010 October 15]; <http://www.citeman.com/4644-chandler%E2%80%99s-thesis/>].
18. Lynch, R., *Corporate strategy*. 4 ed. Vol. 1. 2006, london: Prentice Hall.
19. Collis, D. and C. Montgomery, 2004. *Corporate strategy: A resource-based Approach*.
20. Brown, E.D., *Competitive Advantage and the Resource Based View of the Firm*. 2007 November 5, 2007 [cited 2010 November 29, 2010]; <http://ericbrown.com/competitive-advantage-and-the-resource-based-view-of-the-firm.htm>].
21. Dunford, B., S. Snell. and P. Wright, 2009. *Human Resources and the Resource Based View of the Firm*. *Strategic Human Resource Manage.*, pp: 76.

22. Lee, F., T. Lee. and W. Wu, 2010. The relationship between human resource management practices, business strategy and firm performance: evidence from steel industry in Taiwan. *The International J. Human Resource Manage.*, 21(9): 1351-1372.
23. Ahmad, S. and R. Schroeder, 2003. The impact of human resource management practices on operational performance: recognizing country and industry differences. *Journal of Operations Manage.*, 21(1): 19-43.
24. Venkatraman, N. and V. Ramanujam, 1986. Measurement of business performance in strategy research: A comparison of approaches. *Academy of Management Rev.*, 11(4): 801-814.
25. F.A.O. top production-pistachio. [http:// faostat. fao. org/site/339/ default.aspx](http://faostat.fao.org/site/339/default.aspx) 2007 [cited 2010 07]; 25].
26. I.P.O, Annual report. 2010, industrial park organization of Iran: Kerman. pp: 171-260.
27. Karami, A., F. Analoui and N. Kakabadse, 2006. The CEOs' characteristics and their strategy development in the UK SME sector. *Journal of Management Develop.*, 25(4): 316-324.
28. Analoui, F. and A. Karami, 2003. *Strategic management in small and medium enterprises.* Cengage Learning.
29. Kong, S., C. Gomez and Z. Hamid, 2010. Structural equation modelling the causal effects of ISO 9001 registration efforts. *International Journal of Modelling in Operations Manage.*, 1(1): 29-66.
30. Byrne, B., 2006. *Structural equation modeling with Amos: Basic concepts, applications and programming*, ed. 2. Lawrence Erlbaum.
31. Wong, C., *et al.* 2010. A linear structural equation modelling of TQM principles and its influence on quality performance. *International J. Modelling in Operations Manage.*, 1(1): 107-124.