

Research Article

Diagnosing SWOT through Importance-performance Analysis

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Abstract: The aim of the study is to evaluate the performance of the firms surveyed against the importance of the opportunities, threats, strengths and weaknesses applicable to those firms using Importance-Performance analysis. Firms optimize their Strengths, Weaknesses, Opportunities and Threats with the help of SWOT analysis. Martilla and James (1977) popularized the Importance-Performance analysis through their study titled with the same name. Importance-Performance analysis can be used to evaluate the performance against the intention or plan formulated by business or non-business firms. This method is widely used in consumer satisfaction studies and competitor analysis. Quite often right decisions can be taken if the information is presented in a comprehensive and understandable manner and in these contexts, Importance-Performance measure scores well. To the best of the author's knowledge, Importance-Performance Analysis is used for the first time in the study to diagnose the strengths, weaknesses, opportunities and threats applicable to a firm.

Keywords: Gap analysis, importance-performance analysis, SWOT

INTRODUCTION

A firm uses SWOT Analysis to compare and evaluate its strengths, weaknesses, opportunities and threats. This analysis helps the firm to review whether its overall position is healthy or not. SWOT analysis enables a firm to design its strategy through the exploitation of its resources in order to capitalize the opportunities available to it. The firm can prepare to face the threats posed by the environment through the identification of its strengths and weaknesses. Importance-Performance analysis can be used to evaluate the performance against the intention or plan formulated by business or non-business firms. This method is widely used in consumer satisfaction studies and competitor analysis. This method is graphical and not a statistical analysis. With the help of Importance-Performance analysis, it is easy to comprehend the managerial issues involved and therefore the method facilitates right decisions. Also, since many of the managers are not comfortable with statistical analysis, Importance-Performance analysis can gain acceptability among managers. Quite often right decisions can be taken if the information is presented in a comprehensive and understandable manner and in these contexts, Importance-Performance measure scores well. To the best of the author's knowledge, Importance Performance Analysis is used for the first time in this study to diagnose the strengths, weaknesses, opportunities and threats applicable to a firm, in the

Performance	High	IV Overkills	I Current strengths
	Low	III Low priorities	II Problems
		Low	High
		Importance	

Fig. 1: Performance-importance quadrant analysis

Business Strategy area. This study uses this method to evaluate the performance of the firms surveyed against the importance of the opportunities, threats, strengths and weaknesses applicable to those firms and is based on the unpublished doctoral thesis of the author. Martilla and James (1977) popularized the Importance-Performance Analysis through their paper titled with the same name. There are many variants illustrating the Importance-Performance analysis, the most popular among them is quadrant analysis.

Quadrant Analysis involves plotting performance against importance for each performance attribute. Quadrant analysis can be explained with the help of the Fig. 1.

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The First Quadrant shows the attributes where the firm enjoys strengths at present (high importance, high performance). In this quadrant high importance is matched with high performance. The Second Quadrant represents attributes where action is required by the firm without loss of time (high importance, low performance). Here, there is low performance against high importance. The Third Quadrant shows unimportant attributes where the firm has performed low (low importance, low performance). The Fourth Quadrant denotes the attributes where performance exceeds importance (low importance, high performance). The importance or performances of the attributes are categorized on a relative basis by the firm, comparing with its other attributes.

The usefulness of Importance-Performance analysis is enhanced when combined with Gap Analysis. Gaps are calculated by deducting performance from importance. Problems warranting remedial action are revealed by large positive gaps between importance and performance of the attributes. Negative gaps will show 'overkill' situations. To explain this, though certain attributes may fall in the First Quadrant, large positive gaps between those attributes will suggest further improvements in the attributes to make the customers delighted, though presently the customers are satisfied. Large positive gaps in the Third Quadrant can show that though the attributes are low priorities at present, inadequate attention to them may result in the customers switching over if improved product or service is offered by the competitor. Positive gaps in the Fourth Quadrant are not clear cut overkill situations and require close monitoring. The negative gaps in this quadrant are possible over-kill situations. Thus, the present study emphasis on the quick and right decisions are on the track with the help of the Importance-Performance analysis.

LITERATURE REVIEW

According to Valentin (2001), SWOT analysis provides insights for realizing the planned alignment. Narayanan and Nath (1993) state that SWOT helps the managers to improve the performance of the organization now and in the future. A study on corporate planning in public enterprises was carried out by Bhat (1985) which covered 146 public sector organizations, out of which 96 organizations were found to be engaged in corporate planning. This study concluded that (i) market demand, government policies and finances seem to be the dominant concerns of the planners (Bhat, 1985). A study conducted by Subramaniam (1989) concluded on the basis of a survey of thirty organizations that the major reasons for initiating corporate planning by most companies was the need felt by the top management. Pressure from the

market place and emergence of a new technology were also the other factors that contributed to the introduction of corporate planning. The concept and practice of scanning and appraisal of the external environment in Indian context was studied by Dixit (1987). He found that most of the environmental factors studied by the Indian organizations related to inputs, regulatory framework, government policies and programmes and marketing environments (Dixit, 1985). Importance-Performance analysis has been applied to solve management problems in marketing research (Martilla and James, 1977), student evaluation of teaching (Lewis and Lewis, 2005), quality of health care service (Hawes and Rao, 1985), marketing (Kennedy and Kennedy, 1987; DuVernois, 2001), tourism and hospitality (Oh, 2001) and in many other areas. Whynes and Reed (1995) had applied importance and performance analysis to find out the quality of service in UK hospitals. To the best of the author's knowledge, Importance Performance Analysis is used for the first time in his dissertation to diagnose the strengths, weaknesses, opportunities and threats applicable to a firm in the design of its Business Strategy (Sukumaran, 2010; Sukumaran *et al.*, 2014).

METHODOLOGY

As part of his dissertation, the author has collected data through the distribution of a Questionnaire among public companies in Coimbatore District, India. Thirty companies participated in the survey. The questionnaire contained a detailed check-list of Opportunities, Threats, Strengths and Weaknesses. The respondents were asked to assign scores between 1 to 5 for the items of Opportunities, Threats, Strengths and Weaknesses depending on the Importance of those items individually for their respective companies. The same items of Opportunities, Threats, Strengths and Weaknesses were also stated again in a different section in the Questionnaire asking the respondents to assign scores between 1 to 4 depending on how those companies performed actually by taking steps to exploit those Opportunities and Strengths and to overcome those Threats and Weaknesses. Separate weighted Scores were calculated, one for the Importance of the Opportunities, Threats, Strengths and Weaknesses and the other for the Performance of the Opportunities, Threats, Strengths and Weaknesses for each company for each item by using the following steps:

- Total the scores given for each company, one for the items in Importance and the other for the items in Performance.
- For the Opportunities, Threats, Strengths and Weaknesses listed in Importance; find out the weight for each item of Opportunity, Threat, Strength and Weakness by dividing the score for

that item of Opportunity, Threat, Strength or Weakness by the total of the scores. Repeat the same procedure for the items in Performance also. The outcome of this step is a fraction expressed as a decimal number for each item in the Importance and Performance. Thus weighted scores were obtained, one set for each item in Importance and the other set for each item in Performance. Quadrant Analysis charts have been prepared for each company in MS EXCEL by plotting Performance weights against Importance weights for each item of the opportunities, threats, strengths and weaknesses by way of scatter diagram. In the scatter diagram, origin has been suitably selected to create an informative and visually understandable diagram. Also Gap Analysis has been done through simple bar charting by using MS EXCEL, using the differences between the weighted scores of the items in Importance and Performance for the firm.

Quadrant and Gap Analysis charts relating to two responding companies, named as Company No. 1 and Company No. 2 are given in the study to illustrate the versatility of the Quadrant Analysis and Gap Analysis to illustrate the Importance-Performance analysis.

RESULT ANALYSIS

The Opportunities, Threats, Strengths and Weaknesses chosen by Company No. 1 as factors of Importance to it were:

- Market Size
- Growth Rate
- Export Opportunities
- Government and Policy Incentives
- No Entry Barriers
- Exit Barriers
- Availability of Spurious Products

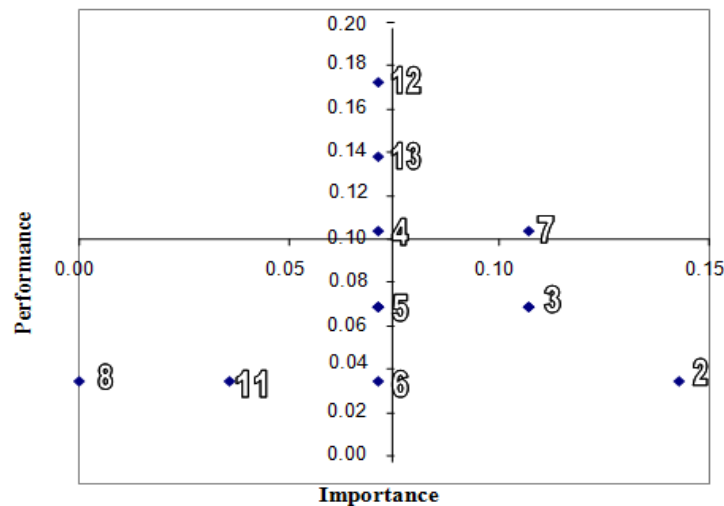


Fig. 2: Quadrant analysis-company No. 1

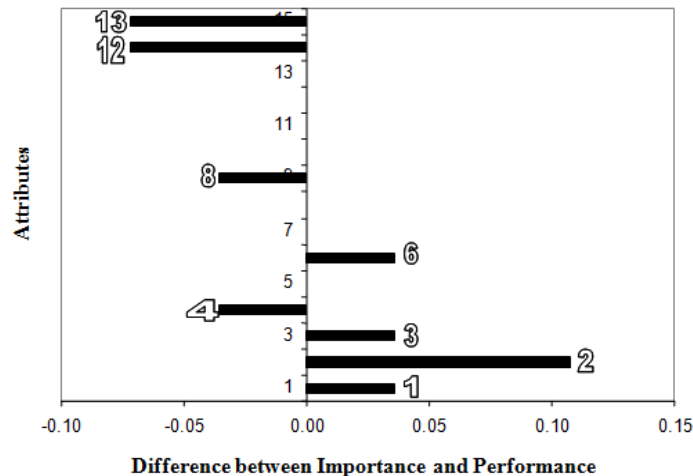


Fig. 3: Gap analysis-company No. 1

- Low Working and Fixed Capital
- High Market Share
- Efficient R and D Department
- Differentiated Products
- Obsolete Technology
- Hostile Trade Union

The Quadrant Analysis and Gap Analysis charts for the company are shown in Fig. 2.

While considering the issues, as in Fig. 2 and 3, in Quadrant Analysis, items 1, 9 and 10 have been overlapped by other items and hence not visible. Similarly, in the Gap Analysis Chart, items 5, 7, 9, 10 and 11, respectively are not visible as their dimensions are negligible. In the Gap Analysis, the items worth noticing are Growth Rate (item 2), Obsolete Technology (item 12) and Hostile Trade Union (item 13).

The above Quadrant and Gap Analysis reveal the following:

- The company has taken effective steps to thwart the Threat from Spurious Products (item 7).
- The company has not responded well to capitalize the Opportunities arising from Export Market and the Growing Domestic Market (items 2 and 3).
- The company has given more than the required attention with regard to the threat of Hostile Trade Union (item 13) and dealing with the weakness of Obsolete Technology (item 12). These are 'over kill' areas and the company can save resources by reducing its attention to these areas.

The Opportunities, Threats, Strengths and Weaknesses chosen by Company No. 2 as its factors of Importance were:

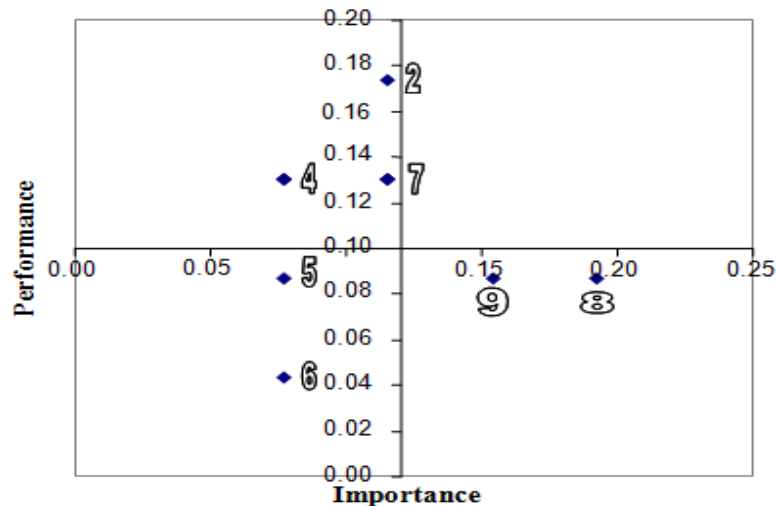


Fig. 4: Quadrant analysis-company No. 2

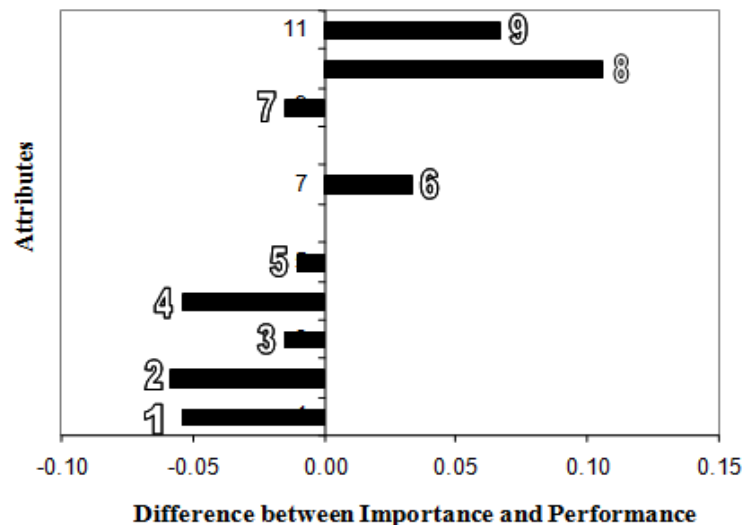


Fig. 5: Gap analysis-company No. 2

- Market Size
- Growth Rate
- Export Opportunities
- No Entry Barriers
- Standardized Products
- Low Working and Fixed Capital
- High Market Share
- Obsolete Technology
- Hostile Trade Union

The Quadrant Analysis and Gap Analysis Charts for the company are shown in Fig. 4.

In Quadrant Analysis, items 1 and 3 have been overlapped by other items and hence not visible. In the Gap Analysis, the items worth noticing are Growth Rate (item 2), Obsolete Technology (item 8) and Hostile Trade Union (item 9).

By considering Fig. 4 and 5, the above Quadrant and Gap Analysis shows the following:

- The company has failed to take effective steps to meet the threat from Hostile Trade Union (item 9) and overcome the weakness of Obsolete Technology (item 8).
- The company has taken extra efforts to catch up with the Market Growth Rate (item 2) and spent more resources than warranted. This is an 'over kill' are for the company.

CONCLUSION

Importance-Performance analysis has diagnosed the companies' Strengths, Weaknesses, Opportunities and Threats in an easily understandable manner. The Quadrant analysis and Gap analysis have illustrated in a clear manner that Company No. 1 has taken effective steps to thwart the threat from spurious products but has not responded well to capitalize the opportunities arising from the growing domestic and export markets. The company has given more than the required attention with regard to the threat of hostile trade union and dealing with the weakness of obsolete technology. As for as Company No. 2 is concerned, the analysis has brought out that it has failed to take effective steps to meet the threat from hostile trade union and failed to overcome the weakness of obsolete technology and that it has overstretched and spent more resources than warranted with regard to the market growth. The same data measured in terms of 'weights' for the various items of strengths, weaknesses, opportunities and threats for Importance and Performance can be analyzed using regression or correlation techniques, but the interpretation and statistical significance of the results from such analysis may not be easily comprehended by the managers. Quadrant and Gap Analysis can also be used to make competitor analysis,

which can bring out the strongholds and weak areas of the competitor firms. Similarly, the host firm can score over the competitor by using its strengths in attributes where the competitor is weak. Quadrant Analysis coupled with Gap Analysis is a powerful analytical tool in hands of the business managers.

REFERENCES

- Bhat, K.S., 1985. Research Report on Corporate Planning in Public Enterprises. Institute of Public Enterprise, Hyderabad and BPE, Delhi.
- Dixit, M.R., 1985. The concept practice of scanning and appraisal of external environment. *Vikalpa*, 10(2): 119-139.
- Dixit, M.R., 1987. Environmental factors relevant for strategy formulation. *Indian Manage.*, pp: 31-37.
- DuVernois, C.C., 2001. Using an importance: Performance analysis of summer students in the evaluation of student health services. M.Sc. Thesis, East Tennessee State University.
- Hawes, J.M. and C.P. Rao, 1985. Using importance-performance analysis to develop health care marketing strategies. *J. Health Care Market.*, 5(4): 19-25.
- Kennedy, D. and S. Kennedy, 1987. Using importance-performance analysis for evaluating university health services. *J. Am. Coll. Health*, 36: 27-31.
- Lewis, S.E. and J.E. Lewis, 2005. Departing from lectures: An evaluation of a peer-led guided inquiry alternative. *J. Chem. Educ.*, 82(1): 135.
- Martilla, J.A. and J.C. James, 1977. Importance-performance analysis. *J. Marketing*, January: 77-79.
- Narayanan, V.K. and R. Nath, 1993. Organization Theory: A Strategic Approach. Richard D. Irwin, Homewood, Ill.
- Oh, H., 2001. Revisiting importance: Performance analysis. *Tourism Manage.*, 22: 617-627.
- Subramaniam, S., 1989. Corporate planning practices in India. *Econ. Polit. Weekly*, 24(21).
- Sukumaran, A.K.S., 2010. Strategic management practices of public companies in Coimbatore district, Tamilnadu. Thesis, Alagappa University, Karaikudi.
- Sukumaran, A.K.S., R. Amudha and R. Alamelu, 2014. Linking SWOT and financial performance: An empirical study. *Res. J. Appl. Sci. Eng. Technol.*, 8(23): 2329-2333
- Valentin, E.K., 2001. SWOT analysis from a resource based view. *J. Market. Theor. Pract.*, 9(2).
- Whynes, D.K. and G.V. Reed, 1995. Importance-performance analysis as a guide for hospitals in improving their provision of services. *Health Serv. Manage. Res.*, 8: 268-277.