

## STRATEGY DEVELOPMENT FOR ENHANCING EXPORTS FOR AUTO COMPONENT MANUFACTURERS WITH SPECIAL REFERENCE TO AUTO COMPONENT UNITS OF AURANGABAD

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**Abstract-** In this research major areas of strategy development for auto component manufacturers to improving competitiveness in globalised market are been studied. The purpose of this study is to analyse different aspects of strategy development for enhancing exports relating to the Indian auto component sector, set within a globalised economy. It examines the strategies development for quality improvement, cost reduction, investment and competency development.

### Introduction

Automotive industry, globally, as well in India, is one of the key sectors of the economy. India has risen to be the second largest two-wheeler manufacturer in the world, seventh in global production in motor vehicles, and every major automobile manufacturer in the world has manufacturing facilities in India.

Key industry drivers of automotive industry:

- It offers support to other industries such as iron, steel, rubber, glass, plastic, petroleum, oil & gas, etc.
- Raising foreign investments led to rapid growth in terms of automobile production and exports. Overseas companies make huge investments and are installing extensive production capacities in developing countries.
- Continuous investment in R & D resulted in the increase productivity and better quality automobiles, automotive accessories and parts.
- Increase in standards of living and purchasing power parity have resulted in the increase demand of automobiles especially four-wheelers in developing nations, mostly in South Asian region.
- This sector provides employment to major chunk of human population in the world i.e. 25 million. This industry provides millions of jobs to the people.
- Adequate infrastructural facilities in form of power supply, machinery, capital ready availability of raw materials and labour help in the tremendous growth of this industry in India.

The rise in efficiency and productivity of the auto industry helps directly and indirectly to accelerate the efficiency of other sectors through factor movements of goods and people in the economy. Therefore the industry is recognized as one of the drivers of economic growth as it contributes significantly to the overall GDP of the nation. It has been identified at different forums as a sector with a high potential to increase exports and employment. It also helps in attaining two critical goals of the common minimum program that of increasing manufacturing output and of providing employment.

Indian auto component manufacturing is currently constrained by lack of large capacities. Greater variety in vehicle launches by Original Equipment Manufacturers (OEMs) in recent years and increased export demand are offering newer challenges to manufacturing capabilities and economies of scale of component manufacturers.

Due to rising competition and growth potential, the auto component industry has been exposed to many risks of varying intensity. Similarly, the current state of competition also increases risks due to competitive forces.

To grow and sustain in this industry the companies have to develop certain strategies. Strategy development, also known as strategic planning, is fundamental to creating and running a business. Its plan that sets specific goals and objectives, it is capable of being changed in response to shifting market dynamics.

Strategies define the overall purpose and plans for the business, in both the short and long term. They help to give the organization direction and give the employees and managers a vision and purpose to get behind. This helps create employee cohesion and a purposeful working environment. Direction is particularly important if the organization relies on funders, investors or other external donors, as they need to be convinced that they are investing in a good cause.

### Objectives

- To study the major areas of strategy development by auto component manufacturers for improving competitiveness exports in globalised market.
- To study the key factors of strategy development for auto component manufacturers export competitiveness.
- To study the relationship between strategies and the different factors of competitiveness with respect to auto component manufacturers.

### Methodology

The research area is with special reference to auto component units in Aurangabad. The automobile cluster in Maharashtra is developed, *inter alia*, due to the state's good factor conditions (strong human capital, geographical advantage with access to ports, well-developed financial institutions), good demand in the western region, and presence of two of the oldest and big industrial houses (Tata and Bajaj).

Data collection was done through a structured questionnaire. Data analysis was done through SPSS (Statistical Package for the Social Sciences) software. Statistical tools like frequency distribution, mean values, standard deviation are used to describe the profile of the responding companies. Tools like Chi-square test, 't' test, and other relevant tools were used to test the hypothesis.

### Hypothesis

- H<sub>01</sub> : There is no association between size of the company and export strategy.  
H<sub>11</sub> : There is association between size of the company and export strategy.  
H<sub>02</sub> : There is no association between period of establishment of the firm and export strategy.  
H<sub>12</sub> : There is association between period of establishment of the firm and export strategy.  
H<sub>03</sub> : There is no association between ownership pattern and export strategy.  
H<sub>13</sub> : There is association between ownership pattern and export strategy.  
H<sub>04</sub> : There is no association between number of employees and export strategy.  
H<sub>14</sub> : There is association between number of employees and export strategy.

H<sub>05</sub> : There is no effect of strategy development for internal factors for enhancing competitiveness with respect to productivity and export.

H<sub>15</sub> : There is an effect of strategy development for internal factors for enhancing competitiveness with respect to productivity and export.

H<sub>06</sub> : There is no effect of external factors on strategy development for productivity and export.

H<sub>16</sub> : There is an effect of external factors on strategy development for productivity and export.

H<sub>07</sub> : There is no association between strategy development for investment priorities and export competency.

H<sub>17</sub> : There is association between strategy development for investment priorities and export competency.

H<sub>08</sub> : There is no association between competency index and export competency.

H<sub>18</sub> : There is association between competency index and export competency.

H<sub>09</sub> : There is no effect of strategy development for present cost strategy on export competency.

H<sub>19</sub> : There is an effect of strategy development for present cost strategy on export competency.

H<sub>010</sub> : There is no effect of strategy development for present quality strategy on export competency.

H<sub>110</sub> : There is an effect of strategy development for present quality strategy on export competency.

H<sub>011</sub> : There is no association between strategy development for competitiveness and export competency.

H<sub>111</sub> : There is an association between strategy development for competitiveness and export competency.

### Aurangabad cluster

The hypothesis are tested with Pearson Chi-square test and ANOVA wherever applicable.

The data was collected with a questionnaire designed to draw proper statistical inferences.

For the research data was collected from 150 companies. The information of companies selected from Pune clusters profile is as below:

The information of companies selected from Aurangabad clusters profile is as below:

Companies having ISO certification were 180, companies with TS certification and companies having other certifications were 33.

From 150 companies there were 46 companies who didn't export any of their products, 24 companies had low export activities i.e. exports below 25% of their turnover, 64 companies had medium export activities i.e. exports between 25% to 45% of their turnover and 16 companies had exports of above 45% of their turnover.

Other data is grouped according to the impact factor created on the key variables.

**H<sub>01</sub> : There is no association between size of the company and export strategy.**

The hypothesis is tested against the size of the company and its association with the export activity. Size of the

company is classified as Small and medium Enterprise (SME) and Medium enterprise (ME)

To test the above hypothesis Pearson chi-square test is applied and the result of the test is as follows:

Calculated Chi-square value : 7.625

Degree of Freedom : 3

Table Value : 7.82

**Result of Test : Accepted**

The Chi-square calculated value is (7.625) is less than the table value (7.82). This indicates that the Null Hypothesis ( $H_0$ ) is accepted that is: **There is no association between size of the company and export strategy.**

**H<sub>02</sub> : There is no association between period of establishment of the firm and export strategy.**

This hypothesis considers the association of the period in which the companies are established with exports. The period of establishment is grouped as companies established before 1990, companies established in the period of 1990 – 2000 and companies established after 2000. To test the above hypothesis chi-square test is applied and the result of the test is as follows:

Calculated Chi-square value : 18.449

Degree of Freedom : 6

Table Value : 12.59

**Result of Test : Rejected**

The Chi-square calculated value is (18.449) is more than the table value (12.59). This indicates that the Null Hypothesis ( $H_0$ ) is rejected that is: **There is association between year of establishment of the company and export strategy.**

**Anova**

As the above Null Hypothesis got rejected, the study was set to have ANOVA table and F- test in order to ascertain the Score of association between year of establishment and exports.

**Null Hypothesis H<sub>02</sub> : There is no association between year of establishment of the company and export strategy.**

For testing the above Null Hypothesis year of establishment distribution were tested by ANOVA technique the result are shown in the table below:

Calculated Value of F-test : .004

Table Value of F-test at 3% I.o.c. : 3.00

**Result of Test : Accepted**

The above table indicates that the calculated F-value (.004) is less than table value (3.00) at 5% level of significance. This indicates that Null Hypothesis ( $H_0$ ) is accepted that is: **There is no association between year of establishment of the company and export strategy.**

**H<sub>03</sub> : There is no association between ownership pattern and export strategy.**

This hypothesis considers the association of ownership pattern with exports. The ownership pattern is classified as Proprietary, Partnership and Private limited companies.

To test the above hypothesis chi-square test is applied and the result of the test is as follows:

Calculated Chi-square value : 47.349

Degree of Freedom : 6

Table Value : 12.59

**Result of Test : Rejected**

The Chi-square calculated value is (47.349) is more than the table value (12.59). This indicates that the Null Hypothesis ( $H_0$ ) is rejected that is: **There is an association between ownership pattern and export strategy.**

**Anova**

As the above Null Hypothesis got rejected, the study was set to have ANOVA table and F- test in order to ascertain the Score of association between the ownership pattern and exports.

**Null Hypothesis H<sub>04</sub> : There is no association between ownership pattern and export strategy.**

For testing the above Null Hypothesis ownership pattern was tested by ANOVA technique the result are shown in the table below:

Calculated Value of F-test : .726

Table Value of F-test at 3% I.o.c. : 3.00

**Result of Test : Accepted**

The above table indicates that the calculated F-value (.726) is less than table value (3.00) at 5% level of significance. This indicates that Null Hypothesis ( $H_0$ ) is accepted that is: **There is no association between ownership pattern and export strategy.**

**H<sub>04</sub> : There is no association between number of employees and export strategy.**

This hypothesis considers the association of number of employees in the companies established with exports. The number of employees is categorised as companies having employees below 100, companies having employees between 101 to 200, companies having employees between 201 to 300 and companies having employees above 301. To test the above hypothesis chi-square test is applied and the result of the test is as follows:

Calculated Chi-square value : 26.544

Degree of Freedom : 6

Table Value : 12.59

**Result of Test : Rejected**

The Chi-square calculated value is (26.544) is more than the table value (12.59). This indicates that the Null Hypothesis ( $H_0$ ) is rejected that is: **There is an association between the number of employees and export strategy.**

**Anova**

As the above Null Hypothesis got rejected, the study was set to have ANOVA table and F- test in order to ascertain the Score of association between the number of employees and exports.

**Null Hypothesis H<sub>04</sub> : There is no association between number of employees and export strategy.**

For testing the above Null Hypothesis employees distribution were tested by ANOVA technique the result are shown in the table below:

Calculated Value of F-test : 1.977

Table Value of F-test at 5% I.o.c. : 3.00

**Result of Test : Accepted**

The above table indicates that the calculated F-value (1.977) is more than table value (3.00) at 5% level of significance. This indicates that Null Hypothesis (H<sub>0</sub>) is rejected that is: **There is no association between the number of employees and export strategy.**

**H<sub>05</sub> : There is no effect of strategy development for internal factors for enhancing competitiveness w.r.t productivity and export.**

The internal factors considered are training and development activities, capacity utilisation, quality consciousness, financial position and internal growth conducive environment

These factors were measured on 5 point likert scale.

To test the above hypothesis chi-square test is applied and the result of the test is as follows:

Calculated Chi-square value : 9.992  
Degree of Freedom : 6  
Table Value : 12.59

**Result of Test : Accepted**

The Chi-square calculated value is (9.992) is less than the table value (12.59). This indicates that the Null Hypothesis (H<sub>0</sub>) is accepted that is: **There is no effect of strategy development for internal factors for enhancing competitiveness w.r.t productivity and export.**

**H<sub>06</sub> : There is no effect of external factors on strategy development for productivity and export.**

The external factors considered are supply of sufficient funds, availability of technical manpower, support from customers, government support and vendor development.

To test the above hypothesis chi-square test is applied and the result of the test is as follows:

Calculated Chi-square value : 17.697  
Degree of Freedom : 6  
Table Value : 12.59

**Result of Test : Rejected**

The Chi-square calculated value is (17.697) is more than the table value (12.59). This indicates that the Null Hypothesis (H<sub>0</sub>) is rejected that is: **There is an effect of external factors on strategy development for productivity and export.**

**Anova**

As the above Null Hypothesis got rejected, the study was set to have ANOVA table and F- test in order to ascertain the Score of effects of external factors on productivity and exports

**Null Hypothesis : There is no effect of external factors on strategy development for productivity and export.**

For testing the above Null Hypothesis external factors were tested by ANOVA technique the result are shown in the table below:

Calculated Value of F-test : .577  
Table Value of F-test at 5% I.o.c. : 3.00

**Result of Test : Accepted**

The above table indicates that the calculated F-value (.577) is less than table value (3.00) at 5% level of significance. This indicates that Null Hypothesis (H<sub>0</sub>) is

accepted that is: **There is no effect of external factors on strategy development for productivity and export.**

**H<sub>07</sub> : There is no association between strategy development for investment priorities and export competency**

The investment priorities considered are R & D, automation process, training of employment, welfare of employees, market research activities and advertisement.

To test the above hypothesis chi-square test is applied and the result of the test is as follows:

Calculated Chi-square value : 2.275  
Degree of Freedom : 6  
Table Value : 12.59

**Result of Test : Accepted**

The Chi-square calculated value is (2.275) is less than the table value (12.59). This indicates that the Null Hypothesis (H<sub>0</sub>) is accepted that is: **There is no association between strategy development for investment priorities and export competency.**

**H<sub>08</sub> : There is no association between competency index and export competency**

The factors for competitive index considered are R & D, changing in target market, adoption of technology, marketing budget strategic alliance and employee stability.

To test the above hypothesis chi-square test is applied and the result of the test is as follows:

Calculated Chi-square value : 9.365  
Degree of Freedom : 6  
Table Value : 12.59

**Result of Test : Accepted**

The Chi-square calculated value is (9.365) is less than the table value (12.59). This indicates that the Null Hypothesis (H<sub>0</sub>) is accepted that is: **There is no association between competency index and export competency.**

**H<sub>09</sub> : There is no effect of strategy development for present cost strategy on export competency.**

The cost strategy considered are reduction of inventory level, rejection rate (parts per million), automation and vendor development.

To test the above hypothesis chi-square test is applied and the result of the test is as follows:

Calculated Chi-square value : 17.016  
Degree of Freedom : 6  
Table Value : 12.59

**Result of Test : Rejected**

The Chi-square calculated value is (17.016) is more than the table value (12.59). This indicates that the Null Hypothesis (H<sub>0</sub>) is rejected that is: **There is an effect of strategy development for present cost strategy on export competency.**

**Anova**

As the above Null Hypothesis got rejected, the study was set to have ANOVA table and F- test in order to ascertain the Score of effects of present cost strategy on and exports

**Null Hypothesis H<sub>09</sub> : There is no effect of strategy development for present cost strategy on export competency.**

For testing the above Null Hypothesis present cost strategies were tested by ANOVA technique the result are shown in the table below:

Calculated Value of F-test : .113

Table Value of F-test at 5% I.o.c. : 3.00

**Result of Test : Accepted**

The above table indicates that the calculated F-value (.113) is less than table value (3.00) at 5% level of significance. This indicates that Null Hypothesis (H<sub>0</sub>) is rejected that is: **There is no effect of strategy development for present cost strategy on export competency.**

**H<sub>010</sub> : There is no effect of strategy development for present quality strategy on export competency.**

The strategies for quality considered are maintenance, improve product design, R & D and employees training To test the above hypothesis chi-square test is applied and the result of the test is as follows:

Calculated Chi-square value : 6.016

Degree of Freedom : 6

Table Value : 12.59

**Result of Test : Accepted**

The Chi-square calculated value is (6.016) is less than the table value (12.59). This indicates that the Null Hypothesis (H<sub>0</sub>) is accepted that is: **There is no effect of strategy development for present quality strategy on export competency.**

**H<sub>011</sub> : There is no association between strategy development for competitiveness and export competency.**

The areas of competency development considered are identify niche markets, new product development, optimum utilisation of resources, introduce new development, use information to optimize decision making and identify market changes.

To test the above hypothesis chi-square test is applied and the result of the test is as follows:

Calculated Chi-square value : 13.115

Degree of Freedom : 6

Table Value : 12.59

**Result of Test : Rejected**

The Chi-square calculated value is (13.115) is more than the table value (12.59). This indicates that the Null Hypothesis (H<sub>0</sub>) is rejected that is: **There is an association between strategy development for competitiveness and export competency.**

**Anova**

As the above Null Hypothesis got rejected, the study was set to have ANOVA table and F- test in order to ascertain the Score of association between competitiveness and export competency

**Null Hypothesis H<sub>111</sub> : There is no association between strategy development for competitiveness and export competency.**

For testing the above Null Hypothesis factors for competitiveness were tested by ANOVA technique the result are shown in the table below:

Calculated Value of F-test : .878

Table Value of F-test at 5% I.o.c. : 3.00

**Result of Test : Accepted**

The above table indicates that the calculated F-value (.878) is less than table value (3.00) at 5% level of significance. This indicates that Null Hypothesis (H<sub>0</sub>) is accepted that is: **There is no association between strategy development for competitiveness and export competency.**

**Recommendations**

- Strategy to use latest technology is also an important factor for competitiveness and export. It can be adopted by the company by providing various resources in-house or by sharing it with the cluster.
- Strategy development by focusing on niche segments and niche export markets is an innovative marketing strategy. The markets which are old are saturated so there is a need to search for a new market.
- Small companies can develop strategies on resource sharing with companies in cluster.
- To develop more strategies benchmarking should be done with the companies mainly in China.
- For auto-components, borrowings enhance competitiveness and hence a strategy to improve credit availability is critically important for auto-components.
- Product diversification strategy enhances competitiveness. Firms that produce more than one product have significantly higher market share than those that produce just one product.
- Imported machinery is superior to domestic ones, in terms of efficiency. Hence, share of imported capital-goods has a positive significant effect on market-share. The firms that use more of them are more competitive.
- There should be awareness created among companies about the need for getting credit worthiness rating done.
- There is a need for building currency fluctuation clause in their medium and long-term contracts with the customers.
- There is a need to diversify the client base and the need for doing business in different and more stable currencies.
- Strategies for expansion and diversification will help break into new markets.
- Strategies should be developed where the companies should identify products where there is continued aftermarket demand for older technologies, even though the original equipment market has moved forward.
- Strategies development should consider the factor of workforce also. There is a need to change their attitude to increase productivity.

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