



## A Study on Impact of Liberalization on Quality Improvement of Selected Engineering Units in Coimbatore

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### ABSTRACT

Coimbatore is the house for textile mills and more than fifty thousand large, medium, and small scale engineering units. The liberalization policy, declared in 1991 by the Government of India, exposed the Indian Industries to global competitive pressures and opportunities. It brought in a new era of technology, quality consciousness, and competition, which compelled Indian business to wake up from its somnambulism and reassess its assumptions for dealing with the 'competitor-perish' situation. However, the industry quickly responded to these challenges and upgraded itself. Quality improvement is a strategic variable employed in the highly competitive international business world. Quality Improvement is a formal approach to the analysis of performance and systematic efforts to improve it. Industries need quality improvement of manufacturing process as it helps to decrease the operation cost, to improve product quality, etc. This paper attempts to analyze the impact of liberalization and quality improvement of selected engineering industries in Coimbatore a district in Tamilnadu, INDIA.

### KEYWORDS

liberalization policy, quality improvement, engineering industries.

### INTRODUCTION

Industrialization is a transformation process of a society or country from a primary agricultural society into one based on the manufacturing of goods and services. Industrial development has influence on economic growth, standard of living, new employment opportunities, production of agriculture, capital formation, balance of payments, economic stability, and revenue to the government. In industrialization engineering industries occupies a greater part which leads the development of other industries and is a barometer of industrial growth and advance in every country. Liberalization was the trend to dilute the strict licensing system and provides more liberty to entrepreneurs, propagated from 1980s. After liberalization, the fact that free trade is growing throughout the world creates a more competitive environment. Quality is a vital component of the business strategy, and quality improvement is a strategic variable employed in the highly competitive international business world. Frequently changing business environment bring a substantial challenge to the industries to remain competitive in the global market place. It is thus essential for an industry to pursue continuous improvement to keep up with changing market conditions.

### STATEMENT OF THE PROBLEM

The engineering industry produces a range of products as durable machinery, equipment, etc. which are used by a wide number of end-users in agriculture, chemical, automobile, petrochemical, fertilizer, textile, mining, power, defense sectors, etc. Coimbatore is popularly known as "Manchester of South India", it conjures up as the city at the helm of business and entrepreneurship. Blessed with a highly conducive business environment, the exceptionally high entrepreneurial spirit of the dynamic business community is renowned across the country. In Post Liberalization period, realizing the need of ability to compete internationally, the industries have been restructuring themselves at a feverish pace. Restructuring, to improve quality and cut costs, is happening in several ways, including staff downsizing, product diversification, fine-tuning manufacturing processes, making value addition, modernizing, improving quality, branding, and financial cleansing (all high-cost debts are being paid off to decrease the interest burden). It is essential for an industry to pursue quality improvement to keep up with changing market conditions. This study is attempted to analyze impact of liberalization on quality improvement of selected engineering industries especially in Coimbatore District.

### OBJECTIVES OF THE STUDY

To examine the factors that influence to improve the quality of products and measures taken for improving engineering products

### RESEARCH METHODOLOGY

In order to study this objective Industries in Coimbatore district were divided into large, medium and small scale industries and were selected by using Quota sampling. Calculation of quota was based on relevant and available data and here it was fixed as 10 % from the three types of units. A sample study was undertaken by the Interview Method. Field survey method was employed to collect the primary data from 169 industries through Interview schedule. Totally 150 industries were taken for analysis based on data availability. These industries are classified under four categories General Engineering, Textile Engineering, Automobile Engineering, and Pump Industry. To analyze the collected data percentage method, SD, t-Test, One Way ANOVA, Correlation, Multiple Regression Analysis and Discriminant function analysis are the tools implemented.

### Review of Literature:

Foster and Sjoblomin their paper, "Quality Improvement Drivers in the Electronics Industry" examined the drivers of quality improvement in the electronics industry. The objectives of the study were to examine the extent to which traditional learning-curve models explain observed learning rates and to develop a richer platform from which to conduct further research on quality improvement drivers. A combination of data analysis, company interviews, and surveys were employed. Up-stream variables such as product design, infrastructure, supplier and customer-related variables were found to be key drivers of quality improvement. The results support a much broader perspective than the traditional "learning by doing" approach being adopted in the accounting literature.

Ray reported that Indian firms recognized significant changes in the business environment during economic liberalization. Overall economic liberalization in India has led to a more munificent environment characterized by opportunities for higher growth and return, greater availability of various resources and easier access to the international market. It has provided improved infrastructure better institutional support and lower regulatory interference and hurdles. It has also resulted in an intensely competitive market with increased foreign and domestic competition and sophisticated and demanding customers.

**Table 1.1 Factors to improve the quality of product**

Items	Type of industry									Total		
	Large scale			Medium scale			Small scale			Mean	S.D	No.
	Mean	S.D	No.	Mean	S.D	No.	Mean	S.D	No.			
Cost	2.84	.55	25	3.00	.64	50	3.05	.63	75	3.00	.62	150
Machinery	2.96	.20	25	2.98	.55	50	3.25	.55	75	3.11	.53	150
Tools and instruments	3.00	.29	25	2.98	.55	50	3.23	.51	75	3.11	.51	150
Team effort	3.00	.29	25	3.02	.59	50	3.04	.58	75	3.03	.54	150
Material Purchase	2.92	.28	25	2.98	.32	50	2.91	.29	75	2.93	.30	150
Marketing techniques	2.88	.44	25	2.76	.69	50	2.47	.89	75	2.63	.78	150

**Source: Primary data**

The ratings assigned in table 1.1 were Not Important, Important, Most Important and Crucial. Mean table shows that amidst large scale industry tools & instrument and Team effort are the most important factors for improving the quality of product and cost was given the lowest rating with the mean of 2.84. Among medium scale industry, most important factors were team effort followed by cost and mean rating was lower for marketing technique compared to other factors. In small scale industry machinery with mean rating 3.25 was the most important factor, which helps to improve the quality of the product and least important factor for improving the quality of product is marketing technique with mean rating 2.47. Irrespective of industries for majority of the items the ratings fall between important and most important since the rating range between 2 & 3.

**Findings of the study:**

- The analysis explores that among large scale industry, most important measures taken to enhance the quality of the product with study on foreign buyer's market. Whereas among medium and small scale industry were strategic plan to work out foreign collaboration. Least important measures were publicity in professional & trade journal in large, medium, and small scale industry.
- The analysis shows that among large scale industry most important factors for improving the quality of the product was tools & instrument and Team effort and least important factors for improving the quality of product was Cost. Whereas among medium scale industry the quality of product was improved by team effort and least important factors was marketing technique. Among small scale industry, machinery was the most important factors that will help them to improve the quality of the product and least

**Table 1.2 Measures to improve the quality of the product**

Items	Type of industry									Total		
	Large scale			Medium scale			Small scale			Mean	S.D	No.
	Mean	S.D	No.	Mean	S.D	No.	Mean	S.D	No.			
Workers suggestion	2.28	1.02	25	2.24	.66	50	2.73	.68	75	2.49	.78	150
Suppliers of components/parts	2.60	.50	25	2.76	.48	50	2.72	.56	75	2.71	.52	150
Study on foreign buyers market	3.08	.49	25	3.00	.64	50	3.21	.96	75	3.12	.80	150
Domestic buyers	3.00	.29	25	2.88	.48	50	2.53	.68	75	2.73	.60	150
Strategic plan to work out foreign collaboration	2.96	.73	25	3.12	.56	50	3.27	.96	75	3.17	.81	150
Improvement in In-house R&D	2.88	.44	25	2.84	.71	50	2.40	.64	75	2.63	.67	150
Empanelment of Consultants	2.12	.53	25	2.28	.57	50	2.71	.63	75	2.47	.64	150
Publicity in Professional & Trade journal	1.96	.98	25	1.80	.64	50	2.33	.53	75	2.09	.70	150
Overseas travel by staff- to study newer markets	1.96	.89	25	2.10	.97	50	2.67	.74	75	2.36	.90	150
Product of competing firms-domestic	2.76	.44	25	2.54	.71	50	2.51	.98	75	2.56	.82	150
Product of competing firms-foreign	2.84	.55	25	2.66	.75	50	2.57	.68	75	2.65	.69	150
Government R&D institution	2.92	.40	25	2.62	.60	50	2.44	.74	75	2.58	.67	150

**Source: Primary data**

Table 1.2 interprets that the measures of companies related to various items taken to improve the quality of product. The ratings were assigned as Not taken, Little measures, Measures to certain extent, and More measures. Mean table shows that among large scale industry most important measures were Study on foreign buyer's market followed by domestic buyers. Least important measures were publicity in professional & trade journal and overseas travel by staff to study newer markets. In medium scale industry most important measures taken by industries were for strategic plan to work out foreign collaboration and mean rating was lower for publicity in professional & trade journal. Within small scale industry, most important measures taken by the industries were strategic plan to work out foreign collaboration followed by study on foreign buyer's market. Publicity in Professional & Trade journal was given lowest rating. In general irrespective of industries for majority of the items the rating falls between little measures and measures to certain extent since the rating range between 2 & 3.

important factors for improving the quality of product was marketing technique.

**Suggestions:**

- Government has to take necessary steps to control the huge price variation.
- Polices for the import and export to be updated regularly, it is likely to be framed to support highly to the domestic people.
- Government has to take immediate action for rectifying power shortage problem.
- Large, medium, and small units should give preference to marketing and advertisement and mostly to R&D.

**CONCLUSION**

The study attempted to examine the impact of liberalization on quality improvement of selected engineering industries in Coimbatore. With the help of a pre tested questionnaire, the

required primary data were collected from 150 Engineering units and the data were analyzed using the appropriate statistical and econometric tools. From the elaborate data analysis it has been observed that after liberalization majority of the large and medium scale units has understand importance of the quality standards and started implementing the processes by means of upgrading them self by various means like Administration, Marketing, and Production process, etc .The small scale units also understand the importance and preparing themselves to next step by upgrading themselves.

## REFERENCES

1. Palande, P.S (2000), "Strategising for internal and external competition" Coping With Liberalisation, Response Books Publication, New Delhi, ,Pp.195. | | 2. Staffan-Jacobsson and GhayurAlam, (1993) "Government Policy and the Engineering Industry" Liberalisation and Industrial Development in the Third World, Sage Publication, New Delhi, Pp.93. | | 3. George Foster, Leif Sjoblom (1996), "Quality Improvement Drivers in the Electronics Industry", Journal of management Accounting Research, Vol.8, Pp 55-86. | | 4. Ray,S (1998) "Impact of Economic Liberalization and Industrial environment of India; A study of managerial perceptions" in Jayachandran.C, Balasubramanian.N and Dastagir S.M (eds), Managing economic liberalization in South Asia, New Delhi: Macmillan India. |