Journal of Management and Science ISSN 2250-1819 / EISSN 2249-1260

# A study on benchmarking techniques in sipcot industrial park, perundurai

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#### ABSTRACT:

The objective of this paper is to examine the effectiveness of benchmarking for the improvement in products, services & processes. This paper contributes by expanding benchmarking literature, as a result of exploring the factors that will contribute best practice in benchmarking process in SIPCOT. Implementing benchmarking is one of the ways to create a sense of urgency by telling them where are, how good they have to be, and what have to do to get there. The study has been conducted in various companies in SIPCOT Industrial park, Perundurai. Process benchmarking acts as the critical methodology for generating a portfolio of improvement projects which can systematically increase organization performance effectiveness, efficiency, and economy as it continues in its journey toward performance excellence.

Keywords: benchmarking, literature, performance excellence,

#### INTRODUCTION OF THE STUDY:

"Benchmarking is a process for identifying and importing best practices to improve performance." Benchmarking is a systematic and scientific methodology for comparing performance between organizations to evaluate the relative excellence of their alternative business practices based on the measured achievements of analytical benchmarks. The International Personnel Management Association and the National Association of State Personnel Executives jointly developed the following definition for benchmarking: A comparison of similar processes across public and private organizations to identify best practices to improve organizational performance. The characteristics and attributes of benchmarking include measuring performance, systematically identifying best practices, learning from leading organizations, and adapting best practices as appropriate.

# **TYPES OF BENCHMARKING:**

- Process benchmarking
- Strategic benchmarking
- Operations benchmarking

# **EFFECTIVENESS**

Benchmarking needs to be linked to other sources of information, such as changing customer expectations and preferences. Benchmarking always looks at the present in terms of how some process or quality dimension is being achieved by others. However, this approach may not be adequate for determining what should be done in the future or whether an organization should retain a function or process or contract it out. For example, an organization could contract out its computer operations' to IBM or some other firm. When used simply to copy the best best-in-class competitors, benchmarking may only lead to short-term competitive advantage. Finally, benchmarking needs to be used to complement and aid, not to substitute for, the creative and innovative efforts of the organization's own employees. Benchmarking is often used to help an organization adapt, but less commonly to innovate.

#### INTRODUCTION OF THE INDUSTRY

State industries promotion corporation of Tamil nadu ltd. (SIPCOT) was established by the government of tamil nadu in the year 1971 with the specific objectives of playing a catalytic role in the promotion and development of medium an major industries and to hasten the industrial dispersal in backward and under developed areas of the state.

SIPCOT's role is to plan, promote and develop medium and major industries and its promotional activities comprise of the following :

- a. Development of industrial parks and provision of developed lands at reasonable cost on easy payment terms.
- b. Provision of financial assistance on liberal terms to medium and major industries, under IDBI refinance scheme.
- c. Implementation of package of incentives for the benefit of entrepreneurs.
- d. Provision of various ancillary services for the entrepreneurs.

#### INDUSTRY PROFILE

Some of the big textile tickets that have their production/processing units located in the Perundurai estate include Gangotri Textiles, KG group, KPR Mills, Vardhaman/Mahaveer group, S P Apparels, Premier and Amorjyoti. Of the 1,820 acres of allottable area with SIPCOT, a little more than 1,140 acres have been given to the industries.

#### **OBJECTIVES OF THE STUDY**

- To identify the employees attitude towards the excellence performance.
- To study the effectiveness of benchmarking for the improvement in products, services & processes.
- To identify the influence of benchmarking to get lower operating costs and improved competitive advantage.
- To identify the effectiveness of benchmarking helps to get new potentials & jobsatisfaction.
- To identify the contribution of benchmarking to reduce wastage, industrial accidents of labour turnover.

#### SCOPE OF THE STUDY

Benchmarking is the process of identifying and adapting outstanding practices from organizations and companies around the world to assist an organization or company in measuring and improving its performance. The metrics and quartile system of classification used in this study were derived from years of research and experience and a detailed understanding of best practices in the garment industries.

# RESEARCH METHODOLOGY

The Research Design undertaken for the study is Descriptive which will to portray the characteristics of a group or individuals or situation.

#### SAMPLING SIZE AND TECHNIQUE

In this study 130 employees of sipcot in perundural was selected as size of sample. Convenient sampling technique was adopted.

# **DESCRIPTION OF STATISTICAL TOOLS USED:**

- Percentage method
- Chi-square test

# > Weighted average method.

# WEIGHTED AVERAGE METHOD:

Weighted average is also called as Mean. It is the most common and widely used to measure central tendency. Weighted average of a series is the figure by dividing the total value of the various terms by their number. The researcher uses weighted average for rating the stress levels of employees in anorganization.

Weighted average total = [(R1\*W5) + (R2\*W4) + (R3\*W3) + (R4\*W2) + (R5\*W1)]

# **ANALYSIS:**

# BENCH MARKING TECHNIQUES IMPROVE THE ORGANISATION

| Improve Organization | Number of respondents | Percentage (%) |
|----------------------|-----------------------|----------------|
| Strongly agree       | 40                    | 30.77          |
| Agree                | 60                    | 46.15          |
| Neutral              | 18                    | 13.85          |
| Disagree             | 12                    | 9.23           |
| Strongly disagree    | -                     | -              |
| Total                | 130                   | 100            |

> Benchmarking techniques acts as a management tool to improve performance of organization.

# IT HELPS INTERNAL INSPECTION OF PERFORMANCE

| Internal Inspection | Number of respondents | Percentage (%) |
|---------------------|-----------------------|----------------|
| Strongly agree      | 30                    | 23.08          |
| Agree               | 60                    | 46.15          |
| Neutral             | 12                    | 9.23           |
| Disagree            | 18                    | 13.85          |
| Strongly disagree   | 10                    | 7.69           |
| Total               | 130                   | 100            |

Benchmarking helps to inspect the internal process and functioning of organization.

# RANKING FOR BENCHMARKING

| Factor       | Rank |    |    |    |    |    |    |    |  |  |
|--------------|------|----|----|----|----|----|----|----|--|--|
| ractor       | 1    | 2  | 3  | 4  | 5  | 6  | 7  | 8  |  |  |
| Services     | 13   | 28 | 19 | 20 | 15 | 23 | 19 | 13 |  |  |
| Process      | 18   | 31 | 16 | 13 | 18 | 21 | 13 | 20 |  |  |
| Cost control | 16   | 17 | 34 | 10 | 13 | 24 | 17 | 19 |  |  |

| Recruitment procedure & practice | 28 | 13 | 19 | 23 | 25 | 15 | 13 | 14 |
|----------------------------------|----|----|----|----|----|----|----|----|
| Training department technique    | 30 | 17 | 18 | 24 | 20 | 14 | 12 | 15 |
| Finance                          | 12 | 16 | 21 | 21 | 23 | 16 | 24 | 17 |
| Marketing                        | 18 | 15 | 15 | 22 | 18 | 16 | 21 | 25 |
| Performance appraisal            | 15 | 13 | 08 | 17 | 18 | 21 | 31 | 27 |

# **Applying weighted average method:**

Assume W1 as 8, W2 as 7, W3 as 6, W4 as 5, W5 as 4, W6 as 3, W7 as 2, and W8 as 1 and WT as Weight age Total.

**WAM** = Weight age total / total weight, where WAM is weight age average.

Weight age total = 
$$[(R1*W8) + (R2*W7) + (R3*W6) + (R4*W5) + (R5*W4) + (R6*W3) + (R7*W2) + (R8*W1)]$$

# $= \left[ (13*8) + (28*7) + (19*6) + (20*5) + (15*4) + (23*3) + (19*2) + (13*1) \right] = 694$

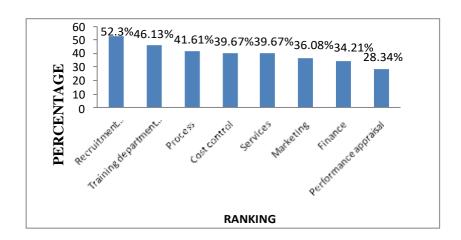
# CALCULATION OF WEIGHTED AVERAGE

| Factors                        | w-1 | w-2 | w-3 | w-4 | w-5 | w-6 | w-7 | w-8 | W.<br>total | WAM   | Rank            |
|--------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-------------|-------|-----------------|
| Services                       | 104 | 196 | 114 | 100 | 60  | 69  | 38  | 13  | 694         | 39.67 | 4 <sup>na</sup> |
| Process                        | 144 | 217 | 96  | 65  | 72  | 63  | 26  | 20  | 703         | 41.61 | 3 <sup>th</sup> |
| Cost control                   | 144 | 119 | 204 | 50  | 52  | 72  | 34  | 19  | 694         | 39.67 | 4 <sup>tn</sup> |
| Recruitment procedure&practice | 224 | 91  | 114 | 115 | 100 | 145 | 26  | 14  | 829         | 52.30 | 1 <sup>st</sup> |
| Training department technique  | 240 | 119 | 108 | 120 | 80  | 42  | 24  | 15  | 748         | 46.13 | 2 <sup>rd</sup> |
| Finance                        | 96  | 112 | 126 | 105 | 92  | 48  | 48  | 17  | 644         | 34.21 | 7th             |
| Marketing                      | 144 | 105 | 105 | 110 | 72  | 48  | 42  | 25  | 651         | 36.08 | 6 <sup>tn</sup> |
| Performance appraisal          | 120 | 91  | 48  | 85  | 72  | 63  | 62  | 27  | 568         | 28.34 | 8 <sup>tn</sup> |

# **INFERENCE:**

Table shows that respondent's gives rank 1 to Recruitment procedure & practice, rank 2 to Training department technique, rank 3 to process, rank 4 & 5<sup>th</sup> service and cost control, rank 6 to marketing, rank 7 to finance, and rank 8 to Performance appraisal.

# RANKING FOR BENCHMARKING



# IDENTIFICATION OF BEST PERFORMERS IS EASY

| Identification Best performers | Number of respondents | Percentage (%) |
|--------------------------------|-----------------------|----------------|
| Strongly agree                 | 28                    | 21.54          |
| Agree                          | 35                    | 26.92          |
| Neutral                        | 64                    | 49.23          |
| Disagree                       | 3                     | 2.31           |
| Strongly disagree              | -                     | -              |
| Total                          | 130                   | 100            |

<sup>&</sup>gt; The Table shows that identifying the best performer is not an easy task

# BENCHMARKING WITH COMPETITOR IS USEFUL

# ORGANIZATION GAINS FROM BENCHMARKING

| Organization gains                | Number of respondent | Percentage (%) |  |
|-----------------------------------|----------------------|----------------|--|
| New ideas for process improvement | 42                   | 32.31          |  |
| New ideas in general              | 23                   | 17.69          |  |
| Competitive performance           | 34                   | 26.15          |  |
| Increase profit & quality         | 31                   | 23.85          |  |
| Total                             | 130                  | 100            |  |

<sup>&</sup>gt; Benchmarking helps the managers to get new ideas for process improvement and identify the gaps in performance.

# TECHNIQUE USED FOR GATHERING INFORMATION FROM OTHER COMPANIES

| Gathering the information            | Number of respondents | Percentage (%) |
|--------------------------------------|-----------------------|----------------|
| Documenting interviews               | 52                    | 40.00          |
| Developing questionnaires and survey | 36                    | 27.69          |
| Analyzing existing workflow          | 42                    | 32.31          |
| Total                                | 130                   | 100            |

Interview method is the best way to collect information for benchmarking. Analyzing the existing workflow and survey methods becomes the next choice in collecting data.

# USES OF BENCHMARKING

Benchmarking with competitor is considered where the company learns from the other companies aiming to gain superiority one over another.

# Journal of Management and Science ISSN 2250-1819 / EISSN 2249-1260

| Uses of bench mark                             | Number of respondent | Percentage (%) |
|--|----------------------|----------------|
| Achieve superior performance                   | 32                   | 24.62          |
| Discuss & understanding methods to reach goals | 40                   | 30.77          |
| Satisfy customers needs & expectations         | 28                   | 21.44          |
| Discover emerging technology                   | 30                   | 23.08          |
| Total  | 130                  | 100            |

<sup>&</sup>gt; It helps majorly to understand the methods to reach goals

# BENCH MARKING BEST PRACTICES AND BENCH MARKING OTHER NATURE OF BUSINESS PROMOTE THE ORGANIZATION

| Bench marking<br>practices/other<br>nature of business | Strongly<br>agree | Agree | Neutral | Disagree | Strongly<br>disagree | Total |
|--|-------------------|-------|---------|----------|----------------------|-------|
| Strongly agree   | 6                 | 3     | 9       | 1        | 1                    | 20    |
| Agree  | 10                | 23    | 2       | 3        | 1                    | 39    |
| Neutral  | 19                | 20    | 15      | 5        | 1                    | 60    |
| Disagree   | 2                 | 1     | 3       | 0        | 2                    | 8     |
| Strongly disagree                                      | 1                 | 1     | 0       | 1        | 0                    | 3     |
| Total  | 38                | 48    | 29      | 10       | 5                    | 130   |

# **INFERENCE:**

There is **close** significant relationship between benchmarking best practices and benchmarking other nature of business promote the organization.

# BENCHMARKING NEW PRACTICES WILL FILL THE GAP AND BENCHMARKING CONTINUOUS JOURNEY TOWARDS PERFORMANCE EXCELLENCE

| Benchmarking<br>new practices/<br>performance<br>excellence | Highly<br>satisfied | Satisfied | Neutral | Dissatisfied | Highly<br>dissatisfied | Total |
|---|---------------------|-----------|---------|--------------|------------------------|-------|
| Strongly agree  | 5                   | 6         | 3       | 4            | 1                      | 19    |
| Agree   | 10                  | 15        | 27      | 5            | 3                      | 60    |
| Neutral   | 2                   | 9         | 2       | 2            | 1                      | 16    |
| Disagree  | 3                   | 1         | 11      | 4            | 3                      | 22    |
| Strongly disagree   | 6                   | 1         | 2       | 2            | 2                      | 13    |
| Total   | 26                  | 32        | 45      | 17           | 10                     | 130   |

# **INFERENCE:**

There is **close** significant relationship between benchmarking new practices will fill the gap and benchmarking continuous journey towards performance excellence.

#### **FINDINGS**

- 46.15% of the respondents agree at the benchmarking will improve the performance of the organization.
- **46.15%** of the respondents agree that the benchmark process would be helpful to in internal inspection performance.
- 49.23% of the respondents are neutral about identifying the best performers.

- ❖ 36.92% of the respondents strongly agree that benchmarking highly influences the growth oforganization
- 46.15% of the respondents are neutral that benchmarking with competitor is useful
- **\$** 36.92% of the respondents agree that benchmarking with other nature of business would promote the organization.
- ❖ 25.38 % of the respondents collect the best practices in the other companies through the managers.
- ❖ 37.69% of the respondents agree that they collect data by giving bribes.
- 44.31 % of the respondents responded neutral with the present data collection procedure..
- 40 % of the respondents have gathered the information from other companies through documenting interviews.
- ❖ 32.31% of the respondents feel that the organization gains new ideas for process improvement through benchmarking.
- ❖ 30.77% of the respondents agree that discuss & understanding methods to reach goals is useful for benchmarking.
- 60% of the respondents feel that benchmarking is necessary when iimplementing new process in the organization.
- 30% of the respondents said that equipment is needed in benchmark.
- 41.54% of the respondents are highly satisfied with the set of improvement goals.
- 46.15% of the respondents satisfied that the new practices will fill the gap in benchmarking.
- ❖ 36.15% of the respondents neutral that the co-employees supported to adopt with benchmarking.
- 44.31% of the respondents neutral at the help of subordinates support of the benchmarking.
- 43.85% of the respondents satisfied that benchmarking is helpful to the performance planning team.
- ❖ 36.15% of the respondents agree that the benchmarking will increase the customer satisfaction.
- ❖ 29.23% of the respondents are strongly agree that benchmarking will decrease the operating cost.
- ❖ 36.92% of the respondents neutrally satisfied with the evaluation procedure of benchmark.
- ❖ 32.31% of the respondents responded neutral that benchmark practice will systematically increase organization performance.
- \$ 34.12% of the respondents neutral at the benchmark have been continuous journey of the performance excellence.

# SUGGESTIONS OF THE STUDY

Based on the major findings, the following suggestions are offered to make the study more worthy.

- The companies may introduce new ideas for process improvement to gain with bench marking.
- The data collection procedure should be encouraged; because of it will be able to identify the present practice of the organizations.
- The companies should provide best bench marking practices which will increase customer satisfaction.
- The study reveals that organizations are lacking proper implementation. To effectively implement benchmarking, adequate planning, training, and open interdepartmental communication is needed.

# CONCLUSION

It is concluded that, most of the respondents are satisfied with benchmarking provided by SIPCOT in Perundurai. Hence the benchmarking mechanism can be used for measuring processes, practices and results against the competition or -peer companies in order to improve performance. It is clear that the benchmarking study allows the participating companies to identify where their own practices diverge significantly from the benchmark sample and the best practice company. Hence, this factor will help the organization to identify ways to structure an improvement plan in increasing the productivity of their organization.

Thus the project helped us in knowing the usage of benchmark and how to implement the benchmarking process in a particular company.