

Performance Enhancement Of A Dairy Product Industry Using Expert Choice Approach

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Abstract - This research is an attempt to apply the Performance Enhancement Techniques in Sanchi Dairy organization, Ujjain using expert choice Approach and gap index. This gap index comprises of 9 different factors for analysis. With the help of personal interview and questionnaire, data is collected from all departments and analyzed. Then weighted and overall gap index is calculated. On the basis of researcher observation, suggestions are recommended to case organization for improvement in 9 different factors. After implementation of some suggestion overall gap index is again calculated, which shows some reduction in it without any additional cost.

Keyword - Performance Enhancement, Gap index, Expert choice Approach, Sanchi organization.

1. INTRODUCTION

Today business is being impacted by multiple forces like economic shocks, borderless commerce, advances in technology, a sense of acceleration, and deconstruction of business. The way to execution lies in foreseeing the future and progressing in the direction of it. In India the business organizations are growing at very rapid rate and every day there is a new technology inventing for the assistance of the organizations. Performance Enhancement is the most preferred tool for business performance improvement. It helps understand how the best-in-class organizations carry out their business activities and eventually leads to learning how to deal successfully with competitors from the organizations. Performance Enhancement is the process of improving performance by continuously identifying, Understanding, and adapting outstanding practices and processes found inside and outside an organization (company, public organization, University, College, etc.) by looking at one's business procedures and execution measurements to industry's ideal and best practices from different organizations.

2. LITERATURE REVIEW

Performance Enhancement is a technique to identify their competitive positions and operating results over a defined period. It is an important tool for improving performance. [23] The administration is an a lot more extensive and a muddled capacity of HR, as it incorporates exercises, for example, joint objective setting, nonstop advancement audit and incessant correspondence, input and coaching for improved performance, implementation of employee development programmers and rewarding achievements. It may be made against individual or groups; other programs within the industry; sets of accepted standards; or data from past performance.[3] This has come a long way from simple innovative adaptations to the present systematic approach of implementation, with targeted goals and standard procedures and helps in revealing where the brand stands against the competitors and what are the areas we need to work upon to become more profitable. Business Excellence is regularly depicted as exceptional practices in dealing with the association and accomplishing results, all dependent on a lot of essential ideas or qualities. Business Excellence is regularly depicted as exceptional practices in dealing with the association and accomplishing results, all dependent on a lot of essential ideas or qualities. [3]

3. OBJECTIVES

- To identify the factors important for achieving business excellence and interrelationship among them.
- To prioritize factors contributing in performance improvement.
- To identify the criteria for selection of the best implementation strategy for dairy organization

Table 1. Findings from Various Research Papers on Performance Enhancement

S.No.	Title	Authors	Findings
1	Alternate distribution of perishable items: A case study of Ujjain Dugdh sang	Vasim Patel & Payal Bhargava	Complete study of distribution network in sanchi organization and improvement techniques
2	Dairy farmers' strategies against the crisis and the economic performance of farms	Athanasios Ragkosa, Alexandros	Information regarding Greek dairy sector strategies against the crisis and policy and Investment supporting scheme

3	A case study of a dairy organization	Vijay Rathore and A.C shukhal	Benchmarking help organizations to identify gap against Amul competitors
4	Dairy Farming - an Alternative Income Generating Activity	Alexandru Nedela, Veronica Grosui	A performance Enhancement to identify importance factors for best competitors manufacturing and service
5	Enhancement of productivity in IRON and Re-rolling mill using TPM Approach	Kushal Sharma& Girish,D Thakar,B E Narkhede	Proper Production, Planning & Control (PPC) to improve the performance and services on the Internet and Other organization environments.
6	Improving productivity with dairy farm performance	David Windsor	Identify actual behavior towards product range and quality and best product and improvements
7	A case study of Amul co-operative in India	Ruchira Prasad, Rupali Satsangi	Elements contributing to benchmarking effectiveness and organization design and operational efficiency.
8	FMEA to enhance quality and efficiency of CNC machines: A case study in valve manufacturing industry	Raj Kumar Salvi And S. Jindal	failure mode and systematic method improve and preventing the product
9	Analyzing the Indian Telecom Supply Chain	Pramod,V.R.; Banwet, D.K	Importance of supply chain as an enabler of business excellence.
10	The development of electronic payment system	Veronica S. Moertini1, Asdi A. Athuri	Important and identify to quality based payment system
11	ERP selection using Expert choice software	Oyku Alanbay	Importance Of Expert choice software and its application in organization
12	Analytic Hierarchy Process and Expert Choice: Benefits and Limitations	Alessio Ishizaka and Ashraf Labib	How expert choice enables business excellence to develop organizations and benefits and limitation
13	Comparative Analysis and Bending Behaviour	Sanchita.S.Nawale, Sangram Chalukya	Identification and behavior of comparative Analysis best practices in the industry.
14	A comparative study on Amul India and Mother dairy	Himaddri tiwari	Comparative analysis is a concept that helps in innovation rather than imitation.
15	Impact of Advertising on Consumption	William M F. Mc Donald	Application of Advertisement as an improvement technique.

4. METHODOLOGY

Philosophy is an arrangement of techniques utilized in a specific region of study or movement. Expert Choice Approach has been used to perform in Sanchi Dairy Industry and obtaining the results. The techniques used are interviewing technique and questionnaire technique. An interview technique is a conversation where questions are asked and answers are given verbally to transform the information from interviewee to interviewer, although information transfer can happen in both directions. A

survey is an exploration instrument comprising of arrangement of inquiries and different prompts to gather data from respondents. The Analytic Hierarchy Process and its use of pair wise comparisons has inspired the creation of many other decision-making methods and it is widely accepted, therefore AHP is used as it is executed in the product bundle "Master Expert Choice Approach methodology"

5. DATA COLLECTION AND ANALYSIS

A questionnaire based survey has been conducted in the Sanchi organization (UDS) Ujjain. Several meetings were held with the different departmental heads (Quality department, Field department, Marketing department etc) of Sanchi to explain the questionnaire and it was ensured that the questionnaire has to be completed by the respondents. The selection of persons asked to fill responses were all departmental heads of Sanchi. Some data are collected by interviewing the heads also. After calculation of present gap index some suggestion are recommended to reduce overall gap index. A gap index is obtained before suggestion with the help of Expert choice software. The table no. 2 shows all the factors including mean of these factors, weightage given to each factor and the gap is calculated.

Table 2:- Initial Gap Index of Sanchi Organization at Ujjain Zone

S.No.	Factors	Mean of Factors (MF _i)	Weightage (W _i)	Gap ($\sum MF_i W_i$)
1	Payment System	3.10	0.190	.58
2	Milk Suppliers	2.70	0.162	.43
3	Programs and Training	3.08	0.040	.12
4	Technologies	4.89	0.130	.63
5	Advertisement	5.23	0.037	.19
6	Availability and Outlets	2.83	0.240	.67
7	Quality	3.22	0.092	.29
8	Product range	3.87	0.059	.22
9	Employees and Customers	5	0.050	.25
	Overall gap		$\sum W_i=1$	3.38

Where, Weightage $\sum W_i=1$ Gap Index = $\sum MF_i \times W_i$

Sum of all the values obtained from the filled section in questionnaire
Number of questions responded by the respondents

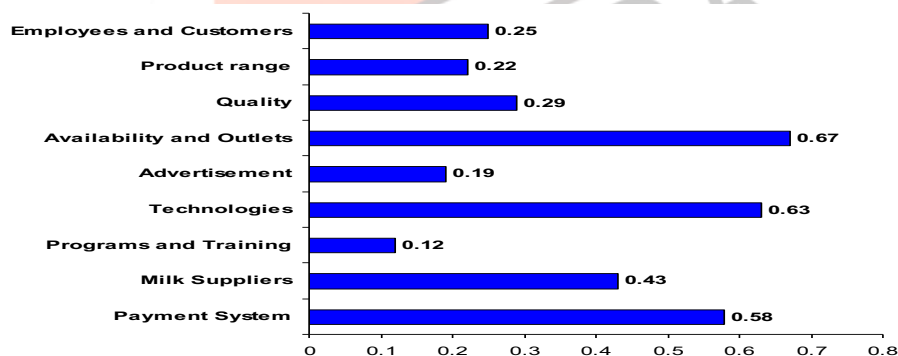


Fig. 1. Bar Graph Showing Initial Gap Index

After one month observation in the plant our some suggestion are given to the management which on implementing help to overcome the overall gap index and some results were found towards to overcome gap index in the organization show in give below table 3.

6. RECOMMENDATION AND SUGGESTION

The results clearly indicate the scope of improvement and recommendations are made in the Sanchi organization to improve in these fields to match against the best in class. After review and analysis the gap index can be overcome to follow some suggestion and implement in the plant. In our observation in the plant some change should be adopted to the company. This can help to reduce each gap.

[1] Management of Sanchi organization should design and develop a quality based payment system (QBPS) for its all departments. A quality based payment system which may gradually be adapted over time to meet changing circumstances.

[2] Management of Sanchi organization should increase the no of training program for its milk supplier for adopting new techniques also should start program like Dairymen Training, Milk Day Celebration, Village Group Discussion.

[3] Management of Sanchi organization should start intensive training program for its employees and stake holder to improve productivity and also should provide safe working environment.

[4] Management of Sanchi organization should adopt an aggressive advertisement policy for promoting their product in competitive environment. Management of Sanchi organization should promote their products in a variety of ways through different medium like print media, social media etc.

[5] Management of Sanchi organization increase no of outlet in new location and increase availability of its product. They may also go for an App based ordering system for home delivery.

[6] Through range of product is high but still needs some diversification in quality and quantity.

[7] Sanchi plant should provide safer working environment for their employees and also some more policy should be adopted to enhance customer satisfaction.

[8] Management of Sanchi organization should start using computerized network system for better control of overall plant operations.

[9] The Government should support to the Dairy farmers by providing subsidies, proper prices and market.

Management agreed on recommendation some of the suggestion for implementation and probable change in gap index is calculated if recommendations are adapted.

Table 3. Gap index of Sanchi Organization at Ujjain Zone (After Suggestion)

S.No.	Factors	Mean of Factors (MF _i)	Weightage (W _i)	Gap ($\sum MF_i W_i$)
1	Payment System	2.97	0.115	.34
2	Milk Suppliers	2.38	0.135	.32
3	Programs and Training	2.95	0.028	.082
4	Technologies	3.12	0.205	.63
5	Advertisement	2.23	0.022	.049
6	Availability and Outlets	2.40	0.267	.64
7	Quality	2.65	0.113	.29
8	Product range	2.75	0.074	.20
9	Employees and Customers	3.69	0.041	.15
	Overall gap		$\sum W_i=1$	2.70

Where, Weightage $\sum W_i=1$

Gap Index = $\sum MF_i \times W_i$

The gap obtained against each factor shows for Sanchi organization Ujjain Zone in descending order after implementation of suggestion. This data are taken for in January 2019. This gap is highest in 'Availability and Outlets' (0.64) followed by 'Technologies' (0.63), 'Payment System' (0.34), 'Milk Suppliers' (0.32), 'Quality' (0.29), 'Product range' (0.20) and 'Employee and customer' (0.15) and 'Programs and Training' (0.082) and the least gap in 'Advertisement' (0.049). The overall gap considering all factors was found to be 2.70 on the scale of 5. It is greater than 50%. This shows high scope of improvement in Sanchi organization at Ujjain zone.

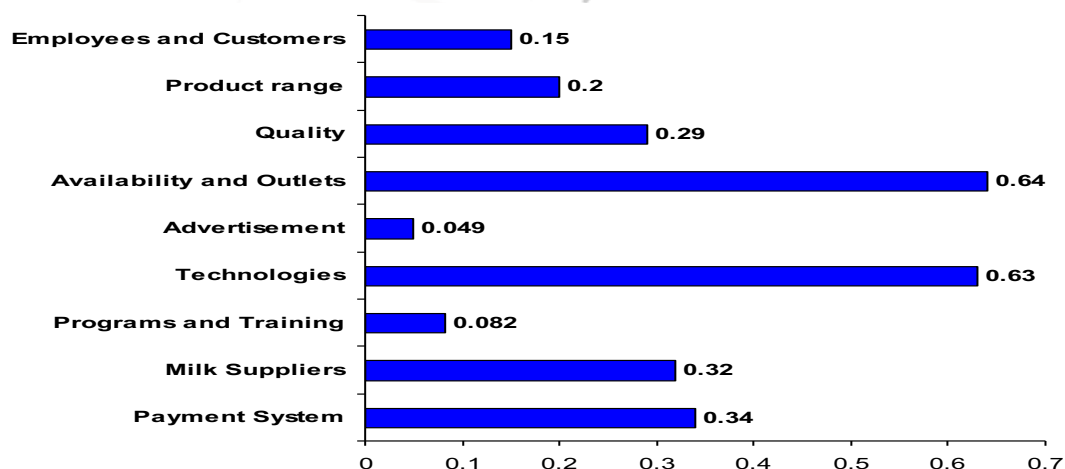


Fig. 2. Bar graph showing final gap index (After suggestion implementation)

Table 4. Comparative Phase of Gap Index of Sanchi Organization at Ujjain Zone

S.NO.	Factors	Initial gap	Final gap
1	Payment system	.58	.34
2	Milk Suppliers	.43	.32
3	Programs and Training	.12	.082
4	Technologies	.63	.63
5	Advertisement	.19	.049
6	Availability and Outlets	.67	.64
7	Quality	.29	.29
8	Product range	.22	.20
9	Employees and Customers	.25	.15
	Overall gap	3.38	2.70

7. RESULT & CONCLUSION

Comparative table no. 4 shows that overall gap index will be reduced from 3.38 to 2.70. If management will be adopt the recommendation and suggestion. This reduction in gap index is due to implementation of suggestion in the case organization without disturbing any kinds of daily production process and at no additional cost.

This research is an attempt to apply the Performance Enhancement techniques in Sanchi organization Ujjain using expert choice Approach and gap index which shows the before suggestion and after suggestion of Sanchi organization. This gap index comprises of 9 different factors for comparative Analysis. With the help of personal interview and questionnaire, data is collected from all department and Analyzed. On the basis of researchers observation and provide suggestion all nine factors are weightage has been given to them using expert choice Approach. The nine factors are Payment system, Milk supplier, Programs and training, Technology, Advertisement, Availability and outlets, Quality, product range, Employees and Customers. The research scholar before suggestion to collect real organization data and Generated gap and Analysis and review after suggestion to the organization some implementations are made. That overall gap index is reduced from 3.38 to 2.70 after implementation of suggestion. This reduction in gap index is due to implementation of suggestion in the case organization And all department improve in order to more in Availability and outlet, technology, payment system, milk supplier, quality, product range, Employees and customers, Programme and training and least in the Advertisement

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