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STRATEGIC DECISION SUPPORT THROUGH COMPETITIVE EVALUATION USING QFD TOOL -A CASE STUDY

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Introduction:

Competitive assessment plays a pivotal role in strategic decision making by providing essential insights into the external environment in which a business operates. It helps to position the organization in a dynamic market environment, for a sustainable growth.

Case study:

The case company is involved in handling turn-key projects of ethanol plant starting from 30klpd to 250 klpd capacities. The main responsibility is to execute various activities smoothly within stipulated time period within targeted estimated project cost by satisfying the agreement, tangible and intangible requirements of the clients.

Methodology:

Quality function deployment (QFD) tool involves a matrix that is used to assess the selectivemanagement policies across the customer requirements, and evaluating those policies, against the competitive companies, considering one of them as Benchmark Company. QFD helps to prioritize the key policies and enhance customer satisfaction in comparison to the competitive companies existing in the market.PDCA cycle is then used for the continual improvement purpose.

Stepwise Procedure: Please refer Fig.No.1, showing the matrix.

Step-I:

Customer requirements are identified and only critical customer requirements are considered for study. Customer importance is given to each customer requirement from 1 to 9

Step-II:

Organizational resources and policies used for the satisfaction of above customer requirements are identified. The relationship (strong/medium/weak), between the customer requirement and the corresponding policy is identified and noted in the corresponding cell.

Step-III:

Importance rating of each policy is calculated as Customer importance*Relationship. e.g. for tender passing rate : 9*9+1*4=81+4=85.

Relative wt. =85/4525=2%

Fig.1 Quality Function Deployment and Technical Assessment



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Step-IV:

Now, Technical competitive assessment is done by rating each policy and rating each customer requirement from 1 to 5 for-

- 1) Our Company
- 2) Company X Ltd.(benchmark company)
- 3) Company Y Ltd.(reputed company)

UGC CARE Group-1



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Rating is done by the team of expert committee and is not disclosed to each other, to avoid the effect of bias.

Step-V:

The results of Policy assessment are as below:

- 1) Our Company 62%
- 2) X Ltd 100% (benchmark company)
- 3) Y Ltd 78%

Step-VI:

The results of Customer requirement satisfaction are as below:

- 1) Our Company 71%
- 2) X Ltd 100% (benchmark company)
- 3) Y Ltd 80%

Results and remarks:

1) There is not much lagging in customer requirement accomplishment between Our Company (71%) and Y Ltd. (80%), *figures are tentative*.

2) In order to fulfil this gap, we have to elevate quality level at site work, safety, quality level at plant and smooth execution of project.

3) There is much lagging in effectiveness of policies implemented by Our Company (62%) and Y Ltd. (78%), again figures are tentative and compared with X ltd. as bench mark (100%).

4) By Parato rule, some 20% policies are going to affect 80% improvements.

We need to improve in some areas like

- a) Employee retention
- b) Strict implementation of ISO system
- c) Employee appreciation policy
- d) Waste control
- e) Inculcation of organisational values
- f) Facilities at site work.

5) We need to start with Demming's PDCA cycle, by taking small assignments for improvement purpose.

6) We can star with SIP i.e. *systematic improvement plan* from each and every department on **compulsory basis**.

Conclusion:

QFD is a structured approach andthough originated in product development; it has proven to be valuable beyond that context. It leads to development of more effective and sustainable policies that address the complex and dynamic changes faced by our company. It also helps enhancestakeholders' engagement, prioritize objectives, supports continual improvement and adopts customer centric approach, in a competitive environment.