ANNEXURE

ANNEXURE A

Questionnaire for assessing the level of implementation of TPM and QFD

A I. Has TPM been implemented in your company? Yes/No

If the answer is Yes, please answer A II to X. Otherwise please proceed to section B.

A II. What is the level of implementation of the first pillar (titled as JISHU - HOZEN meaning AUTONOMOUS MAINTENANCE) in your company?

A III. What is the level of implementation of the second pillar (titled as KOBETSU KAIZEN meaning INDIVIDUAL IMPROVEMENTS) in your company?

A IV. What is the level of implementation of the third pillar (titled as PLANNED MAINTENANCE) in your company?

A V. What is the level of implementation of the fourth pillar (titled as QUALITY MAINTENANCE) in your company?

A VI. What is the level of implementation of the fifth pillar (titled as OFFICE TPM meaning TPM IN NON-SHOP FLOOR AREAS) in your company?

A VII. What is the level of implementation of the sixth pillar (titled as EDUCATION & TRAINING) in your company?

A VIII. What is the level of implementation of the seventh pillar (titled as SAFETY / HEALTH & ENVIRONMENT) in your company?

A IX. What is the level of implementation of the eighth pillar (titled as INITIAL CONTROL meaning DEVELOPMENT MANAGEMENT) in your company?
A X. Have your company ever used internal and external customers concept while implementing TPM?

B I. Has your company ever implemented quality function deployment (QFD)? Yes/No

If your answer is Yes, please proceed to respond to the following questions.

B II. To which extent QFD has been implemented in your company?

B III. Who are the personnel involved while implementing QFD? Please tick

<table>
<thead>
<tr>
<th>Top Management Personnel</th>
<th>Middle Level Management Personnel</th>
<th>Bottom Level Management Personnel</th>
<th>Transaction Processors</th>
<th>Others please specify</th>
</tr>
</thead>
<tbody>
<tr>
<td>Managing Director</td>
<td>General Manager</td>
<td>Supervisors</td>
<td>Clerical Personnel</td>
<td></td>
</tr>
<tr>
<td>President</td>
<td>Works Manager</td>
<td>Office Superintendents</td>
<td>Data entry operators</td>
<td></td>
</tr>
<tr>
<td>Vice-President</td>
<td></td>
<td></td>
<td></td>
<td>Typists</td>
</tr>
</tbody>
</table>

B IV. What are the benefits that your company has derived by implementing QFD?

Please tick the appropriate boxes

- Reduced design changes
- Shorter Product development cycles
- Lowered costs and enhanced productivity
- Improved product quality and reliability
- Increased market share
- Increased attention to customer's perspectives
- Any other, please specify
**ANNEXURE B**

**Survey for Better Maintenance**  
Government Vehicle workshop, Coimbatore

**Instructions**

Kindly Answer the following

Please do not reveal your name or identity

You are supported to discuss with your colleagues.

Answer should be done individually.

Please mark (\(\checkmark\)) to the respective grade against each question

<table>
<thead>
<tr>
<th>E</th>
<th>Excellent</th>
<th>A</th>
<th>Average</th>
<th>G</th>
<th>Good</th>
<th>B</th>
<th>Bad</th>
<th>Z</th>
<th>Excellent bad</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>Condition of Drivers seat</td>
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<td>2</td>
<td>Condition of rear view mirrors</td>
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<td>3</td>
<td>Condition of front light</td>
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<td>4</td>
<td>Engine condition</td>
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<td>5</td>
<td>Condition of Gear box</td>
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<td>6</td>
<td>Condition of Transmission</td>
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<td>7</td>
<td>Condition of suspension/Springs</td>
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<td>8</td>
<td>Condition of Tyres</td>
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<td>9</td>
<td>Condition of Steering</td>
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<td>10</td>
<td>Condition of Breaks</td>
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<td>Condition of Clutches</td>
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<td>Ride Comfort</td>
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<td>Handling characteristics</td>
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<td>Response from maintenance department against problems</td>
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<td>Control of repeated breakdowns</td>
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<td>Consideration of drivers suggestion by maintenance people</td>
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<td>Skill of maintenance people</td>
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</table>
The following questions may be answered in 3 or 4 sentences

21. According to you what are the major complaints of the vehicle

22. What are the wrong maintenance practices exists in your knowledge

23. List your five strong points as a driver

24. List your five weaknesses as a driver

25. List any five strong points of the maintenance stream

26. List any five week points of maintenance stream
ANNEXURE C

Survey for Better Maintenance.

Instructions

Kindly answer the following
Please do not reveal your name or identity.
You are supported to discuss with your colleagues.
Answer should be done individually.
Please mark (✓) to the respective grade against each question

E - Excellent.  G - Good  A - Average  Z - Extremely bad

<table>
<thead>
<tr>
<th></th>
<th>E</th>
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<th>A</th>
<th>B</th>
<th>Z</th>
<th>Remarks</th>
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</tbody>
</table>
The following question may be answered in 3 or 4 sentences

21. According to you where are all the majors complaints of the equipment.
   
   a. Operators' comfort
   
   b. Condition of equipment

   c. Working condition

22. What are all the wrong operating practices exists in your knowledge?

23. List your five strings point as an operator.

24. List your five weaknesses as an operator.

25. List any 5 strong point of maintenance stream.

26. List any 5 weak points of maintenance stream
**ANNEXURE D**

**Questionnaire**

A Questionnaire for Implementation of MQFD in RUBCO, Kottayam

Kindly answer the following questions on the product **HEAVEN**

( \(0 = \) Not at all satisfied, \(5 = \) Somewhat satisfied, \(9 = \) Fully satisfied)

<table>
<thead>
<tr>
<th>Essential Product Features:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. How much are you satisfied with</td>
</tr>
<tr>
<td>i) Cushioning effect of mattress</td>
</tr>
<tr>
<td>ii) Colour of clothes</td>
</tr>
<tr>
<td>iii) Corner cutting</td>
</tr>
<tr>
<td>iv) Finish</td>
</tr>
<tr>
<td>a. Smoothness</td>
</tr>
<tr>
<td>b. Appearance</td>
</tr>
<tr>
<td>v) Thickness</td>
</tr>
<tr>
<td>vi) Stitching</td>
</tr>
<tr>
<td>vii) Durability</td>
</tr>
</tbody>
</table>
Design Parameters

i) Handling feasibility
   a) Weight
      0 1 2 3 4 5 6 7 8 9
   b) Folding feasibility
      0 1 2 3 4 5 6 7 8 9

ii) Structural Features
   a) Shape of Quilting Patterns
      0 1 2 3 4 5 6 7 8 9
   b) Stitching of Pattern
      0 1 2 3 4 5 6 7 8 9
   c) Pattern Size
      0 1 2 3 4 5 6 7 8 9

Dealer Relationship

i) Complaint residual system
   0 1 2 3 4 5 6 7 8 9

ii) Credit facility
    0 1 2 3 4 5 6 7 8 9

iii) Emergency order fulfillment
     0 1 2 3 4 5 6 7 8 9

iv) Effectiveness of sales promotion
    0 1 2 3 4 5 6 7 8 9

Cost

Price of the product
    0 1 2 3 4 5 6 7 8 9
Packaging
i) Attractiveness
ii) Durability
ii) User friendliness

Supply Chain
i) Responsiveness
ii) Transportation
iii) Ability to meet the order

General
1. Any other suggestions regarding the product ............

2. How will you rate the product "HEAVEN" with the competitors product on:
a. Quality
b. Cost
c. Customer preference
3. Can you specify the nature of recurring complaint, if any

Your Name:

Official Address: Period of Dealership

Signature

..................................................Thank you for your co-operation.
ANNEXURE E

Dear Sir,

Please find enclosed here with the following questionnaire, your valuable responses will be very helpful for my research work. I request you to be kind enough to fill up the questionnaire and send back.

Thanking you
Yours sincerely

Pramod.V.R
Lecturer
Department of Mechanical Engineering
N.S.S.College of Engineering
Palakkad
Kerala 678008
QUESTIONNAIRE ON MQFD IMPLEMENTATION IN ENGINEERING EDUCATIONAL INSTITUTION

Name:
Designation:
Official Address:

Your brief bio data showing previous positions held

Note: Tick Your Choice
Yes- Surely (If the step is definitely possible to execute)
Yes- Partially (If the step is possible to execute to the extent between 50 and 80%)
Yes- Feebly (If the step is possible to execute to the extent below 50%)
Not Possible (If the step is not possible to execute)

Step 1
MQFD experts have to convince the top management and the principal/director of the engineering educational institution about the benefits that can be reaped by the implementation of MQFD. This exercise has to be carried out by organizing seminars and brainstorming sessions. To which extent do you believe that this exercise can be carried out given the prevailing engineering educational scenario?

Yes-Surely  Yes-Partially  Yes-Feebly  Not Possible
Please write your comment

Step 2

Management and the principal have to announce the implementation of MQFD as a policy. They have to state the objectives such that it will reach all personnel in the institution. Different types of educational campaigns have to be conducted for personnel at different levels in order to make them fit to attain MQFD objectives. To which extent do you believe that this exercise can be carried out given the prevailing engineering educational scenario?

[ ] Yes-Surely  [ ] Yes-Partially  [ ] Yes-Feebly  [ ] Not Possible

Please write your comment

Step 3

Form an MQFD team consisting of 7-8 members of different departments. They meet once in a week and draw out plans for the implementation. To which extent do you believe that this exercise can be carried out given the prevailing engineering educational scenario?

[ ] Yes-Surely  [ ] Yes-Partially  [ ] Yes-Feebly  [ ] Not Possible

Please write your comment

Step 4

Identify the customer languages of education. For this purpose the feedback of parents, alumnis and the employers who have employed alumnis has to be rigorously and regularly gathered. To which extent do you believe that this exercise can be carried out given the prevailing engineering educational scenario?

[ ] Yes-Surely  [ ] Yes-Partially  [ ] Yes-Feebly  [ ] Not Possible
Please write your comment

Step 5

Customer languages shall have to be ranked based upon their importance. This can be done either by using previous experience and the views of management and personnel. To which extent do you believe that this exercise can be carried out given the prevailing engineering educational scenario?

[Box with options: Yes- Surely, Yes- Partially, Yes- Feebly, Not Possible]

Please write your comment

Step 6

The format of HoQ is given below.

```
1. Voice of Customers
2. Relationship Matrix
3. Ranking of Customer Language
4. Ranking of Technical Remedies
5. Technical Remedies
6. Technical correlation
```
To which extent do you believe that this exercise can be carried out given the prevailing engineering educational scenario?

<table>
<thead>
<tr>
<th>Yes-Surely</th>
<th>Yes-Partially</th>
<th>Yes-Feebly</th>
<th>Not Possible</th>
</tr>
</thead>
</table>

Please write your comment

Step 7

Management and principal have to take strategic decision to choose the outputs of HoQ which have to be passed through eight TPM pillars.

The eight TPM pillars are

1. Autonomous maintenance  
2. Individual improvement  
3. Planned maintenance  
4. Quality maintenance  
5. Development Management  
6. Education and Training  
7. Office TPM  
8. Safety, Health and environment

To which extent do you believe that this exercise can be carried out given the prevailing engineering educational scenario?

<table>
<thead>
<tr>
<th>Yes-Surely</th>
<th>Yes-Partially</th>
<th>Yes-Feebly</th>
<th>Not Possible</th>
</tr>
</thead>
</table>
Please write your comment

Step 8

Send the chosen outputs of HoQ through eight pillars of TPM. To which extent do you believe that this exercise can be carried out given the prevailing engineering educational scenario?

Yes-Surely  Yes-Partially  Yes-Feebly  Not Possible

Please write your comment

Step 9

Direct the results to the curriculum. To which extent do you believe that this exercise can be carried out given the prevailing engineering scenario?

Yes-Surely  Yes-Partially  Yes-Feebly  Not Possible

Please write your comment

Step 10

Evaluate the results based on the parameters namely

(Number of students placed, Percentage of students passed, Number of companies visited for campus interview, Overall performance quality of students, Number of students dropping the course and Availability of competent faculty and supporting staff). To which extent do you believe that this exercise can be carried out given the prevailing engineering educational scenario?

Yes-Surely  Yes-Partially  Yes-Feebly  Not Possible
Please write your comment

Step 11

Compare the results with the set targets. To which extent do you believe that this exercise can be carried out given the prevailing engineering educational scenario?

Yes- Surely  Yes- Partially  Yes- Feebly  Not Possible

Please write your comment

Step 12

Identify the deviation of the results, if any. To which extent do you believe that this exercise can be carried out given the prevailing engineering educational scenario?

Yes- Surely  Yes- Partially  Yes- Feebly  Not Possible

Please write your comment

Step 13

The tactical suggestions have to be exposed to the management and principal, who will take strategic decisions to implement them. To which extent do you believe that this exercise can be carried out given the prevailing engineering educational scenario?

Yes- Surely  Yes- Partially  Yes- Feebly  Not Possible

Please write your comment
Step 14

Implement the recommended actions evolved after MQFD proceedings. To which extent do you believe that this exercise can be carried out given the prevailing engineering educational scenario?

Please write your comment

Yes-Surely  | Yes-Partially  | Yes-Feebly  | Not Possible

Step 15

After achieving the target, revise the target and HoQ matrix. If there is change in customers' languages, that also has to be considered while revising the matrix. To which extent do you believe that this exercise can be carried out given the prevailing engineering educational scenario?

Please write your comment

Step 16

Review the working of MQFD Program as a whole and incorporate the top management's and principal’s views while experimenting the MQFD for enhancing continuously the maintenance quality of engineering education. To which extent do you believe that this exercise can be carried out given the prevailing engineering educational scenario?

Please write your comment
ANNEXURE F

Questionnaire

Name and address of the company:

Your name and designation

Your experience in the company

1. When was the company started?

2. What are the main products manufactured?

3. What is the turnover of the company?

4. Name the countries to which the products are exported?

5. Please list the TQM related activities that are being conducted?
   Please also indicate the year of starting of the activity in brackets
   eg. Quality circle (year)

6. Please list the TPM related activities that are being conducted?
   Please also indicate the year of starting of the activity in brackets

7. Any other major significant activities that are being carried out
ANNEXURE G

Questionnaire for constructing MQFD

Phase I

Name your customers

1

2

3

Are you able to get feedback from external customers?   Yes/No

If yes,

a. What are the methods used to collect feedback from customers?

b. Are the external customers feedback ranked?   Yes/No

If yes, What are the factors considered while ranking?


<table>
<thead>
<tr>
<th>Factors</th>
<th>Rank</th>
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<tbody>
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</table>

What are the technical remedies that you are generally suggesting against customer feedback?

a. Are these technical remedies ranked?   Yes/No

If Yes,

b. What are the factors considered while ranking]


<table>
<thead>
<tr>
<th>Technical remedies</th>
<th>Rank</th>
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</table>

School of Engineering, CUSAT, Cochin-22

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Are you taking efforts to correlate technical matters among them? Yes/No
If Yes, how is it carried out in practice?

Phase II

Please refer to the "HOUSE OF QUALITY" part of MQFD model.
If used in your company, what will be the outputs of the above "HOUSE OF QUALITY"

Complete the following table to identify TPM pillars through which strategic decisions are to be passed.

<table>
<thead>
<tr>
<th>Outputs of the “House Of Quality”</th>
<th>Strategic decisions that may be taken</th>
<th>Personnel responsible for Strategic decisions</th>
</tr>
</thead>
<tbody>
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</table>

Phase III

After implementing MQFD model, indicate the expected results by quantifying the following parameters using Likert’s scale

OEE - Will improve/ Will retard

\[-10 \quad -8 \quad -6 \quad -4 \quad -2 \quad 0 \quad 2 \quad 4 \quad 6 \quad 8 \quad 10\]

MTTR - Will decrease/ Will increase

\[-10 \quad -8 \quad -6 \quad -4 \quad -2 \quad 0 \quad 2 \quad 4 \quad 6 \quad 8 \quad 10\]

MTBF - Will improve/ Will retard

\[-10 \quad -8 \quad -6 \quad -4 \quad -2 \quad 0 \quad 2 \quad 4 \quad 6 \quad 8 \quad 10\]

Performance quality of the organization Will improve/ Will retard

\[-10 \quad -8 \quad -6 \quad -4 \quad -2 \quad 0 \quad 2 \quad 4 \quad 6 \quad 8 \quad 10\]
MDT - Will decrease/ Will increase

| -10 | -8 | -6 | -4 | -2 | 0 | 2 | 4 | 6 | 8 | 10 |

Availability - Will decrease/ Will increase

| -10 | -8 | -6 | -4 | -2 | 0 | 2 | 4 | 6 | 8 | 10 |

Maintenance Quality - Will improve/ Will retard

| -10 | -8 | -6 | -4 | -2 | 0 | 2 | 4 | 6 | 8 | 10 |

Core competence - Will upgrade/ Will degrade

| -10 | -8 | -6 | -4 | -2 | 0 | 2 | 4 | 6 | 8 | 10 |

Profit - Will decrease/ Will increase

| -10 | -8 | -6 | -4 | -2 | 0 | 2 | 4 | 6 | 8 | 10 |

Good will of the company - Will enhance/ Will retard

| -10 | -8 | -6 | -4 | -2 | 0 | 2 | 4 | 6 | 8 | 10 |

Do you find it necessary to again go to HoQ with Customer feedback? Yes/No
Spell out the reasons

To which extent you think that the targets are achievable through MQFD implementation?

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |

0=Not at all possible, 10=Full Extent

What are your technical suggestions for improving the targets to achieve the output by MQFD?
What are the strategic decisions that may be made in this regard?
1
2
3
4

What are the favorable and unfavorable conditions that you expect while implementing strategic decisions?
favorable conditions
1
2
3
4
unfavorable conditions
1
2
3
4

Do you think that MQFD can be successfully implemented in real time situation?
Yes/No

If your response is No, please suggest modification and refinements to the MQFD model so that it is made practically compatible.
ANNEXURE H

Questionnaire on MQFD

The following steps are essential in implementing MQFD in your esteemed company. Please rate the extent to which steps can be practically implemented in your esteemed organization.

Step 1
MQFD experts have to convince the top management about the benefits that can be reaped by the implementation of MQFD. This has to be done through seminars and brainstorming sessions.

Please use the following in Likert’s scale of range 0-10 to rate the implementation feasibility.

\[
\begin{array}{cccccccccc}
0 & 1 & 2 & 3 & 4 & 5 & 6 & 7 & 8 & 9 & 10 \\
\end{array}
\]

0 = Not at all possible 10 = Completely possible

Please write your comments in this regard

Step 2
Top management has to announce the implementation of MQFD as a decision. They have to state the objectives either in company news letter or through similar media such that it will reach all in the company. Different types of educational campaigns have to be conducted for personnel at different levels in order to make them fit people fit to attaining objectives.

Please use the following in Likert’s scale of range 0-10 to rate the implementation feasibility.

\[
\begin{array}{cccccccccc}
0 & 1 & 2 & 3 & 4 & 5 & 6 & 7 & 8 & 9 & 10 \\
\end{array}
\]

0 = Not at all possible 10 = Completely possible

Please write your comments in this regard

Step 3
Form an MQFD team consisting of 7-8 members of different departments. They meet once in a week and plans for the implementation.

Please use the following in Likert’s scale of range 0-10 to rate the implementation feasibility.

\[
\begin{array}{cccccccccc}
0 & 1 & 2 & 3 & 4 & 5 & 6 & 7 & 8 & 9 & 10 \\
\end{array}
\]

0 = Not at all possible 10 = Completely possible
Please write your comments in this regard

Step 4

Identify the customer language
Please use the following in Likert’s scale of range 0-10 to rate the implementation feasibility.

0 1 2 3 4 5 6 7 8 9 10
0 = Not at all possible 10 = Completely possible

Please write your comments in this regard

Step 5

Rank customer language. This can be done either by using Analytical Hierarchy Process (AHP) or other similar techniques.
Please use the following in Likert’s scale of range 0-10 to rate the implementation feasibility.

0 1 2 3 4 5 6 7 8 9 10
0 = Not at all possible 10 = Completely possible

Please write your comments in this regard

Step 6

Develop HoQ to convert customer languages in technical languages.
Please use the following in Likert’s scale of range 0-10 to rate the implementation feasibility.

0 1 2 3 4 5 6 7 8 9 10
0 = Not at all possible 10 = Completely possible

Please write your comments in this regard

Step 7

Top Management has to take strategic decision to choose the outputs of HoQ which have to be passed through eight pillars
Please use the following in Likert’s scale of range 0-10 to rate the implementation feasibility.

0 1 2 3 4 5 6 7 8 9 10
0 = Not at all possible 10 = Completely possible
Please write your comments in this regard

Step 8
Send the chosen output of HOQ through eight pillars of TPM.
Please use the following in Likert's scale of range 0-10 to rate the implementation feasibility.

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |

0 = Not at all possible 10 = Completely possible

Step 9
Direct the results to the production system.
Please use the following in Likert's scale of range 0-10 to rate the implementation feasibility.

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |

0 = Not at all possible 10 = Completely possible

Please write your comments in this regard

Step 10
Evaluate the results based on six parameters (OEE, MTBF, MTTR, Performance quality, MDT and Availability).
Please use the following in Likert's scale of range 0-10 to rate the implementation feasibility.

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |

0 = Not at all possible 10 = Completely possible

Please write your comments in this regard

Step 11
Compare the results with the set targets.
Please use the following in Likert's scale of range 0-10 to rate the implementation feasibility.

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |

0 = Not at all possible 10 = Completely possible

Please write your comments in this regard
Step 12
The deviation of the results
Please use the following in Likert’s scale of range 0-10 to rate the implementation feasibility.

<table>
<thead>
<tr>
<th>0</th>
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<th>9</th>
<th>10</th>
</tr>
</thead>
</table>
0 = Not at all possible 10 = Completely possible

Please write your comments in this regard

Step 13
The tactical suggestions have to exposed to the top management, who will take strategic decisions to implement them.
Please use the following in Likert’s scale of range 0-10 to rate the implementation feasibility.

<table>
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<tr>
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<th>9</th>
<th>10</th>
</tr>
</thead>
</table>
0 = Not at all possible 10 = Completely possible

Please write your comments in this regard

Step 14
Implement the results of the recommended MQFD proceedings.
Please use the following in Likert’s scale of range 0-10 to rate the implementation feasibility.

<table>
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<tr>
<th>0</th>
<th>1</th>
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<th>9</th>
<th>10</th>
</tr>
</thead>
</table>
0 = Not at all possible 10 = Completely possible

Please write your comments in this regard

Step 15
After achieving the target, revise the target and revise the matrix. If there is change in customers languages, that also has to be considered while revising the matrix.
Please use the following in Likert’s scale of range 0-10 to rate the implementation feasibility.

<table>
<thead>
<tr>
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<th>10</th>
</tr>
</thead>
</table>
0 = Not at all possible 10 = Completely possible

Please write your comments in this regard
Step 16

Review the working of MQFD Programme as a whole and incorporate the top management’s view while experimenting the scope of MQFD in different directions of company’s performance.

Please use the following in Likert's scale of range 0-10 to rate the implementation feasibility.

<table>
<thead>
<tr>
<th>0</th>
<th>1</th>
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<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
</table>

0 = Not at all possible 10 = Completely possible

Please write your comments in these regard,
ANNEXURE I
QUESTIONNAIRE

KINDLY ANSWER THE FOLLOWING QUESTIONS.

1. As per your judgment how much CUSTOMER'S (Driver's) voice influences the organizational prospects
   1 2 3 4 5 6 7 8 9
   (a). To which extent the frequency of vehicle breakdown influences customer behavior
       1 2 3 4 5 6 7 8 9
   (b). To which extent cultural background influences customer behavior
       1 2 3 4 5 6 7 8 9
   (c). To which extent the duration of maintenance influences customer behavior
       1 2 3 4 5 6 7 8 9
   (d). To which extent necessities/emergencies influence customer behavior
       1 2 3 4 5 6 7 8 9
   (e). To which extent the quality of spare parts influences customer behavior
       1 2 3 4 5 6 7 8 9
   (f). To which extent cost of maintenance influences customer behavior
       1 2 3 4 5 6 7 8 9

2. As per your judgment how much Technology influences organizational prospects
   1 2 3 4 5 6 7 8 9
   (a). To which extent infrastructure influences maintenance efficiencies
       1 2 3 4 5 6 7 8 9
   (b). To which extent skill of the personnel influences maintenance efficiencies
       1 2 3 4 5 6 7 8 9
   (c). To which extent employer-employee relationship influences maintenance efficiencies
       1 2 3 4 5 6 7 8 9
   (d). To which extent organizational climate influences maintenance efficiencies
(e). To which extent maintenance methods influence maintenance efficiencies

3. As per your judgment how much COMPETITORS influences organizational prospects

(a). To which extent financial power of competitors influences future prospects of the organization

(b). To which extent performance of competitors influences future prospects of the organization

(c). To which extent customer relationship influences future prospects of the organization

(d). To which extent strategies of competitors influences future prospects of the organization

(e). To which extent change management scheme influences future prospects of the organizations

(f). To which extent quality parameters influences future prospects of the organization

(g). To which extent new technology influences future prospects of the organization

I. As per your judgment how much Personnel factor influences organizational prospects?

(a). To which extent authority of personnel influences future prospects of the organization

(b). To which extent responsibility of personnel influences future prospects of the organization

(c). To which extent initiatives of personnel influences future prospects of the organization
1 2 3 4 5 6 7 8 9
(d) To which extent motivation of personnel influences future prospects of the organization
1 2 3 4 5 6 7 8 9

II. As per your judgment how much value of decisions influences organizational prospects?
1 2 3 4 5 6 7 8 9

III. As per your judgment how much reliability of decisions influences organizational prospects?
1 2 3 4 5 6 7 8 9

A. As per your judgment how much autonomous maintenance influences organizational prospects?
1 2 3 4 5 6 7 8 9
(a) To which extent attitude of worker influences autonomous maintenance of the organization
1 2 3 4 5 6 7 8 9
(b) To which extent attitude of management influences autonomous maintenance of the organization
1 2 3 4 5 6 7 8 9
(c) To which extent motivation schemes influences autonomous maintenance of the organization
1 2 3 4 5 6 7 8 9
(d) To which extent incentive of salary influences autonomous maintenance of the organization
1 2 3 4 5 6 7 8 9
(e) To which extent financial benefits influences autonomous maintenance of the organization
1 2 3 4 5 6 7 8 9
(f) To which extent lubrication management influences autonomous maintenance of the organization
1 2 3 4 5 6 7 8 9
(g) To which extent daily maintenance influences autonomous maintenance of the organization
1 2 3 4 5 6 7 8 9

B. As per your judgment how much individual improvement influences organizational prospects?
1 2 3 4 5 6 7 8 9
(a) To which extent reputation of individual influences future prospects of the organization
   1 □ 2 □ 3 □ 4 □ 5 □ 6 □ 7 □ 8 □ 9 □
(b) To which extent kaizen's principles influences future prospects of the organization
   1 □ 2 □ 3 □ 4 □ 5 □ 6 □ 7 □ 8 □ 9 □
(c) To which extent employee's suggestion scheme influences future prospects of the organization
   1 □ 2 □ 3 □ 4 □ 5 □ 6 □ 7 □ 8 □ 9 □
(d) To which extent employee involvement scheme influences future prospects of the organization
   1 □ 2 □ 3 □ 4 □ 5 □ 6 □ 7 □ 8 □ 9 □
(e) To which extent daily maintenance influences future prospects of the organization
   1 □ 2 □ 3 □ 4 □ 5 □ 6 □ 7 □ 8 □ 9 □
(f) To which extent interpersonal relationship influences future prospects of the organization
   1 □ 2 □ 3 □ 4 □ 5 □ 6 □ 7 □ 8 □ 9 □
(g) To which extent employee's wish influences future prospects of the organization
   1 □ 2 □ 3 □ 4 □ 5 □ 6 □ 7 □ 8 □ 9 □

C. As per your judgment how much PLANNED MAINTENANCE influences organizational prospects?
   1 □ 2 □ 3 □ 4 □ 5 □ 6 □ 7 □ 8 □ 9 □
(a) To which extent schedule of maintenance influences planned maintenance of the organization
   1 □ 2 □ 3 □ 4 □ 5 □ 6 □ 7 □ 8 □ 9 □
(b) To which extent frequency of breakdown influences planned maintenance of the organization
   1 □ 2 □ 3 □ 4 □ 5 □ 6 □ 7 □ 8 □ 9 □
(c) To which extent idleness of machine influences planned maintenance of organization
   1 □ 2 □ 3 □ 4 □ 5 □ 6 □ 7 □ 8 □ 9 □
(d) To which extent schedule of maintenance influences planned maintenance of the organization
   1 □ 2 □ 3 □ 4 □ 5 □ 6 □ 7 □ 8 □ 9 □
(e) To which extent repetition of same problem influences planned maintenance of the organization
   1 □ 2 □ 3 □ 4 □ 5 □ 6 □ 7 □ 8 □ 9 □
D. As per your judgment how much QUALITY MAINTENANCE influences organizational prospects?

(a) To which extent TQM tools influences quality maintenance of the organization

(b) To which extent sampling influences quality maintenance of the organization

(c) To which extent data management influences quality maintenance of the organization

E. As per your judgment how much EDUCATION and TRAINING influences organizational prospects?

(a) To which extent feasibility for higher studies influences education and training

(b) To which extent training facility influences education and training

(c) To which extent employee’s own interest influences education and training

(d) To which extent motivation for training influences education and training

(e) To which extent rewards for better performance motivates people for education and training

F. As per your judgment how much DEVELOPMENT MANAGEMENT influences organizational prospects?

(a) To which extent target setting influences development management

(b) To which extent job scheduling influences development management
G. As per your judgment how much OFFICE TPM influences organizational prospects?

- (a) To which extent **new technology** influences office TPM
- (b) To which extent **training** influences office TPM
- (c) To which extent **motivation** influences office TPM
- (d) To which extent **proximity of customer** influences office TPM
- (e) To which extent **proximity of suppliers** influences office TPM
- (f) To which extent **data processing speed** influences office TPM

H. As per your judgment how much SAFETY, HEALTH and ENVIRONMENT influences organizational prospects?

- (a) To which extent **hospital** influences future prospects of the organization
- (b) To which extent **gymnasium influences** future prospects of the organization
- (c) To which extent **pollution influences** future prospects of the organization
- (d) To which extent **safety rules influences** future prospects of the organization
(e) To which extent **green belt concepts** influences future prospects of the organization

1 □  2 □  3 □  4 □  5 □  6 □  7 □  8 □  9 □

(f) To which extent **safety training** influences future prospects of the organization

1 □  2 □  3 □  4 □  5 □  6 □  7 □  8 □  9 □

(g) To which extent **displays for safety** influences future prospects of the organization

1 □  2 □  3 □  4 □  5 □  6 □  7 □  8 □  9 □

(h) To which extent **periodic medical check up** influences future prospects of the organization

1 □  2 □  3 □  4 □  5 □  6 □  7 □  8 □  9 □

1. As per your judgment how much **OVERALL EQUIPMENT EFFICIENCY** influences organizational prospects?

1 □  2 □  3 □  4 □  5 □  6 □  7 □  8 □  9 □

2. As per your judgment how much **MEAN TIME BETWEEN FAILURE** influences organizational prospects?

1 □  2 □  3 □  4 □  5 □  6 □  7 □  8 □  9 □

3. As per your judgment how much **MEAN TIME TO REPAIR** influences organizational prospects?

1 □  2 □  3 □  4 □  5 □  6 □  7 □  8 □  9 □

4. As per your judgment how much **PERFORMANCE EFFICIENCIES** influences organizational prospects?

1 □  2 □  3 □  4 □  5 □  6 □  7 □  8 □  9 □

5. As per your judgment how much **MEAN DOWN TIME** influences organizational prospects?

1 □  2 □  3 □  4 □  5 □  6 □  7 □  8 □  9 □

6. As per your judgment how much **AVAILABILITY** influences organizational prospects?

1 □  2 □  3 □  4 □  5 □  6 □  7 □  8 □  9 □

(i). As per your judgment how much **IMPROVED MAINTENANCE** influences organizational prospects?

1 □  2 □  3 □  4 □  5 □  6 □  7 □  8 □  9 □

(ii). As per your judgment how much **INCREASED PROFIT** influences organizational prospects?

1 □  2 □  3 □  4 □  5 □  6 □  7 □  8 □  9 □

(iii). As per your judgment how much **UPGRADED CORE COMPETENCE** influences organizational prospects?

1 □  2 □  3 □  4 □  5 □  6 □  7 □  8 □  9 □
(iv). As per your judgment how much ENHANCED GOODWILL influences organizational prospects?
1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐ 8 ☐ 9 ☐