

# **TQM implementation assessment**

## **Quality Management in Operations**

Customer oriented quality definitions off course depend on successful results of product supplies and services by the organizations. Three types of quality is done in textile industry

Product quality

Factory and social audits

Laboratory testing

Departments in selected organization's apparel division; especially responsible for quality are "Quality Control" and "Quality Assurance". These two different departments are purely looking after for quality of product. Production department is also looking after for quality but questions are not asked about poor quality to this department directly. This practice denies the TQM execution in textile industry. As we know that TQM defines that everyone is responsible for quality. Any how the quality procedure that is adopted by these departments is assessed below.

## **Assessment of TQM practices**

To evaluate the implementation status of total quality management in textile industry, TQM implementation instrument is prepared in the light of instrument used to evaluate TQM execution for Chinese manufacturing companies (IJQRM 17, 7 PP 730-755) and circulate among the key persons in the industry. According to this paper the instrument presented is reliable and valid and may be used to target improvement areas.

## **TQM Implementation Instrument**

Respondent Name: .....

Organization Name: .....

Designation: .....

Department Name: .....

The five point likert scale (1 = strongly disagree; 2 = disagree; 3 = neutral; 4 = agree; 5 = strongly agree) is used to ask the respondents to state how much they agree with these statements.

### **Scale 1: Leadership**

A. Top management keenly participates in quality management and improvement process.

☐

B. Top management study quality-related concepts and skills.

☐

C. Top management strongly promotes employee involvement in quality management and improvement activities.

☐

D. Top management empowers employees to solve quality issues.

☐

E. Top management organizes adequate resources for employee education and training.

☐

F. Top management talk about many quality-related issues in top management meetings.

☐

G. Top management focus on product quality rather than yields.

☐

H. Top management pursues long-term business achievement.

☐

### **Scale 2: Supplier Quality Management**

SQ1. Our company has recognized long-term co-operative relations with suppliers.

☐

SQ2. Our company considers product quality as the most important factor for selecting suppliers.

☐

- |      |                                                                              |                          |
|------|------------------------------------------------------------------------------|--------------------------|
| SQ3. | Our company always takes part in supplier activities related to quality.     | <input type="checkbox"/> |
| SQ4. | Our company always gives feedback on the performance of suppliers' products. | <input type="checkbox"/> |
| SQ5. | Our company has detailed information about supplier performance.             | <input type="checkbox"/> |
| SQ6. | Our company regularly perform supplier quality audit.                        | <input type="checkbox"/> |

### **Scale 3: Vision and Plan Statement**

- |      |                                                                                |                          |
|------|--------------------------------------------------------------------------------|--------------------------|
| VP1. | Our company has a clear long term vision statement.                            | <input type="checkbox"/> |
| VP2. | The vision effectively motivates employees' commitment to quality improvement. | <input type="checkbox"/> |
| VP3. | Our company has a clear short-term business plan.                              | <input type="checkbox"/> |
| VP4. | Our company has a clear quality policy.                                        | <input type="checkbox"/> |
| VP5. | Our company has a detailed quality goal.                                       | <input type="checkbox"/> |
| VP6. | Our company has an effective quality improvement plan.                         | <input type="checkbox"/> |
| VP7. | Various policies and plans are well correspond to the employees.               | <input type="checkbox"/> |
| VP8. | Employees from different levels are involved in making policies and plans.     | <input type="checkbox"/> |

### **Scale 4: Evaluation**

- |     |                                                                                |                          |
|-----|--------------------------------------------------------------------------------|--------------------------|
| E1. | Our company regularly audits various policies and strategies.                  | <input type="checkbox"/> |
| E2. | Our company regularly conducts quality audits.                                 | <input type="checkbox"/> |
| E3. | Benchmarking is used comprehensively in our company.                           | <input type="checkbox"/> |
| E4. | Our company uses quality related costs extensively.                            | <input type="checkbox"/> |
| E5. | Our company has detailed quality related data such as defect rates and scraps. | <input type="checkbox"/> |
| E6. | Quality-related data are used to assess the management of our company.         | <input type="checkbox"/> |

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|-----------------------------------------------------------------------------------|--------------------------|
| E7. Quality related data are used to evaluate the performance of all departments. | <input type="checkbox"/> |
| E8. Quality related data are used to evaluate the performance of employees.       | <input type="checkbox"/> |
| E9. Quality related information is displayed on the shop floor.                   | <input type="checkbox"/> |
| E10. The aim of evaluation is for improvement, not for criticism.                 | <input type="checkbox"/> |

### **Scale 5: Process Control and Improvement**

- |                                                                                                        |                          |
|--------------------------------------------------------------------------------------------------------|--------------------------|
| PC1. Our company is kept neat and clean all times.                                                     | <input type="checkbox"/> |
| PC2. Process capability can meet production requirements.                                              | <input type="checkbox"/> |
| PC3. Production equipment is maintained well according to maintenance plan.                            | <input type="checkbox"/> |
| PC4. Our company implements various inspections effectively (e.g., incoming, process, final products). | <input type="checkbox"/> |
| PC5. Our processes are designed to be 'fool proof' in order to minimize the chance of employee error.  | <input type="checkbox"/> |
| PC6. Our company uses the Seven QC tools extensively for process control and improvement.              | <input type="checkbox"/> |
| PC7. Our company uses SPC extensively for process control and improvement.                             | <input type="checkbox"/> |
| PC8. Our company uses PDCA cycle extensively for process control and improvement.                      | <input type="checkbox"/> |

### **Scale 6: Product Design**

- |                                                                             |                          |
|-----------------------------------------------------------------------------|--------------------------|
| PD1. The design engineers are required to have some shop floor experiences. | <input type="checkbox"/> |
| PD2. The design engineers are required to have some marketing experiences.  | <input type="checkbox"/> |
|                                                                             | <input type="checkbox"/> |

- PD3. The customer requirements are thoroughly considered in new product design.
- PD4. Various departments participate in new product development. ☐
- PD5. New product designs are thoroughly reviewed before production. ☐
- PD6. Cost is emphasized in the product design process. ☐
- PD7. Experimental design is used extensively in product design. ☐
- PD8. Quality function deployment (QFD) is used extensively in product design. ☐

### **Scale 7: Quality System Improvement**

- QS1. The quality system in our company is constantly improved. ☐
- QS2. Our company uses ISO 9000 as an instruction for establishing our quality system. ☐
- QS3. Our company has a sensible quality manual. ☐
- QS4. Our company has clear method credentials. ☐
- QS5. Our company has clear implementation directions. ☐

### **Scale 8: Employee Participation**

- EP1. Our company has cross-functional teams. ☐
- EP2. Our company has a number of QC circles (within one function). ☐
- EP3. Workforce is keenly concerned in quality-related behavior. ☐
- EP4. Our company implements proposition activities comprehensively. ☐
- EP5. Most employees' suggestions are implemented after an assessment. ☐
- EP6. Employees are very devoted to the success of our company. ☐
- EP7. Employees are confident to fix troubles they find. ☐

EP8. Reporting work problems is encouraged in our company.

### **Scale 9: Recognition and Reward**

- RR1. Our company improves working circumstances in order to distinguish employee quality enhancement efforts. ☐
- RR2. Our company has a salary promotion plan for encouraging employee contribution in quality enhancement. ☐
- RR3. Position promotions are based on work quality in our business. ☐
- RR4. Excellent suggestions are economically rewarded. ☐
- RR5. Employees' rewards and penalties are clear. ☐
- RR6. Recognition and remuneration activities efficiently encourage employee assurance to quality improvement. ☐

### **Scale 10: Education and Training**

- ET1. Employees are encouraged to acknowledge education and guidance in our company. ☐
- ET2. Resources are available for employee edification and training in our company. ☐
- ET3. Most employees in our company are trained on how to use quality administration methods (tools). ☐
- ET4. Quality understanding education is given to human resources. ☐
- ET5. Definite work-skills training is given to all human resources. ☐

ET6. Employees are regarded as important, long-term resources valuable of receiving education and training all over their career.

☐

### Scale 11: Customer Focus

CF1. Our company collects broad criticism information from consumers.

☐

CF2. Quality-related customer complaints are treated with top main concern.

☐

CF3. Our company conducts a consumer contentment survey every year.

☐

CF4. Our company always conducts market research in order to collect suggestion for improving our products.

☐

CF5. Our company provides warranty on our sold products to customers.

☐

CF6. Our company has been customer focused for a long time.

☐

### Measurement for Product Quality

Compared with the other companies within the same business in China, please state the situation of your primary products (1 = worst in the industry; 2 = below average; 3 = average; 4 = above average; 5 = best in the industry):

P1. The performance of your principal products.

☐

P2. The conformity rates of your primary products.

☐

P3. The reliability of your major products.

☐

P4. The durability of your prime products.

☐

P5. The defect rates of your primary products.

☐

P6. The internal failure costs as a percentage of annual sales.

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P7. The guarantee claims costs as a percentage of annual sales.

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