# Table of Contents

Preface i  
Acknowledgements li  
Abstract iv  
List of Tables viii  
List of Figures x  

## 1 INTRODUCTION  
1.1 INTRODUCTION 1  
1.2 QUALITY 2  
1.2.1 Definitions 2  
1.2.2 Some other definitions 3  
1.3 HISTORY OF QUALITY 3  
1.3.1 Approaches of Quality Management 4  
1.3.2 Hierarchy of Quality Management 5  
1.4 VIEWS OF QUALITY GURUS 8  
1.4.1 Philip Crosby 8  
1.4.2 Armand V. Feigenbaum 9  
1.4.3 W. Edwards Deming 9  
1.4.4 Joseph M. Juran 9  
1.4.5 Kaoru Ishikawa 10  
1.4.6 Taguchi 10  
1.5 COST OF QUALITY (COQ) 11  
1.5.1 Quality costs—general description 13  
1.5.2 Few more examples of the various types of quality costs 17  
1.6 MOTIVATION BEHIND SELECTION OF THE TOPIC 19  

## 2 SMALL & MEDIUM ENTERPRISES (SMEs) 21  
2.1 INTRODUCTION 21  
2.2 CHARACTERISTICS OF SMEs 22  
2.2.1 Differences between small and big enterprises 22  
2.3 SMEs: THE INDIAN SCENARIO 24  
2.4 OPPORTUNITIES & CHALLENGES FOR SMEs IN INDIA 25  
2.5 LIMITATIONS OF SMEs 27  
2.6 IMPORTANCE OF QUALITY MANAGEMENT IN SMEs 29  
2.7 PERFORMANCE OF MSMEs IN INDIA 29  
2.8 SCENARIO IN GUJARAT 31  
2.8.1 MSME Registrations in Gujarat 32  
2.8.2 Assistance available 33  

## 3 ISO 9000 & TQM 34  
3.1 ISO 9000 34  
3.1.3 Principles of ISO standards 38  
3.1.4 How ISO standards benefit society 39  

xiii
5.5.2 Secondary data

5.6 TOOL USED FOR DATA COLLECTION
5.6.1 Section A
5.6.2 Section B
5.6.3 Section C
5.6.4 Section D

5.7 DATA COLLECTION

5.8 DATA ANALYSIS TECHNIQUES
5.8.1 Frequency distribution
5.8.2 One sample ‘t’ test
5.8.3 One way ANOVA
5.8.4 Interdependence techniques (Factor Analysis)

6 DATA ANALYSIS AND INTERPRETATION
6.1 ISO 9001
6.1.1 Profile of respondent firms
6.1.2 Motivating factors for ISO certification
6.1.3 Ranking of motivating factor for certification
6.1.4 Analysis of some other questions
6.1.5 Actual benefits derived by the firms after obtaining ISO 9001
6.1.6 Ranking of benefits derived by the respondent firms

6.2 TQM
6.2.1 Profile of the companies
6.2.2 Key elements of TQM
6.2.3 Ranking of TQM elements
6.2.4 Practices followed by firms while following TQM principles
6.2.5 Further findings of the practices followed by TQM firms
6.2.6 Benefits of TQM
6.2.7 Ranking of TQM benefits
6.2.8 Difficulties in implementing TQM
6.2.9 Ranking of difficulties in implementing TQM in SMEs

6.3 QUALITY CIRCLES & 5S STANDARD
6.3.1 Awareness and benefits of quality circles
6.3.2 Benefits of quality circles
6.3.3 Awareness & implementation of 5S housekeeping standard

6.4 NON ISO/TQM FIRMS
6.4.1 Profile of companies
6.4.2 Awareness and perceptions about ISO/TQM
6.4.3 Practices followed by non certified and non TQM firms

6.5 HYPOTHESIS TESTING
6.5.1 Part A: (for ISO certified companies)
6.5.2 Part B: (for TQM companies)
6.5.3 Part D: (for companies with no ISO/TQM)

6.6 FACTOR ANALYSIS
6.6.1 Suitability of Factor Analysis for the present study
6.6.2 Factor Analysis of statements related to benefits of ISO 9001

6.7 ONE WAY ANALYSIS OF VARIANCE (ANOVA)
# CONCLUSIONS AND RECOMMENDATIONS

## 7.1 CONCLUSIONS

### 7.1.1 ISO 9001

### 7.1.2 TQM

### 7.1.3 Quality Circles and 5S

### 7.1.4 ‘Non ISO/TQM’ firms

## 7.2 COMPARISON BETWEEN ISO/TQM AND NON ISO/TQM FIRMS

### 7.2.1 Comparison between ISO & TQM firms

### 7.2.2 Comparison between Non ISO/TQM & ISO/TQM firms

## 7.3 LIMITATIONS OF THE STUDY

## 7.4 RECOMMENDATIONS

## 7.5 FUTURE SCOPE

Annexure I QUESTIONNAIRE

Annexure II TABLES FOR FACTOR ANALYSIS

BIBLIOGRAPHY