

RESEARCH THESIS

Empirical Study of Quality Standards on Electronics Industry: Electronics firms of Islamabad and Rawalpindi as Case Scenario



SUBMITTED BY

Hafssa Rizwan

01-246172-004

MS (Engineering Management)

SUPERVISED BY

Dr. Shahid Nazir Bhatti

Department of Software Engineering

Bahria University Islamabad Campus

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Dedication

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Abstract

Globalization has expanded the competition up to an incomparable level, quality standards are considered as extant tools in modern industry. Only the product, process and services that come up to the benchmarks of the quality standards survive in global market competition. Organizations employee quality standards like ISO, Total Quality Management (TQM), Six Sigma, Lean practices like Just In Time (JIT), Kaizen, Quality Function Deployment (QFD) to improve their performance and to accomplish organizational objectives in efficient and effective manner. Innovations and advancements in the field of science and technology have enhanced the global competition for the quality of the products. Electronics industry is the fastest flourishing and ripens industry of present era. To compete with this tremendous competition in field of electronics industry, quality standards are the fundamental striving tool for any electronics organization. Electronics Industry holds a significant position in the development of country. As an established electronics industry would escort toward development of other sectors and will eventually result in surge in overall advancement. Some of the developing countries, like Pakistan lag in electronics sector due to lack of implementation of quality practices and standards. Deficiency of standardized processes leads to low quality product which fails to sustain the global demand and competition. This study focuses on implication and analysis of quality standards in electronics sector in twin cities that of Islamabad and Rawalpindi, Pakistan via different electronic organizations, firms. This research study involves developing an understanding of quality standard for electronics industry, investigation of critical factors and challenges faced by electronics sector and selection of appropriate standard according to the nature of critical factor and OC. In this empirical study is conducted via comprehensive survey based analysis of electronics organizations of Islamabad and Rawalpindi to construe conclusive results. Further this study aims to provide valuable contribution in determining importance and impact of quality on electronics industry of Pakistan. It is an attempt and initiative in direction of improving quality standards, practices and culture in electronics sector of Pakistan.

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List of Abbreviations

Term	Abbreviation
Organizational Culture	OC
Quality Management	QM
Organizational Performance	OP
Quality Control	QC
Total Quality Management	TQM
High Performance Manufacturing	HPM
Structural Equation Modeling	SEM
Government of Pakistan	GOP
Research and Development	R&D
Just- In- Time	JIT
Continuous Quality Improvement (CQI)	CQI
Quality Function Deployment (QFD)	QFD
Exploratory Factor Analysis	EFA
Chi Square/degree of freedom	CMIN/Df
Comparative Fit Index	CFI
Goodness of Fit Index	GFI
Adjusted Goodness of Fit Index	AGFI
Root Means Square Error of Approximation	RMSEA
Normal Fit Index	NFI