

Nadeem, K., ur Rehman, A., Furqan, M., Tariq, M. O., & Khan, A. A. (2014). Impact of MBNQA Criteria on Customer Satisfaction in Modern Retail Chain Stores: An Empirical Study in Context of Developing Countries like Pakistan. *Bulletin of Business and Economics*, 3(4), 182-195.



## **Impact of MBNQA Criteria on Customer Satisfaction in Modern Retail Chain Stores: an Empirical Study in Context of Developing Countries like Pakistan**

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### **Abstract**

This explanatory study investigates the strategic effect of TQM factors modeled by the MBNQA criteria on customer satisfaction in modern retail industry of Pakistan. The factors comprise leadership, strategy and planning, information and analysis, customer focus, people management and process management. The data were gathered from 129 employees from various departments of modern trade stores. The statistical analysis concludes that the overall regression model is highly significant. Customer focus and process management were found to be the enablers with highest level of significance when correlated with customer satisfaction i.e. 64.7% and 63.9%. However, an anomaly was seen in the case of strategy and planning which showed a non-significant negative relationship. The findings of this research can prove to be of high value for policy makers in these organizations and those who intend to take this field as a new venture.

**Keywords:** MBNQA, Strategic Effect, Customer Satisfaction, Retail Industry, Leadership, Strategy and Planning, Information and Analysis, Customer Focus, People Management, Process Management.

**JEL Codes:** L8, L81, M1

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## **I. Introduction**

MBNQA (Malcolm Baldrige National Quality Award) is a framework for the implementation of Total Quality Management (TQM). TQM has gained considerable importance in the industry (Easton and Jarrell, 1998); not only in the manufacturing sector but also in the service-based industry including academia, health care division, government and social welfare organizations (Hackman and Wageman, 1995). TQM is being implemented enthusiastically by various Pakistani organizations in the last 15 years (Moosa et al., 2010).

Total Quality Management gives better quality, products with reduced costs and services with a high level of reliability and responsiveness (Zbaracki, 1998). It is considered to be a continual improvement of organizational systems with an aim to provide products and services at the best possible price (Beer, 2003). Ross (1995) defines TQM as the amalgamation of all departments and systems in a corporation to attain continual improvement of product and service standard with the eventual objective being the contentment of customers. Organizations use total quality management to connect their vision, mission, objectives, processes and quality principles to customer satisfaction as the highest preference (Baidoun, 2004). The eventual objective of using TQM is gaining customer satisfaction (Deming, 1986; Juran, 1986). Customer retention and dependability is highly dependent on customer satisfaction. It enhances the profitability of a company, its stock performance and investment returns (Sureshchandar *et al.*, 2002).

In the recent years, multinational companies have heavily invested in retail and modern trade industry of Pakistan. With the coming of Makro in 2006 and Metro in 2007, the first significant foundation in FMCG (Fast Moving Consumer Goods) and grocery retailing was laid in terms of wholesaling. Modern trade concept (i.e. supermarket culture) has grown manifolds lately, especially in the metropolitan cities of Karachi, Lahore and Islamabad (Aman and Hopkinson, 2010). With companies like Metro, Makro and Carrefour giving one-stop shopping solutions to consumers, a paradigm shift has been seen. A huge population of buyers now prefers purchasing goods from these stores rather than the conventional round-the-corner shops. What has caused this change? This research is intended to identify the factors related to total quality management in modern trade which have resulted in such high levels of customer satisfaction.

Customer satisfaction carries a great deal of importance in a service based industry like modern retailing. It is a determinant of the financial performance of such firms. TQM is being seen as an integral cause of the high levels of customer satisfaction for the modern trade industries in Pakistan. Therefore, the purpose of this survey-based quantitative study is to determine the impact of most critical TQM factors on customer satisfaction in modern retail chain stores of Pakistan. Here MBNQA criteria factors are taken as the most critical TQM factors; hence the independent variables were leadership, strategy and planning, customer focus, information and analysis, people management and process management. The dependent variable was customer satisfaction.

Since it is a new concept, least research is found on it especially in context of developing countries like Pakistan. Researchers have studied TQM in manufacturing industries in many parts of the world (Kaynak, 2003; Malik et al., 2010; Nilsson, 2001; Raja et al., 2011; Easton and Jarrell, 1998; Choi and Eboch, 1997). However, such research in modern trade industry is yet not substantially materialized. This study addresses this significant gap and enables other modern trade firms to develop their TQM program accordingly.

## **II. Literature Review**

### **TQM and Customer Satisfaction**

Nilsson *et al.* (2001) studied the impact of quality practices on customer satisfaction and business performance in the Swedish industry while making a comparison of product-based and service-based organizations. In the product-oriented firms, improved customer satisfaction and business performance were the resultants of internal quality measures especially those relating to customer focus. Whereas, in the service-based companies, both customer and process management played a crucial part in influencing customer satisfaction and business performance was enhanced as a result of human resource practices.

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While carrying out an empirical investigation to find out the influence of TQM implementation on corporate performance of 108 firms (including banking, chemicals, food, home appliances and automotive industries among many others), Easton and Jarrell (1998) indicate that the business results of organizations actively involved in TQM activities have improved. The business performance was evaluated on the base of stock results and accounting-related values. Use of benchmarking - as a control to observe the performance in the absence of TQM practices - showed that if TQM practices were not employed, corporate performance was not as remarkable. Noteworthy was the finding that the relationship was stronger in production-based industries.

Sanchez *et al* (2005) explored the effects of employing TQM in the health service sector. 31 health organizations from Basque Country (Spain) were the sample. The EFQM (European Foundation for Quality Management) excellence model was being implemented by these organizations. This is a generic non-prescriptive model for TQM implementation; the 9 clauses of the framework are divided into enabler and result categories. The enablers include leadership, policy and strategy, processes, people, and partnership/resources, while the results are categorized into customer, business, society and people results. The findings reveal a strong correlation of TQM implementation with customer (patient) satisfaction: the satisfaction level was more than 89%. A study of 65 manufacturing firms of Pakistan was carried out by Raja *et al* (2011) to explore the effect of total quality management practices on business performance. TQM was measured on five levels (no inspection, quality control, quality assurance, continuous quality improvement and award models for quality); whereas product quality, customer satisfaction and corporate financial results were used to evaluate overall business performance. The aspect of leadership was found to be the most crucial factor in effective TQM implementation. Moreover, higher levels of TQM initiative led to increased customer satisfaction and product quality. Majority of the organizations used ISO 9001 as the quality model for TQM implementation.

Choi and Eboch (1997) carried out a study to develop relationship between TQM practices and customer satisfaction with the mediating role of plant performance. Malcolm Baldrige National Quality Award (MBNQA) was used to model TQM practices which include process quality, human resource management, strategy and planning, and information and analysis. Customer satisfaction was assessed on the basis of price, quality and delivery. TQM practices were found to be highly correlated with customer satisfaction but not with plant performance. Furthermore, customer satisfaction was not influenced by plant performance. Further elucidation tells that TQM practices focused on customer orientation contribute more towards customer satisfaction compared to other practices which are more inclined towards internal performance of the organization.

While studying TQM practices and organizational performance in the SMEs (Small and Medium Enterprises) of Pakistan, Malik *et al* (2010) concluded that certain TQM practices have a significant impact on organizational performance. The factors under study included relationship with vendors, benchmarking, organizational culture, employee commitment and motivation, involvement of senior-most management, and customer orientation. Of these, vendor relationship and benchmarking were rated with highest significance; customer orientation and involvement of senior management were also crucial in improving the non-financial results of the SMEs. Companies certified with ISO 9001 demonstrated better organizational performance when compared to those which were not using this standard.

Kaynak (2003) researched on the relationship between total quality management practices and their impacts on the performance of organizations operating in America. The SEM (structural equation modeling) evaluation of financial and market performance was based on various TQM practices including training, employee relations, leadership, vendor quality management, product/service quality, quality data and reporting , and process approach etc. Organizational performance was found to be improved with application of TQM practices.

### **III. Framework for TQM**

Based on theoretical as well as empirical evidence, researchers have provided several frameworks and models for the implementation of TQM practices in organizations. The Deming prize is one of the most applied TQM frameworks. Its criteria set includes six main practices: „management policies and their deployment“, „new product

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development and work process innovation“, „maintenance and improvement“, „management system“, „information analysis and use of Information Technology“ and „human resource development“ (Khan, 2008).

Chin and Pun (2001) talk about the employment of UMIST framework of TQM implementation for Chinese organizations. The UMIST-TQM framework has four key sections and 28 elements. The sections are: „organizing“, „system and techniques“, „measurement and feedback“ and „cultural change“. The “Cultural Change” is the principal outcome of other practices and is involved in them during the entire course of implementation. Based on 19 critical quality factors identified from an empirical investigation, Baidoun (2004) proposed a TQM framework for Palestinian firms built on four constructs of „top management commitment“, „employee motivation and involvement“, „customer-related systems and processes“ and „culture for continual improvement“. These constructs lead to enhanced customer satisfaction which eventually becomes a reason for business excellence.

Yusof and Aspinwall (2000) presented a conceptual TQM framework for small businesses based on a coordinating body that deals with quality initiatives / tools (benchmarking, quality circles, vendor quality control, customer feedback surveys, Statistical Process Control, Kaizen, Total Productive Maintenance and 5S among many others) and general methodology of implementation based on planning, training, testing, evaluation, improvement and standardization.

Prajogo and McDermott (2005) while linking organizational culture with TQM practices used the Malcolm Baldrige National Quality Award (MBNQA) criteria. The MBNQA model includes „leadership“, „strategy and planning“, „customer focus“, „information and analysis“, „people management“ and „process management“. This award is applicable to manufacturing as well as service based industries (Prajogo and McDermott, 2005). Ahire et al. (1995); Dean and Bowen (1994); Capon et al. (1995); Choi and Eboch (1997) and Curkovic et al. (2000) have all used the MBNQA criteria to model TQM factors.

It has, thus, been decided to use the MBNQA criteria to model TQM practices for the purpose of the present research.

#### **IV. Methodology and Methods:**

The research approach is quantitative as concrete generalized deductions are made due to which the data is numerical. Positivism is, therefore, the research paradigm with the methodology being deductive. The sample consisted of managers - from various seniority levels – of leading modern retail chain stores in Pakistan to measure the application of TQM assessment model criteria as per MBNQA and from the customers of these retail chain stores to measure the customer satisfaction level. Close ended questionnaires on a 5-point Likert scale were used as the method for data collection with a cross-sectional research design. Simple random sampling was used in order to speed up and economize the research process. 150 questionnaires were emailed, out of which 129 were received back i.e. a response rate of 85.3%. Thereafter, the data obtained was statistically analysed using SPSS software. The analysis included reliability analysis, hypothesis testing, descriptive statistics, correlation and regression.

#### **V. Measures**

Questionnaire includes the general details of the departmental personnel as gender, department, age and total work experience. Out of all the items discussed in the questionnaire, six key factors of TQM assessment model as presented by Malcolm Baldrige National Quality Award i.e., Leadership, Strategy and planning, Customer Focus, Information and Analysis, People Management and Process Management are used for analysis. Customer satisfaction is taken as dependent variable to be measured data is collected from the customers of these retail chain stores on the basis of ServQual (Service Quality) level of customer expectations.

#### **VI. Research Question**

“What is the impact of most critical TQM factors as modeled by MBNQA on customer satisfaction in the modern retail chain stores of Pakistan?”

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## VII. Hypotheses

The following Hypotheses have been developed in this research study:

- H<sub>1</sub> = There is positive/significant relationship between leadership and customer satisfaction.
- H<sub>2</sub> = There is positive/significant relationship between strategy & planning and customer satisfaction.
- H<sub>3</sub> = There is positive/significant relationship between customer focus and customer satisfaction.
- H<sub>4</sub> = There is positive/significant relationship between information & analysis and customer satisfaction.
- H<sub>5</sub> = There is positive/significant relationship between people management and customer satisfaction.
- H<sub>6</sub> = There is positive/significant relationship between process management and customer satisfaction.

## VIII. Analysis and Results

### Multicollinearity

Collinearity means that two or more of the independent/explanatory variables in a regression have a linear relationship. This causes a problem in the interpretation of the regression results. If the variables have a close linear relationship, then the estimated regression coefficients and T-statistics may not be able to properly isolate the unique effect/role of each variable and the confidence with which we can presume these effects to be true. The close relationship of the variables makes this isolation difficult.

Where correlation (r) is greater than (0.80) or Tolerance value is closer to zero or Eigen values are not approximately of the same size or Variance Inflation Factor (VIF) is having high value e.g. 10 plus in some cases than multicollinearity exists. Table (1) is showing that all correlation values are lesser than (0.80), and Table (1) indicates that tolerance levels of all the variables are greater than (0.30), VIF value is not more than (3.13), and Eigen values are approximately same as there is no huge difference amongst them, all these things are indicating that there is no problem of multicollinearity.

## IX. Theoretical Framework

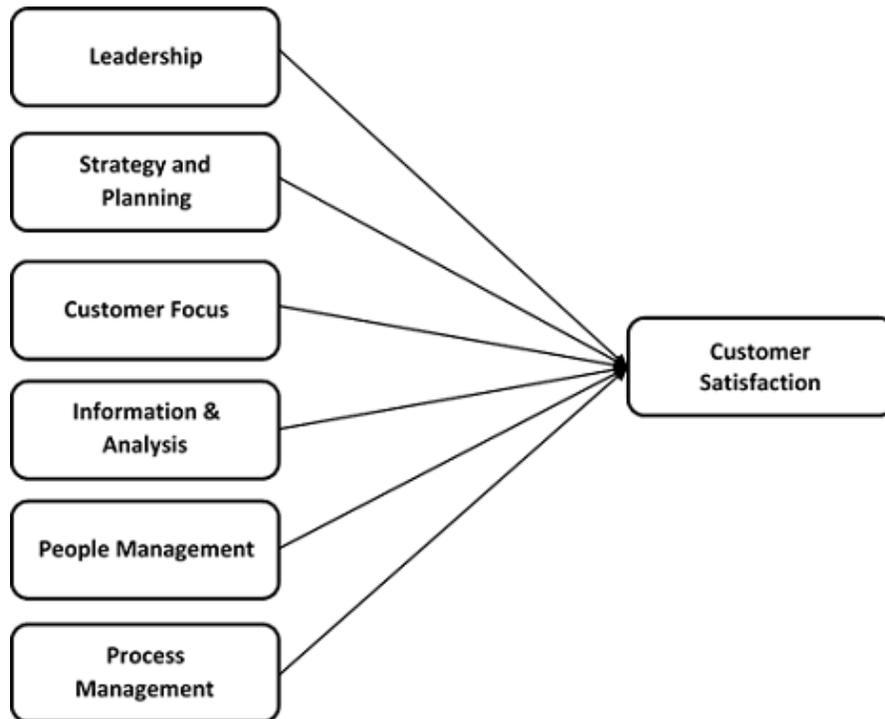


Fig-1

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**Table 1**

<i>Variable</i>	<i>Eigen Value</i>	<i>Tolerance</i>	<i>VIF</i>
Leadership	.029	.482	2.076
Strategy and Planning	.019	.319	3.138
Customer Focus	.016	.400	2.501
Information and Analysis	.013	.354	2.825
People Management	.009	.445	2.245
Process Management	.007	.404	2.478

## X. Reliability

To test the reliability of data, Cronbach's Alpha has been applied. Table 2 summarizes the Cronbach's Alpha findings. A value of 0.905 indicates that the items are consistent and reliable towards findings.

**Table 2**  
**Reliability Statistics**

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.905	.907	7

Table 3 indicates the Cronbach's Alpha values of all the items involved in the study. It is a good indication towards the data reliability through all Cronbach's Alpha values above 0.88. It shows that the data can be relied upon and the results can be generalized confidently.

**Table 3**  
**Item-Total Statistics**

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
Leadership	21.7070	13.688	.610	.528	.902
Strategy and Planning	21.7814	12.470	.749	.689	.888
Customer Focus	22.0605	12.460	.746	.645	.888
Information and Analysis	21.9256	12.489	.774	.647	.885
People Management	22.0000	12.780	.725	.566	.890
Process Management	21.9814	12.236	.776	.622	.884
Customer Satisfaction	21.9488	12.032	.670	.526	.899

## XI. Research Findings

Pearson Correlation is used for finding degree of relationship between several variables; generally two variables are correlated when they tend to simultaneously vary in same direction. If both the variables tend to increase or decrease together, the correlation is said to be direct or positive. When one variable tends to increase and the other variable decrease, the correlation is said to be negative or inverse.

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Correlation between different variables is shown in Table 4 and descriptive statistics comprised upon standard deviation, mean, median, mode, minimum, maximum values and ranges are shown in Table 5. There is a positive and significant (even at confidence level of 0.01) correlation between customer satisfaction and all of the criteria set of MBNQA. The table shows that the highest degree of correlation (0.647) exists between customer satisfaction and customer focus with a mean value of (3.50) which is true in terms of closeness in the dimension and shows above average response from the managers. The second most important element that is correlated with customer satisfaction is process management (0.639) and a mean value of (3.6), showing an above average ranking by the respondent towards process management. It shows that effectively managed processes generate high focus towards customers which ultimately results in higher customer satisfaction levels.

Information analysis and people management are correlated with customer satisfaction almost showing an equal strength (0.57) and (0.54) and mean values of (3.64) and (3.56) respectively. Information is the key towards customer relationship management and employees are the vital role players towards value provision. Higher focus

towards information analysis and motivated employees will always result in higher customer satisfaction. Similarly leadership and strategy and planning shows a correlation coefficient of (0.413) and (0.451) with means values of (3.86) and (3.78) respectively. It indicates that leadership and strategy and planning when handled effectively, lead the organization towards better customer value creation and delivery, resulting in enhanced customer satisfaction.

**Table 4**

**Correlations**

		Leadership	Strategy and Planning	Customer Focus	Information and Analysis	People Management	Process Management	Customer Satisfaction
Leadership	Pearson Correlation	1	.704**	.388**	.505**	.518**	.499**	.413**
	Sig. (2-tailed)		.000	.000	.000	.000	.000	.000
	N	129	129	129	129	129	129	129
Strategy and Planning	Pearson Correlation	.704**	1	.592**	.662**	.667**	.590**	.451**
	Sig. (2-tailed)	.000		.000	.000	.000	.000	.000
	N	129	129	129	129	129	129	129
Customer Focus	Pearson Correlation	.388**	.592**	1	.730**	.554**	.652**	.647**
	Sig. (2-tailed)	.000	.000		.000	.000	.000	.000
	N	129	129	129	129	129	129	129
Information and Analy:	Pearson Correlation	.505**	.662**	.730**	1	.570**	.672**	.570**
	Sig. (2-tailed)	.000	.000	.000		.000	.000	.000
	N	129	129	129	129	129	129	129
People Management	Pearson Correlation	.518**	.667**	.554**	.570**	1	.657**	.543**
	Sig. (2-tailed)	.000	.000	.000	.000		.000	.000
	N	129	129	129	129	129	129	129
Process Management	Pearson Correlation	.499**	.590**	.652**	.672**	.657**	1	.639**
	Sig. (2-tailed)	.000	.000	.000	.000	.000		.000
	N	129	129	129	129	129	129	129
Customer Satisfaction	Pearson Correlation	.413**	.451**	.647**	.570**	.543**	.639**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	
	N	129	129	129	129	129	129	129

\*\*Correlation is significant at the 0.01 level (2-tailed).

Mean values of all the variables is ranked above average i.e., Leadership (3.86), Strategy and Planning (3.78), Customer focus (3.50), Information Analysis (3.64), People Management (3.80), Process Management (3.58) and Customer Satisfaction (3.61). The standard deviations for the above discussed variables are (0.62), (0.73), (0.73), (0.70), ((0.69), (0.75) and (0.87) respectively. The values for standard deviations indicates that all the respondents possess almost the same opinion.

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## XII. Regression Analysis

For finding the contribution of independent variables towards dependent variable multiple regression analysis is used, in this analysis initially one variable “Leadership” is considered than one by one other variables were tested. **Table (6, 7, 8, 9, 10, and 11)** bestows the regression outcomes for Modern retail chain stores of Pakistan. A step by step regression analysis has been performed to get a clear analysis of independent variables and their affect on the dependent variable. The step by step regression analysis will include the following equations to be formed.

**Table 5**

		Statistics						
		Leadership	Strategy and Planning	Customer Focus	Information and Analysis	People Management	Process Management	Customer Satisfaction
N	Valid	129	129	129	129	129	129	129
	Missing	0	0	0	0	0	0	0
Mean		3.8605	3.7860	3.5070	3.6419	3.5674	3.5860	3.6186
Median		3.8000	3.8000	3.6000	3.6000	3.8000	3.6000	3.8000
Mode		3.80	4.40	4.00	3.60	4.00	3.60	3.40
Std. Deviation		.62079	.73152	.73529	.70961	.69677	.75049	.87658
Minimum		2.00	2.20	2.00	1.80	2.40	2.00	.40
Maximum		5.00	5.00	4.80	4.80	4.80	5.00	5.00

$$1 \quad y = \beta + \beta 1 (x1)$$

$$2 \quad y = \beta + \beta 1 (x1) + \beta 2 (x2)$$

$$3 \quad y = \beta + \beta 1 (x1) + \beta 2 (x2) + \beta 3 (x3)$$

$$4 \quad y = \beta + \beta 1 (x1) + \beta 2 (x2) + \beta 3 (x3) + \beta 4 (x4)$$

$$5 \quad y = \beta + \beta 1 (x1) + \beta 2 (x2) + \beta 3 (x3) + \beta 4 (x4) + \beta 5 (x5)$$

$$6 \quad y = \beta + \beta 1 (x1) + \beta 2 (x2) + \beta 3 (x3) + \beta 4 (x4) + \beta 5 (x5) + \beta 6 (x6)$$

**Table 6**

### Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.413 <sup>a</sup>	.171	.164	.80143

a. Predictors: (Constant), Leadership

### Coefficients<sup>a</sup>

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.367	.446		3.063	.003
	Leadership	.583	.114	.413	5.112	.000

a. Dependent Variable: Customer Satisfaction

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**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	16.785	1	16.785	26.134	.000 <sup>a</sup>
	Residual	81.570	127	.642		
	Total	98.355	128			

- a. Predictors: (Constant), Leadership  
 b. Dependent Variable: Customer Satisfaction

The table is showing regression step one in which only one variable is tested against the dependent variable. In this model, **(16%)** variability is explained in Customer Satisfaction by Leadership. Coefficient value of **(0.58)** shows that by increasing one unit of leadership, 0.58 units of customer satisfaction were increased. The model is highly significant on a whole.

**Table 7**

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.470 <sup>a</sup>	.221	.209	.77962

- a. Predictors: (Constant), Strategy and Planning, Leadership

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.145	.441		2.596	.011
	Leadership	.268	.156	.190	1.717	.088
	Strategy and Planning	.380	.133	.317	2.864	.005

- a. Dependent Variable: Customer Satisfaction

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	21.772	2	10.886	17.911	.000 <sup>a</sup>
	Residual	76.583	126	.608		
	Total	98.355	128			

- a. Predictors: (Constant), Strategy and Planning, Leadership  
 b. Dependent Variable: Customer Satisfaction

Table 7 variability in customer satisfaction is increased to (21%) by Leadership and Strategy and Planning. The coefficients are (.26) and (.38) respectively showing that one unit increase in leadership and will lead to 0.26 units increase in customer satisfaction and one unit increase in strategy and planning will lead to 0.38 units increase in customer satisfaction. One point to be pondered is that by introducing one new variable to the model, the model, the previous variable (leadership) has become non-significant (p-value of 0.11). Overall model is still significant (p-value of 0.000). This shows that in comparison to leadership and strategy and planning, strategy and planning are playing more vital role towards customer satisfaction.

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**Table 8**

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.671 <sup>a</sup>	.451	.438	.65733

a. Predictors: (Constant), Customer Focus, Leadership, Strategy and Planning

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.179	.395		.454	.651
	Leadership	.315	.132	.223	2.392	.018
	Strategy and Planning	-.070	.128	-.059	-.550	.583
	Customer Focus	.709	.098	.595	7.228	.000

a. Dependent Variable: Customer Satisfaction

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	44.345	3	14.782	34.210	.000 <sup>a</sup>
	Residual	54.010	125	.432		
	Total	98.355	128			

a. Predictors: (Constant), Customer Focus, Leadership, Strategy and Planning

b. Dependent Variable: Customer Satisfaction

In the table 8, third variable Customer focus has been introduced which has increased the variability in customer satisfaction to (43.8%) that can be explained by leadership, strategy and planning and customer focus. The coefficients of leadership, strategy and planning and customer focus are (0.31), (-0.70) and (0.71) respectively. Overall model is still highly significant (p-value of 0.000) but after introducing a third variable in the model, leadership has again become significant and strategy and planning which was significant in the previous table has become now insignificant (p-value of 0.583). Customer focus is highly significant with a p-value of (0.000) and a coefficient of (0.71) which means that one unit increase in customer focus will bring in a (0.71) increase in customer satisfaction.

**Table 9**

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.679 <sup>a</sup>	.461	.444	.65392

a. Predictors: (Constant), Information and Analysis, Leadership, Customer Focus, Strategy and Planning

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**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.103	.396		.260	.795
	Leadership	.291	.132	.206	2.201	.030
	Strategy and Planning	-.124	.132	-.104	-.940	.349
	Customer Focus	.608	.118	.510	5.135	.000
	Information and Analysis	.201	.132	.162	1.519	.131

a. Dependent Variable: Customer Satisfaction

**ANOVA<sup>b</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	45.331	4	11.333	26.502	.000 <sup>a</sup>
	Residual	53.024	124	.428		
	Total	98.355	128			

a. Predictors: (Constant), Information and Analysis, Leadership, Customer Focus, Strategy and Planning

b. Dependent Variable: Customer Satisfaction

Table 9 shows the introduction of a fourth variable in the model that is Information and Analysis. At this stage the variability in customer satisfaction has been raised to (44.4%) that can be explained leadership, strategy and planning, customer focus and information and analysis with coefficients (0.29), (-0.12), (0.60) and (0.20) respectively. The significance of customer focus is still the highest having the highest coefficient value of (0.60). After introduction of information and analysis the overall model is still significant with a p-value of (0.000).

**Table 10**

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.703 <sup>a</sup>	.494	.474	.63586

a. Predictors: (Constant), People Management, Leadership, Customer Focus, Information and Analysis, Strategy and Planning

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.100	.392		-.255	.799
	Leadership	.255	.129	.180	1.971	.051
	Strategy and Planning	-.251	.136	-.210	-1.847	.067
	Customer Focus	.548	.117	.460	4.682	.000
	Information and Analysis	.168	.129	.136	1.300	.196
	People Management	.324	.113	.257	2.854	.005

a. Dependent Variable: Customer Satisfaction

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**ANOVA<sup>b</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	48.624	5	9.725	24.052	.000 <sup>a</sup>
	Residual	49.731	123	.404		
	Total	98.355	128			

a. Predictors: (Constant), People Management, Leadership, Customer Focus, Information and Analysis, Strategy and Planning

b. Dependent Variable: Customer Satisfaction

In Table 10, fifth variable People Management has been introduced, which has raised the variability of Customer satisfaction to (49%) to be explained by leadership, strategy and planning, customer focus, information analysis and people management with coefficients of (0.25), (-0.25), (0.c54), (0.16) and (0.32) respectively. The model is still highly significant with a p-value of (0.000). Customer focus is still the most significant variable showing the highest coefficient (0.54).

**Table 11**

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.725 <sup>a</sup>	.526	.503	.61818

a. Predictors: (Constant), Process Management, Leadership, Customer Focus, People Management, Information and Analysis, Strategy and Planning

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.091	.381		-.239	.811
	Leadership	.205	.127	.145	1.613	.109
	Strategy and Planning	-.237	.132	-.198	-1.790	.076
	Customer Focus	.464	.118	.389	3.945	.000
	Information and Analysis	.076	.129	.062	.590	.556
	People Management	.208	.118	.165	1.766	.080
	Process Management	.327	.115	.280	2.852	.005

a. Dependent Variable: Customer Satisfaction

The table shows the incorporation of the last variable process management in the model that has increased the variability of customer satisfaction to the highest level of (50%) to be explained by leadership, strategy and planning, customer focus, information analysis, people management and process management with coefficients of (0.20), (-0.23), (0.46), (0.07), (0.20) and (0.32) respectively. The overall model is highly significant with a p-value of (0.000). Customer focus and process management are showing a strong significant effect on customer satisfaction. All other variables have become insignificant in comparison to these two variables.

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### **XIII. Practical Implications for Modern Retail Chain Stores**

From the findings of the research, it can be derived that TQM practice based on MBNQA criteria can lead to higher customer satisfaction levels which in return will result in high revenues, high profitability and increased customer retention. In today's turbulent era, competition has grown to its maximum extent and acquiring and retaining profitable customers have become a biggest challenge especially for the retail corporations. This issue is of great magnitude because a developing country like Pakistan will have to operate with the emphasis on a very high productivity in order to combat the challenges of global village. Organizations should understand the need of TQM implementation so that they can generate higher revenues and sustain their customers for a longer time period.

### **XIV. Conclusions**

This study is focused mainly on the 'hard' aspects of TQM i.e. the tools and techniques without considering the 'soft' aspects that deal with organizational culture and behavior. For a holistic view, both these aspects should be taken into consideration. Moreover, data collection through close ended questionnaires may not give a deep insight into the implementation details and functioning of TQM practices. Open ended interviews may be required for further elaboration. The current research is cross-sectional; it cannot analyze how customer satisfaction is affected before and after the implementation of TQM practices.

The scope of this study includes the leading modern retail industries (national and multinational both) of Pakistan. Six independent variables namely Leadership, Strategy and Planning, Customer Focus, Information analysis, People Management and Process Management have a highly positive effect on Customer Satisfaction of modern retail chain stores in Pakistan. It has been observed that Leadership ( $\beta = 0.20$ ), Information Analysis ( $\beta = 0.07$ ) and People Management ( $\beta = 0.20$ ) have positive insignificant relation with customer satisfaction. Process Management ( $\beta = 0.32$ ) and Customer Focus ( $\beta = 0.46$ ) have positive and highly significant relation with customer satisfaction whereas Strategy and Planning ( $\beta = -0.23$ ) have negative insignificant relation with customer satisfaction. The findings have also revealed that Customer focus and Process Management are the key ingredients towards Customer Satisfaction and have a significant effect on contentment level of the customers.

Throughout the research process, ethical considerations were given utmost importance in order to protect the security of all the stakeholders involved. The respondents and readers were informed completely about the aspects, objectives and outcomes of the study. The confidentiality of the collected data from respondents was not compromised at any cost. The rights of the respondents were protected by having them sign a permission letter and mutual consent form. The wellbeing of the respondents was guaranteed through protecting their right to voluntarily participate and withdraw at any time. To prevent disturbance in workflow at the research site, time adjustment were made beforehand. It was ensured that the data collected should not harm the respondent in any way.

In future this research can be extended to various dimensions as modern retail trade is an emerging industry all over the world. The mediating role of customer satisfaction on the organizational and financial performance of such firms can be investigated. The study can be expanded to encompass more countries in the region to determine the impact of national culture on customer satisfaction levels. The effect of significant TQM factors not covered by MBNQA criteria may be examined in relation to customer satisfaction. Structural Equation Modeling may be used for better analysis.

### **XV. References**

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