

TOTAL QUALITY SERVICE (TQS) AND BUSINESS PERFORMANCE THROUGH SERVICE PROFIT CHAIN

Jyoti Sharma,
Ph. D Research Scholar,
Dept. of Commerce, University of Jammu, Jammu, India.

Introduction:

Quality is a term that carries important meaning to both producer and customer. In the global market today, many organisations realized that their survival in the business world depends highly on producing high quality product and services. Everyone has had experiences of poor quality when dealing with business organisations. Successful companies understand the powerful impact customer-defined quality can have on business (Anderson, 1994). For this reason many competitive firms continually increase their quality standards. Total quality service (TQS) and its components have a direct impact on customers' assessment of a company and the willingness to choose the service provider. Cavana et al. (2007) reported that total quality service becomes a crucial competitive bludgeon in service sector for the survival and growth as they compete in the marketplace so, only thing through which service oriented firms can gain customers is the service quality in totality (Stafford, 1996).

These studies focused on the partial relationships between internal service quality (Employee satisfaction) and external service quality (customer satisfaction). More comprehensive relationships are reflected with the service profit chain and a conceptual model for including the linkages of management practices with service companies (Heskett et al., 2008).

Objectives of the study

Automobile sector is becoming more and more competitive every day. In order to be successful in the field, focus is on providing quality services to its customers by satisfying its employees. The paper is designed to investigate the role of total quality service on financial performance through service profit chain. The paper also plans to design a model depicting the direct structural relationship between total quality service, internal service quality, employee

satisfaction, employee commitment, employee loyalty, external service quality, customer satisfaction and financial performance.

Literature Review:

Customer Loyalty and Financial Performance:

Satisfied employees leads to satisfied customers and lead an organisation towards profits as employee satisfaction has a strong influence on employee turnover intention, employee loyalty and also customer satisfaction (Xu and Goedegebuure, 2005). Many authors suggested that the positive relationship prevails between customer loyalty and business performance (Reichheld, 2000; Sheth and Parvatiyar, 1995). Loyal customers in addition to increase the value of the business also enable it to sustain lower costs than those attached with attracting new customers.

Internal Service Quality, Perceived Service Quality and Employee Satisfaction:

Internal service quality refers to the attitude that people have towards their jobs, colleagues and companies (Heskette et al., 2008). Whereas, Perceived service quality is regarded as the feeling customers have regarding the superiority and inferiority of the service provider (Tsoukatos and Rand, 2006). Many authors are of the view that the strategy that is considered essential and indispensable for success and survival in today's competitive and cutthroat environment is delivering service quality (Parasuraman et al., 1985).

These lead to the following hypotheses-

Hyp1: TQS leads to internal service quality;

Hyp2: Internal service quality leads to employee satisfaction;

Hyp3: Employee satisfaction leads to employee commitment

Hyp4: Employee satisfaction significantly affects employee performance

Research Design and Methodology

The study is evaluative in nature as it tries to establish the theoretical relationships between total quality service and financial performance through service profit chain. To prove the relationship following methodology has been adopted:

Generation of Scale Items

The survey questionnaire is composed of questions relating to eight scales viz; total quality service, internal service quality, employee satisfaction, employee commitment, employee loyalty, external service quality, customer satisfaction and financial performance.

The Total Quality Service questionnaire consisted of 91 statements on 7 point Likert scale, covering ten dimensions viz;

For the measurement of Internal service quality 22 statements with three dimensions from Lings (2004) were taken up.

The questionnaire for measuring employee satisfaction, customer satisfaction, employee commitment and employee loyalty has been adopted from Sureshchandar (2001) and Fuentes et al. (2007).

The questionnaire for measuring employee performance has been adopted from Fuentes et al. (2007) and Venkatraman and Ramanujam (1986) having five statements.

The scale for measuring external service quality has been adopted from Narver and Slater's (1990) 7- point rating scale with 15 items.

The questionnaire for measuring financial performance has been adapted from Fuentes et al. (2007) and Venkatraman and Ramanujam (1986). It consists of five statements. Financial performance has also been measured through objective criteria's like sales growth and profits in % age.

Sample Size and Design:

The study confines to the showroom cum service stations of major players of automobile industry i.e. Maruti Udyog, Hyundai Motor Ltd., Tata Motors Ltd. In order to avoid the problem of common method variance data have been collected from multiple respondents i.e. executives, employees and customers. All (85) executives, which include General Managers, Deputy General Managers, Managing Director, and Functional Managers of the showrooms, employees (380) and customers (289) in Jammu Province were contacted for primary data collection. Census method was used for collecting the data from executives and employees. The total number of customers was 10,800. To determine the final sample size, a pilot survey of seventy customers, selected conveniently, was conducted. The final sample size for customers comes to 289, which has been identified on the basis of pre testing results by the application of formula proposed by J.K Sharma (2007).

$n = n_0 \cdot N / (n_0 + (N - 1))$

Where $n_0 = (Z_{\alpha/2})^2 \cdot S.D^2 / E^2$

$(Z_{\alpha/2}) = 1.96,$

S.D= Standard Deviation,

E= Sample Error

The response rate from executives was seventy two percent, from employees it was eighty nine percent and for customers it was ninety three percent.

Data Analysis

The detailed result of exploratory and confirmatory factor analysis is as under:

Scale Purification-Exploratory Factor Analysis

The multivariate data reduction technique of factor analysis has been used for the study. It involved examination of inter-relationship among variables and reduction of large number of variables into few manageable and meaningful sets. Factor analysis was carried to simplify and reduce the data. It was carried with Principal Component Analysis along with orthogonal rotation procedure of Varimax for summarising the original information with minimum factors and optimal coverage. The study aims at using factor analysis, primarily because of its three general functions i.e. reducing the original set of variables to a small set, which accounts for most of the variance of the initial set; searching data for qualitative and quantitative distinctions and statistically testing of priori hypothesis about number of dimensions or factors underlying a set of data (Kaur et al., 2009). All the five major methodological issues that a researcher should consider when conducting a factor analysis (Fabrigar, 1999) were taken care of while pursuing factor analysis, as these decisions have an important bearing on the results obtained. These are: a) What variables to include (Cattell and Gorsuch, 1963), b) appropriateness of factor analysis, c) selection of appropriate procedure, d) number of factors to be included, and e) selection of appropriate rotational method.

Validity- Confirmatory factor Analysis (CFA)

Confirmatory factor analysis (CFA) uses a multivariate technique to test whether a pre specified relationship exists between the manifest and latent variables. It is used to provide a confirmatory test of our measurement theory. It is a way of testing how well measured variables represent a latent constructs (Demirbag et al., 2006). The items that emerged after EFA under the individual factor were averaged for the application of CFA (Jones et al. 2001) and items with Standardised regression weights (SRW) less than 0.50 were deleted (Hair et al., 2006).

Convergent validity

The authors suggested that if all the factor loadings of indicators on their constructs are significant, convergent validity is attained. It can be established in three ways: Factor Loadings, Average Variance Extracted and by Bentler-Bonnet Delta Coefficient.

Reliability

Reliability of the constructs has been checked through internal consistency by the application of Cronbach's alpha (Cronbach, 1951) as well as by extracting the composite reliability with the help of variance extracted. Alpha values equal to or greater than 0.70 indicate high construct reliability (Nunally, 1970; O'Leary-Kelly and Vokurka, 1998). The alpha values for total quality service ranged from 0.89 to 0.96 (Table 1), for internal service quality it was 0.954 (Table 2), for employee satisfaction it was 0.974 (Table 3), For employee commitment it was 0.879 (Table 4), for employee performance it was 0.952 (Table 5), for external service quality it 0.972 (Table 6), for customer satisfaction it was 0.954 (Table 7) and for financial performance, it was 0.897 (Table 8). Composite Reliability for all is above 0.70 (Table 10) during CFA.

Relationship between Total Quality Service (TQS) and Financial performance through /Role of Service Profit chain

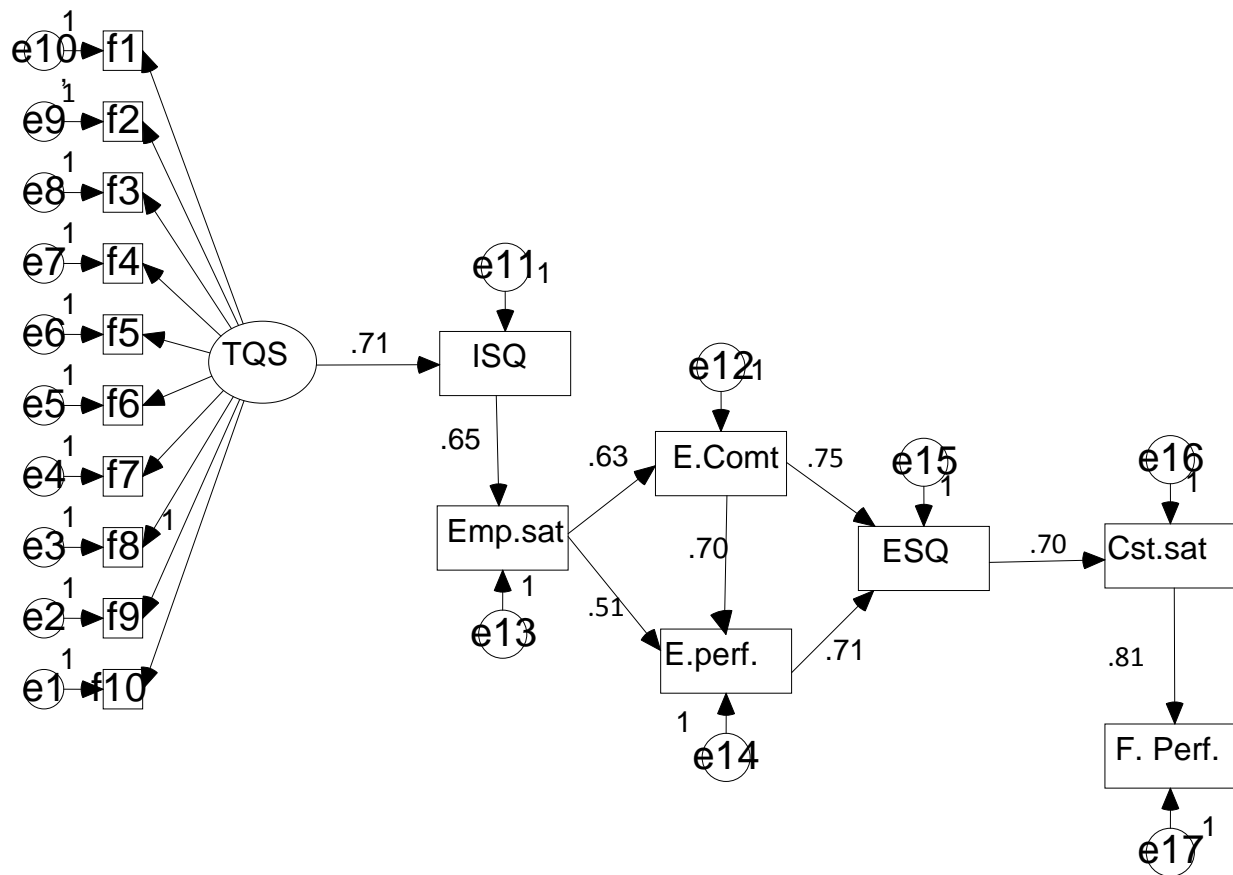
Structural Equation Modeling is a multivariate technique that seeks to explain the relationship among multiple variables. In the present study, the relationship among total quality service, internal service quality, employee satisfaction, employee commitment, employee performance, external service quality, customer satisfaction and financial performance have been assessed.

First, a test of not-close fit was carried out for each model. The root-mean square error of approximation (RMSEA), a measure of model residuals, has been used in conducting this test. Since the upper bound of the RMSEA confidence interval for all of the models is quite below 0.10, the hypothesis of not-close fit could be rejected (MacCallum et al., 1996). Thus, it could be inferred that none of the models had a poor fit. Furthermore, to minimize the effect of sample size in assessing model adequacy, CFI and SRMR were used to assess model fit in addition to the χ^2 significance test, because CFI and SRMR are relatively unaffected by sample size (Hu and Bentler, 1998). The goodness-of-fit indices for the structural model, ($\chi^2= 33.651$, $df =6$, $\chi^2/df =5.608$, $GFI = 0.954$, $AGFI= 0.978$, $NFI= 0.965$, $CFI= 0.992$, $RMR= 0.034$, $RMSEA=0.062$, Table 12) are well within the generally accepted limits, indicating a good fit. It supports the first hypothesis i.e., total quality service significantly influences internal service quality. The possible reason behind the significant impact of total quality service on internal service quality lies in the notion that total quality implementation in a service organisation brings all the people together to ensure and improve the services provided by improving the work environment, working culture and satisfaction level of employees. Thus it brings/ improves internal service .The second path traced the relationship between internal service quality and employee satisfaction. The standardised regression weight for the hypothesized relationship between internal service quality and employee satisfaction ($\beta = 0.65$, $p<0.001$, Table 12) is significant which **confirms the third hypothesis** that internal service quality significantly affects the employee satisfaction. The employees in an organisations where internal service quality is good are generally highly motivated and thus they reflect their satisfaction.

In internal service environments in which customers are highly demanding of employees, coupled with employees who in turn hold high expectations and satisfaction from their jobs leads to high commitment toward their job (path 3) and better performance (path 4). Thus our third and fourth hypothesis stands to be accepted i.e. employee satisfaction leads to employee commitment and employee satisfaction significantly affects employee performance. Satisfied employees always considered as a valuable asset for the organisation.

Conclusion and Recommendations

The novelty of this study lies in its inclusion of total quality service along with the components of service profit chain like internal service quality, employee satisfaction, employee commitment, employee performance, external service quality, and customer satisfaction while investigating the relationship between total quality service and financial performance in service sector. This paper investigated a link between total quality service and financial performance of the business through employees and customers variables that is core in a service profit chain. In this study, exploratory and confirmatory factor analyses have been used to produce empirically verified and validated underlying dimensions of various constructs. TQS provides a vision that keeps focus on quality and performance improvement. The result shows that total quality service directly affects internal service quality, internal service quality directly and positively affects employee satisfaction, employee satisfaction directly and positively affects employee commitment and employee performance as well as indirectly affects to employee performance through employee commitment. Employee performance and employee commitment, in turn, directly influences external service quality and external service quality in turn, positively affects customer satisfaction. Finally, customer satisfaction results in elevated profits i.e. financial performance. So showroom managers should devise such policies and HR practices that result in increased employee satisfaction that lead to increased customer satisfaction. The findings of the study suggest that an effective implementation of TQS system can positively influence organisational financial performance through service profit chain.



Key: F1- top management commitment, F2-Benchmarking,F3-Human Resource Management, F4-Technical system, F5.- Information analysis,F6- Service marketing, F7.- Social Responsibility, F8- Service culture, F9-servicescape, F10- Continues improvement, TQS-Total quality service ISQ- Internal service q

Total Service Quality	Factor Loading	Mean	S.D	Alpha	Eigen Value	KMO	VE
MGT. COMMITMENT (F1)		5.80			1.233	0.806	78.82
Mutual trust and respect	0.813	5.58	1.910				
Participative management	0.915	5.87	0.983				
Skillful supervisor	0.698	5.57	0.956				
Consensus approach	0.527	5.91	0.991				

Planning and decision making	0.862	5.45	0.876				
Guidance to subordinates	0.838	5.62	0.873				
BENCHMARKING (F2)		5.69			2.10	0.789	74.77
Achieving Cust. satisfaction	0.749	5.66	0.982				
Training and development	0.768	5.75	0.863				
Customer satisfaction	0.783	5.66	0.823				
HRM (F3)		5.64			2.453	0.688	73.05
Inspection of vehicles	0.902	5.41	1.34				
Usage of quality circles	0.904	5.70	0.977				
Employees involvement	0.893	5.54	1.06				
Suggestions for innovations	0.920	5.58	0.653				
Effectiveness of quality circles	0.928	5.50	0.722				
TECH. SYSTEM (F4)		5.65			1.927	0.686	64.217
Redesigning of processes	0.806	5.70	0.550				
Time and Motion studies	0.866	5.66	0.637				
Documentation of ser. processes	0.726	5.70	0.690				
INFO.ANALYSIS (F5)		5.78			2.340	0.727	68.234
Market analysis	0.892	5.83	0.761				
Analysis of costs	0.818	5.79	0.721				
Market investigation	0.858	5.64	0.733				
SERVICE MKT. (F6)		5.67			1.908	0.657	64.836
Extended warranty	0.868	5.79	0.658				
Reminder letters to customers	0.823	5.75	0.675				
Information to customers	0.639	5.54	0.721				
SOCIAL RESP. (F7)		5.73			2.112	0.753	75.469
Disciplined behavior	0.838	5.91	0.653				
Customer satisfaction	0.826	5.66	0.637				
Equal treatment to all customers	0.908	5.70	0.690				
Establishment of service stations	0.875	5.83	0.816				
Value added services	0.893	5.58	0.717				
SERVICE CUL. (F8)		5.70			3.843	0.809	64.055

Team work and human relations	0.808	5.70	0.750				
Trust and openness	0.872	5.79	0.832				
Make the right in first time	0.792	5.83	0.868				
Feeling of oneness	0.640	5.79	0.779				
Service to customers	0.894	5.62	0.923				
Importance to quality mgt.	0.771	5.50	1.142				
SERV. SCAPE (F9)		5.81			2.958	0.696	66.979
Neat and professional appearance	0.893	5.79	0.721				
Cleanliness practices	0.874	5.87	0.797				
Proper working environment	0.772	5.83	0.761				
Display boards	0.697	5.87	0.740				
Showroom's layout	0.565	5.83	0.701				
Product advertisement boards	0.796	5.87	0.679				
Display of service delivery status	0.889	5.79	0.721				
Attractive materials and colors	0.875	5.66	0.761				
C. IMPROVEMEN (Factor 10)		5.72			3.060	0.762	68.253
Strategic improvement	0.553	5.70	0.750				
Importance to quality	0.844	5.87	0.612				
Importance of work instructions	0.908	5.83	0.701				
Quality management systems	0.729	5.70	0.550				
Quality awareness programmes	0.768	5.66	0.637				
Autonomy in quality department	0.835	5.75	0.675				
Automated inspection/review/ checking	0.840	5.58	0.829				
Quality department data	0.792	5.70	0.750				
Total mean of TQS		5.70					

Statements	FL	Mean	Comm.	S.D	Alpha	E.V	KMO	VE
All grievances are duly addressed	0.868	5.83	0.765	0.603	0.954	3.80	0.798	72.00
Training is provided to low performing employees.	0.867	5.75	0.822	0.794				
Employees are rewarded	0.842	5.75	0.897	0.692				
Seminars/workshops are organized	0.855	5.83	0.753	0.730				
Regular staff meetings	0.823	5.57	0.765	0.581				
Efforts were made to find out employees' real feelings.	0.742	5.00	0.875	0.692				
Manager regularly talks to employees about their work.	0.809	5.41	0.887	0.644				
Manager meets employees at regular interval	0.906	5.33	0.786	0.701				
Regular staff appraisal is done.	0.835	5.58	0.754	0.829				
Manager interacts directly with employees.	0.699	5.34	0.689	0.579				
Management does a lot of internal market research.	0.755	5.48	0.876	0.672				
Total Mean and VE		6.087						

Employee Satisfaction	Factor Loading	Mean	Comm.	S.D	Alpha	Eigen Value	KMO	VE

Grievance redressal meetings	0.916	5.71	0.865	0.739	0.974	11.678	0.876	71.00
Implementation of appraisal system	0.878	5.70	0.873	0.739				
Job satisfaction	0.867	5.83	0.920	0.692				
Monetary awards	0.892	6.04	0.768	0.615				
Freedom to do work	0.776	5.59	0.789	0.876				
Incentives for motivation	0.856	5.86	0.823	0.692				
Total Mean		5.73						

Table 4 : Summary of result from scale purification for Employee Commitment

Statements	Factor Loading	Communalities	Mean	S.D	Alpha	Eigen Value	KMO	VE
Committed to philosophy of quality mgt.	0.876	0.890	5.32	1.042	0.879	4.532	0.789	72.35
Employees commitment	0.871	0.902	5.45	1.091				
Accounting the competitors for planning and decision-making.	0.790	0.876	5.63	0.989				
Customer satisfaction.	0.821	0.897	5.87	0.976				
Employees as valuable asset.	0.776	0.789	5.79	0.956				
Proper guidance your subordinates.	0.699	0.821	5.99	1.450				
Committed to	0.854	0.934	6.01	1.230				

quality implementation.								
Total Mean and VE			5.723					

Table 5 : Summary of result from scale purification for Employee Performance

Statements	FL	Comm.	Mean	S.D	Alpha	EV	KMO	VE
The level of employee satisfaction is increased	0.876	0.932	5.67	0.923	0.952	3.401	0.786	69.88
The employee turnover has decreased.	0.764	0.921	5.79	0.956				
Employee efficiency has improved.	0.789	0.945	5.99	1.340				
The level of absenteeism is reduced.	0.890	0.890	6.00	1.230				
Employee participates in managerial affairs.	0.856	0.877	5.97	0.988				
Total mean and VE			5.884					

Table 6 : Summary of result from scale purification for External Service Quality

Dimensions	Factor Loading	Communalities	Mean	S.D	Alpha	Eigen Value	KMO	VE
Feed back for quality Improvement	0.635	0.504	5.460	1.25	0.972	2.789	0.780	
Reminders on time for due installment	0.908	0.828	4.48	1.10				
Reminders for after-sale services	0.849	0.765	5.93	0.612				
Sales staff is responsive and courteous	0.775	0.611	5.996	0.844				
New strategies	0.641	0.592	5.636	1.03				

for customer satisfaction.								
Service delivery status is displayed in the showroom	0.771	0.597	6.090	0.619				79.67
Modern services like E-cash and cheques are used	0.751	0.565	5.906	0.776				
Customers' complaints are properly addressed.	0.796	0.633	5.425	1.154				
Total mean and Variance Explained			5.615					

Table 7: Purification for Customer Satisfaction Scale

Customer Satisfaction	FL	Mean	Comm.	S.D	Alpha	EV	KMO	VE
Correct service delivery	0.868	5.83	0.765	0.603	0.954	6.80	0.754	
Feedback forms	0.867	5.75	0.822	0.794				
Technical capability	0.842	5.75	0.897	0.692				
Make customer feel safe	0.855	5.83	0.753	0.730				
Convenient working hours	0.823	5.87	0.765	0.581				
Customer delight in mind	0.742	6.00	0.875	0.692				
Handle customer grievances	0.809	5.91	0.887	0.644				

Dissatisfaction analysis	0.906	5.83	0.786	0.701				68.00
Courteous employees	0.835	5.58	0.754	0.829				
Customers satisfaction	0.699	5.54	0.689	0.579				
Total Mean and VE		5.789						

Table 8: Purification of Financial Performance Scale

Financial performance	FL	Mean	Comm.	S.D	Alpha	Eigen Value	KMO	VE
Competitive position	0.856	5.58	0.789	0.775	0.897	2.558	0.701	62.793
Increase in profits	0.973	5.45	0.865	0.931				
Sales volume	0.921	5.58	0.874	0.880				
Market share	0.838	5.70	0.897	0.750				
Firm's reputation	0.734	5.66	0.786	0.816				
Total Mean and VE								

Table 9: Fit Indices of CFA

Constructs	χ^2	DF	χ^2/df	RMR	GFI	AGFI	NFI	CFI	RMSEA
TQS	75	30	2.500	0.015	0.956	0.869	0.964	0.993	0.065
Internal Service Quality (ISQ)	20.540	6	3.423	0.011	0.983	0.967	0.961	1.000	0.000
Employee satisfaction	15.675	6	2.612	0.042	0.958	0.899	0.936	0.960	0.042
Employee	36.0	10	3.600	0.023	0.982	0.923	0.945	0.978	0.031

Commitment									
Employee Performance	61.24	17.88	3.425	0.017	0.922	0.976	0.934	0.982	0.023
External Service Quality	30.56	10	3.056	0.016	0.951	0.975	0.976	0.943	0.002
Customer Satisfaction	14.645	5	2.929	0.016	0.965	0.924	0.985	1.000	0.000
Financial performance	25.87	9	2.874	0.023	0.898	0.919	0.967	0.032	0.076

Table 10: Reliability and Validity Analysis

Constructs	Construct Reliability	Bentler-Bonett Coefficient Delta	Cronbach's Alpha
TQS	0.879	0.964	0.965
Internal Service Quality	0.899	0.961	0.954
Employee satisfaction	0.903	0.936	0.974
Employee Commitment	0.945	0.945	0.879
Employee Performance	0.890	0.934	0.952
External Service Quality	0.965	0.976	0.972
Customer Satisfaction	0.978	0.985	0.954
Financial performance	0.946	0.967	0.897

Table 11: Inner Regression Weights between Latent variables in the Structural Model

Relationship	Casual Path	SRW	CR
Direct relationship	TQS → Internal Service Quality (ISQ)	0.72	5.245***
Direct relationship	ISQ → Employee Satisfaction	0.65	7.053***
Direct relationship	Employee satisfaction → Employee Commitment	0.63	8.617***
Direct relationship	Employee satisfaction → Employee Performance	0.51	4.102***
In direct relationship	ES → E. Commitment → E. Performance	0.70	3.805*
Direct relationship	E. Commitment → External Service Quality (ESQ)	0.75	7.562***
Direct relationship	Employee Performance → ESQ	0.71	7.201***
Direct relationship	ESQ → Customer satisfaction	0.70	7.874***
Direct relationship	Customer Satisfaction → Financial Performance	0.81	3.865*

$\chi^2= 33.651$, $df =6$, $\chi^2/df =5.608$, $GFI = 0.954$, $AGFI= 0.978$, $NFI= 0.965$, $CFI= 0.992$, $RMR= 0.034$, $RMSEA=0.062$

References:

- **Anderson, Eugene W., Claes Fornell and Donald R. Lehmann, 1994. Customer Satisfaction, Market Share, and Profitability: Findings from Sweden.** *Journal of Marketing*, 58(July): 53-66.
- Bagozzi, R.P., Yi, & Phillips, L.W.(1991). Assessing construct validity in organizational research. *Administrative Sciences Quarterly*, 36(3), 421–458.
- Bentler, P.M., & Bonnet, D.G. (1980). Significance tests and goodness-off it in the analysis of covariance structures. *Psychological Bulletin*, 8 (3), 588–606.
- **Cattell, R.B. and Gorsuch, R.L. (1963). The Uniqueness and Significance of Simple Structure** Demonstrated by Contrasting Natural Structure and Random Structure Data. *Psychometrika*, 28(3), 55-67.
- **Cavana, R.Y., L.M. Corbett, Y.L. Lo, (2007). Developing zones of tolerance for managing passenger rail services quality.** *Inter. J. Qual. Reliability Manage*, 24(1): 7-31.
- **Cronbach, L. J. (1951). Coefficient alpha and the internal structure of Tests.** *Psychometrika*, 16(3)297-334.
- **Demirbag, M., Koh, S.C, Tatoglu, E.& Zaim,S. (2006). TQM and Market Orientation’s impact on SMEs’ Performance.** *Industrial Management and Data Systems*, 10(8),1206-1228.
- **Fabrigar, L.r. Wegener,D.T., MacCallum, R.C. & Strahan, E.J. (1999). Evaluating the use of exploratory factor analysis in Psychological Research.** *Psychological Methods*, 4(3),272-299.
- **Fuentes, M., Javier, L. M. & Luis, M.F. (2007). Total Quality Management, Strategic Orientation and Organizational Performance: The Case of Spanish Companies.** *Journal of Total Quality Management*, 17(3), 303–323.
- **Hair, J.F, Anderson, R.E, Tatham, R.L. & William, C.B. (2006). Multivariate Data Analysis,** Pearson Education, Inc.U.K.
- **Heskett, James L., Thomas O. Jones, Gary W. Loveman, W. Earl Sasser, and Leonard A. Schlesinger, 2008. Putting the Service-Profit Chain to Work.** *Harvard Business Review*, (Jul-Aug), 118-126.
- **Kaur, Gurjeet, Sharma, R.D. & Seli, N. (2009). Internal Market Orientation in Indian Banking: An empirical analysis.** *Managing Service Quality*, 19 (5), 595-627.
- Lim Beng C, and Ployhart. R.E.(2006). Assessing the Convergent and Discriminant Validity of Goldbergs International Personality Item Pool: A Multitrait-Multimethod Examination. *Organizational Research Methods*, 9 (1), 29-54.
- **Lings, I. (2004). Balancing Internal and External Market Orientations.** *Journal of Marketing Management*, 18,239-263.
- **Loveman, G. W. (1998). Employee satisfaction, customer loyalty and financial performance: An empirical examination of the service profit chain in retail banking.** *Journal of Service Research*, 1, 18–31.

- **MacCallum, R.C., Browne, M.W., Sugawara, H.M., (1996). Power Analysis and Determination of Sample Size for Covariance Structure Modeling. *Psychological Methods*, 1(2), 130–149.**
- **Narver, J.C. & Slater, S.F. (1990). The effect of a market orientation on business profitability. *Journal of Marketing*, 54, 20-35.**
- **Nunnally, J.C. (1970). *Introduction to Psychological Measurement*, New York, McGraw Hill, 3rd Ed.**
- **Parasuraman, A., Valarie A. Zeithaml and Leonard L. Berry, 1985. A Conceptual Model of Service Quality and Its Implications for Future Research, *Journal of Marketing*, 49: 41-50.**
- **Reichheld, F.F., 2000. Loyalty-based management. HBR, (One Point Enhanced Edition).**
- **Sheth, J. and A. Parvatiyar, (1995). Relationship marketing in consumer markets: antecedents and consequences. *Journal of the Academy of Marketing Science*, 23(4): 255-71.**
- **Stafford, M.R., (1996). Demographic discriminators of service quality in the banking industry. *The Journal of Services Marketing*, 10(4): 6-22.**
- **Tsoukatos, E., G.K. Rand, 2006. Path analysis of perceived service quality, satisfaction and loyalty in Greek insurance. *Managing Service Quality*, 16(5): 501-519.**
- **Venkatraman, N. & Ramanujam, V. (1986). Measurement of Business Performance in Strategy Research: A Comparison of Approaches. *Academy of Management Review*, 11(4), 801–814.**