

Linkages Between Critical Success Factors and Performance Measures for Improvement in Service Quality - Life Insurance Perspective

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ABSTRACT

The paper tries to link the Critical success factors and Performance Measures for improvement in Service Quality in Life Insurance sector. An instrument for identifying the problem through analysis of facts, in order to gain thorough, proper and clear understanding has been designed. The linkages both strong and weak were established from the empirical study. The result will help in deriving a statement in which a predicate affirms or denies something about the subject for further study and research for services to be provided in Life Insurance sector. Companies will change their style of functioning and may bring changes in their service practices.

Keywords: Service Quality, Organizational performance, Pilot study, Life Insurance sector.

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INTRODUCTION

For last 100 years, India's life insurance industry is changing rapidly. Post liberalization in the economy in 1991, gates were again thrown open for investment in this sector for the private players, both national and foreign partners (Insurance companies). In case of joint venture with Indian partner the FDI limit was set to 49% for foreign partner (IRDA, 1996). Twenty-nine Indian and foreign private Companies started their operations post year 2000 (IRDA, 2020). This paper examines the factors responsible for the fall in income of private companies' operating in India [1-4].

Primary investigations revealed a number of reasons behind this sharp fall of premium income. They were incomplete information of the facts, miss-selling by the agents, non-cooperation by the company staff, exorbitant policy charges, claim settlement issues, wrong promises made by the companies, attrition rate of employees, closure of branches, and technological use by the companies to address the grievances, cultural issues etc [5-7].

To find a solution to the present problem, the authors tried critical analysis of the research studies

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done so far in the life insurance sectors in India. Wide range of products in offerings in markets by these companies led the authors to think on the service dimension and forced them to think how improvement in quality of services to customers will help companies in their objectives [8-9]. To deal with various threats the authors tried to understand the different measures needed to allow speedy utilization of service improvement tools and technique and the predominant or critical factors that prevent them as service yields intangible and more customers contact.

This paper develops Critical Success Factors and Performance Measures framework using the facts revealed through survey, secondary data specific to Life insurance Industries and detailed contemporary studies reported on Service Quality in insurance Industries and other service sector Industries. This paper identifies nine important variables (areas) and four performance metrics of service quality management in a business unit, providing a synthesis of the Service Quality literature [10]. This research highlighted nine significant success factors as well as four performance indicators for improving service quality. This was made possible by a thorough analysis and collecting of the Service Quality success elements and Measures of Performance literature that is currently being used and must be used in insurance firms to improve service quality. Critical factor operational measurements and Performance Measures were established. It can be utilised to create a profile of company-wide Service Quality improvement and management needs. To check the content validity, construct validity and reliability data was collected as responses from 8 companies consisting of 3 business heads, 4 zonal managers, 8 regional managers, 16 area managers, 16 branch managers, 32 sales managers, 40 agents and 474 customers. SPSS was used for analysis of the data.

The Critical factors and Performance measures used were at all the levels in the organizations to check the Service Quality practices being followed and implemented. These tests proved authentic as well as trustworthy. The paper aims at identification and linking Critical success Factors and Performance measures for Service Quality improvement in Life Insurance sector and designing and testing an instrument affecting Service Quality.

The next section conducts a quick assessment of the Service Quality literature and highlights important aspects and Service Quality Performance Measures that derive from it. Beyond that, the construction of the measurement instrument is detailed. Finally, the measurements and psychometric properties are analysed, and the recommendations and findings are given.

LITERATURE REVIEW

As service operations grew more important than manufacturing in the second part of the twentieth century, the quality discussion changed from product quality to service quality. Regan was the one to highlight the differences between services activities and product manufacture [11]. He asserted that "intangibility,"

"perishability," "heterogeneity," and "simultaneity" made it impossible to fully comprehend services. Those four qualities/characteristics also were mentioned and accepted upon. These four well-documented features, it was believed, should be recognized in order to identify or confess the presence, truth, and actuality in order to fully comprehend service excellence.

Following that, there was an increasing push to use the SERVPERF tool because it was focused on a performance-based methodology of perception alone measures, whereas the SERVQUAL instrument were based on a disconfirmation of perception minus expectancies measures. With the existing SERVPERF tool that was created to measure service quality in a business-to-consumer(B2C) context, it was noted that Service Quality determinants and items needed to be included to evaluate Service Quality in a business-to-business(B2B) environment. [12].

Based on the findings of the research and workshops conducted, it was decided that the Service Quality of Business Support services should be assessed using 15 Service Quality determinants[13] (Table-1)

Table-1 : Service Quality Determinants

Quality determinants	Parasuraman	Zeithaml	Westbrook and Peterson	Gronroos	Research findings
Reliability(R)	*	*	*	*	*
Responsiveness(RE)	*	*		*	*
Assurance(AS)		*		*	*
Competence(C)	*		*		*
Courtesy(CO)	*				*
Credibility(CR)	*		*	*	*
Security(S)					*
Empathy(E)		*		*	*
Accessibility(AV)	*		*	*	*
Communication(CM)	*		*		*
Understanding(UN)	*	*	*		*
Tangibles(T)			*	*	*
Consulting(CN)			*		*
Price	*				*
offerings		*	*		*
Clout	*		*	*	*
Geographics	*				*

Literature review was carried out on factors that related to the improvement in Service Sector. Various items under different factors for both the dependent

(Performance Measures) and independent variables (Critical Success factors) were identified based on past studies carried out for similar nature of problems. The research gap along with the Aims and Objectives of study were based on the literature review.

RESEARCH PROGRESS

Management, Agents, and Customers were the prime field of study since the measure was intended for insurance firms. The company's Service Quality processes, as well as the Managers' and Agents' improvements and customer perceptions, were studied [14]. The disparity between customers' service performance and their experienced was investigated. Because the goal was to create a measurement instrument that could be utilised in very large organisations' service operations, companies with a minimum customer base of ten thousand consumers and at least 20 managers and scores of agents participated. The managers were personally contacted; the agents were advised of the study's significance. Customers were invited to gatherings at local branch offices, wherein their problems and expectations were recorded. Because there was no time constraint, it was possible to accomplish all of them. The objectives of this paper was to discover the relationship across Service Quality Critical Factors and Performance Measures [15]. After the constructs were confirmed to be both reliable and valid, the correlation was assessed. There are 81 organizational criteria for effective Service Quality practices, as well as 9 constructs from those 81 requirements. Organizational requirements were generated from the literatures that represent 4 different Performance Measures with 26 factors of quality and productivity improvement approaches, All eighty-one and twenty-six needs were divided into nine and four categories after a judicious procedure of grouping related requirements. Individual questionnaire was developed using classification. As a consequence of this approach, an instrument with a strong literature framework was developed. Independent variables identified, as the eighty-one needs, while dependent variables were identified as the 26 variables. For this study, the proposed model was considered. [16].

"Service quality management strategies" and "performance improvement approaches" were the independent variables. The consequence of the independent variables are also the dependent variables. To evaluate firm performance, actual data and percentage were used, including the proportion of flawed operations, workforce attrition rates, revenue

of the business in terms of premium generated, and so on. Figure 3 suggests the test research model that the authors propose for Life Insurance sector in India. Table-2 & Table-3 show the Physical significances of Critical factors and Performance measures.

Table-2: Critical Factors (cf's) and Their Physical Significance

Factors to Consider When Optimizing Service Quality	Explanation of Critical Factors
Capacity building and customer focus	Identifying customers' requirements by paying personal attention to their needs and building capacity to fulfill it.
Top management's proactive role	Creating measurement system, commitment to resource allocation, customers feedback analysis based on measurement system.
Continuous skill up gradation and flexible system	Availability of relevant infrastructures of Six Sigma project implementation. Training.
Standard operating procedures	Problem solving ability of workforce. Change management.
Encouragement & Recognition of good work	Encouraging cooperative behavior and attitude.
Strategic process up gradation	Continuous process monitoring and improvement. Strategy definition by senior management. Goal setting by senior management.
Six Sigma implementation	Optimum time for implementation of Six Sigma.
Customer relationship management	Training of resource persons (Six Sigma trainer). Prompt attention to customer's complaints. Involving customers in Six Sigma projects.
Encouraging innovations	Encouraging and innovating in regular job work. Product affordability. SWOT analysis.

A doctrine that combined the characteristics of performance measures was used that ensured process output. Multiple regression test was used to estimate the content reliability and validity, along with factor analysis to check the relationship. [17][18]. Multiple correlations checked the minimum number of input variables that strongly related to the output variables. While the nine characteristics are based on literature, actual research will be used to establish them.. Reliability and validity were demonstrated to be high that we intended to measure. Other crucial variables or other elements could have been produced, however the set of factors established looks to encompass the preponderance of essential aspects of good Servqual Model, as research suggests. Over time,

empirical study will confirm the quality of this set of performance measures.

Table-3: Performance Measures: Physical Significance

Performance Measures for Service Quality Improvement	Explanation of Performance Measures
1 .High Customer satisfaction	Flexible work system, End to end service provision for the customers, Improved returns on investment, Better understanding of customer needs.
2 .Improved Market share	Increased market share ,Better product mix in the market
3. Process efficiency and claim settlement	Cost of work is drastically reduced, optimum utilization of time, Amicable and speedy claim settlement, High process efficiency
4 .Improved regimentations of the company	Robust atmosphere in the company premises

The internal consistency approach is the most common technique for evaluating the consistency of a set of measurement items that reflect constructs. Measurement items that are strongly associated and homogeneous are considered to be highly reliable constructs. Cronbach's alpha (α) is the most generally used internal consistency reliability coefficient [19]. In terms of internal consistency, the subset with the highest reliability coefficient is likely to be the best construct. The minimum value of should be at least 0.6 to ensure internal consistency.. Table 5 and Table 10 shows all that all factors were found having alpha value more than 0.6 which concluded that the scales developed were found to have expected reliability. Tables 4 and 8 show that when the measures were integrated, they had a significant level of Criterion validity. The coefficient found were 0.959 for Critical Factors and 0.914 for Performance Measures. The construct validity needed to measure the extent whereby the elements in a scale all measure the same construct is shown in Tables 6 and 11. The item-score to scale-score relationships are used to decide if an item belongs on the scale as assigned, on another scale, or should be removed. If an item does not correlate highly with any of the scales, it is eliminated. (Eigen value should be more than one for construct validity)

Table-4: Internal Consistency Analysis Results for Quality Management Critical Factors

Critical factors for Service Quality Improvement	Selected item numbers	Number of items	Items deleted	Alpha
Capacity building and customer focus	1-14	14	None	.95
Top management's proactive role	15-25	11		.89
Continuous skill up gradation and flexible system	26-35	10		.91
Standard operating procedures	36-41	6		.87
Encouragement & Recognition of good work	42-45	4		.90
Strategic process up gradation	46-51	6		.88
Six Sigma implementation	52-56	5		.92
Customer relationship management	57-58	2		.94
Encouraging innovations	59-62	4		.93

Table-5: Summary of Separate Factor Matrices for each Construct (Critical Factors)

Construct	Item Loading Range for Factor 1	Eigenvalue	% Variance Explained by Factor 1
Factor 1	.80 - .82	9.05	64.6
Factor 2	.78 - .94	7.95	72.3
Factor 3	.65 - .90	6.28	62.8
Factor 4	.68- .85	5.84	76.4
Factor 5	.69- .92	6.72	74.9
Factor 6	.88 - .95	4.65	77.6
Factor 7	.79- .92	5.69	74.9
Factor 8	.74- .89	6.38	79.4
Factor 9	.79- .92	5.94	68.3

Table-6: Total Variance Explained for Service Critical Factors

Initial Eigenvalues			Total
Total	% of Variance	Cumulative %	
1	8.362	32.162	32.16
2	3.578	13.761	45.92
3	2.359	9.073	54.99
4	1.955	7.519	62.51
5	1.563	6.011	68.52
6	1.130	4.347	72.87

Table-7: Coefficient Alphas for Total Sample (organizations service quality factors)

Analysis	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6	Factor 7	Factor 8	Factor 9
Factor 1	(0.959)								
Factor 2	0.22	(0.96)							
Factor 3	0.401	0.269	(0.929)						
Factor 4	0.271	0.456	0.432	(0.967)					
Factor 5	0.341	0.228	0.282	0.274	(0.961)				
Factor 6	0.263	0.564	0.41	0.351	0.396	(0.935)			
Factor 7	0.466	0.322	0.384	0.374	0.489	0.491	(0.934)		
Factor 8	0.324	0.326	0.431	0.328	0.252	0.151	0.193	(0.999)	
Factor 9	0.401	0.305	0.578	0.274	0.113	0.444	0.294	0.177	(0.89)

Table-8: Internal consistency analysis results for Performance measures of Service Quality

Performance measures for Service Quality Improvement	Selected item numbers	Number of items	Items deleted	Alpha
Capacity building and customer focus	1-7	7	None	.92
Top managements proactive role	8-13	6		.87
Continuous skill up gradation and flexible system	14-17	4		.89
Improved Regimentations of the company	18-21	4		.90

Table-9: Coefficient Alphas for Total Sample (organizations performance measures)

Analysis	Factor 1	Factor 2	Factor 3	Factor 4
Factor 1	(0.914)			
Factor 2	0.393	(0.831)		
Factor 3	0.415	0.437	(0.831)	
Factor 4	0.038	0.376	0.206	(0.799)

Table-10: Summary of Separate Performance Measures

Construct	Item Loading Range for Factor 1	Eigenvalue	% Variance Explained by Factor 1
Factor1	.65 - .89	4.68	66.9
Factor 2	.57 - .84	3.32	55.4
Factor 3	.71 - .90	2.68	67.1
Factor 4	.62 - .87	2.54	63.7

Table-11: Regression Analysis Between CSF's and Performance Measures

Performance measures Factors CSF's Factors	High Customer Satisfaction	Improved market share	Process efficiency and settlement claims	Improved Regimentations of the company
	Model 1	Model 2	Model 3	Model 4
	Constant=0.22	Constant=0.057	Constant=0.075	Constant=0.094
	Significance	Significance	Significance	Significance
Capacity building and customer focus	.000	.173	.184	.448
Top Management proactive role	.407	.308	.162	.000
Continuous skill up gradation and flexible systems;	.471	.000	.145	.099
Standard operating procedures	.245	.224	.117	.056
Encouragement and Recognition of good work	.047	.257	.000	.034
Strategic process up gradation	.051	.245	.058	.469
Six Sigma's implementation in Life Insurance sector	.358	.061	.004	.489
Customer relationship management;	.031	.090	.444	.352
Encouraging Product and Process Innovations	.287	.024	.006	.001

ANALYSIS

The overall Variance is explained in Table-7. Component 1 is accountable for 31.031 percent of the total 100 percent of the 81 key items released at the same time. Components 4 and 9 provide 6.35 and 3.09 percent of 100 percent, respectively. The authors used a total of 9 components, accounting for 77.69 percent of the entire hundred percent. This was based on a literature assessment and the widespread acceptability of the Scree plot for this type of research. Scree plot implies that those components that together account for 50% of the total can be taken as the rest components do not contribute significantly to the study and can be deleted. The authors, on the other hand, elected to increase the percentage to 80%.

Table-7: Total variance explained for Service Critical Factors

Component	Initial Eigenvalues		
	Total	% of Variance	Cumulative %
1	25.135	31.031	31.031
2	10.00	12.352	43.384
3	5.812	7.176	50.560
4	5.144	6.351	56.911
5	4.473	5.522	62.432
6	3.950	4.877	67.309
7	3.271	4.038	71.347
8	2.664	3.289	74.636
9	2.477	3.059	77.695

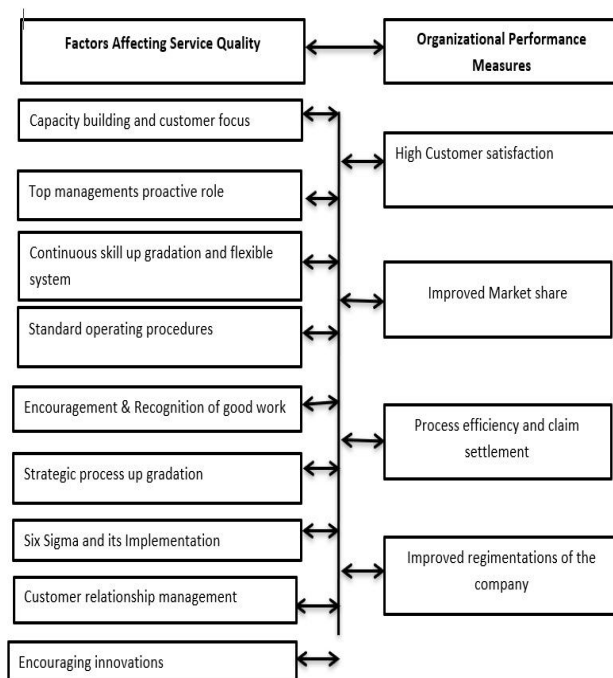


Figure 1: Scree Plot for Critical Factors

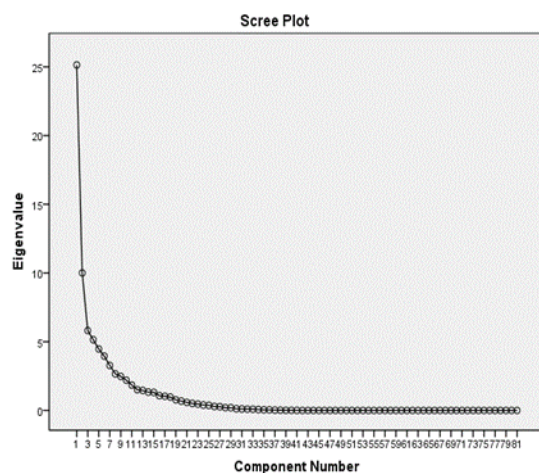


Figure 2: Scree plot for Performance Measures

Representation of the components which included 62 items out of 81 items under consideration (Table-4). The same theory applies for Performance measure also. Analysis shows that the first four components were considered for study constituting 21 out of 26 items which accounted to 62.515 percent of the total 100 percent of all 26 items taken together (Table 8). Table-6 and Table-11 shows that the Factor matrices taken were uni-factorial and were having Eigen values greater than 1. That indicated that all the scales taken in the study in the form of questionnaire had construct validity [21]. SPSS was used to do all the above analysis. If the nine key variables of Service Quality measures

and the four measures of performance in a business unit are significantly positive correlated with Service Quality performance in a business unit, these measures (together) exhibit criterion-related validity [22]. The multiple correlation coefficients computed for the nine measures and a measure of business unit Service quality performance management were used to assess the criterion-related validity of the combined set of nine measures of Service Quality management [23]. From the sample of Managers, Agents, and Customers, four metrics of Service Quality performance were obtained. Each of them was asked to score their division's Service Quality performance over the previous ten years (on a 5-point scale) as well as customer satisfaction with Service Quality over the previous five years [24]. Because it is easier to discover and obtain a subjective measure that is adequate for the wide assortment of interviewees, a psychological measure was adopted over an objective measure. The multiple correlation coefficients for the Service Quality performance measure and the nine quality management measures were 0.9 and 0.8 for 4 Performance measures, correspondingly, demonstrating that they both have a high degree of criterion-related validity when used together.

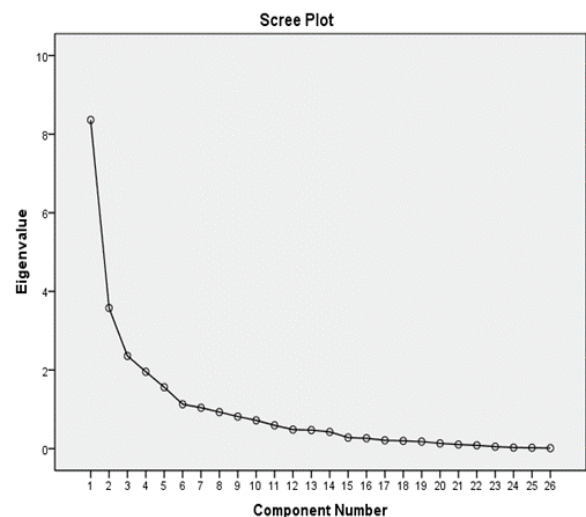


Figure 3: Structural Coefficients of the Derived Service Quality model

Figure 3 defines the relationship between Critical factors and Measures of Performance[20]. All the critical factors and measures of Performance having $P < 0.05$ were considered to have strong relationship. Those factors between $P \geq 0.05$ to 0.3 were considered to have moderate significance and equally moderate relationship and all the factors having significance $P \geq$

0.3 were considered to have weak relationship and were termed as Less Significant. We can clearly see that Critical Factor 1 (Capacity building and Customer focus) have strong relationship with Factor 1 of Performance Measure (High Customer Satisfaction), moderate relationship with Factor 2 (Improved Market Share) and Factor 3 (Process Efficiency and Claim settlement) and weak relationship with Factor 4 (Improved Regimentations of the company). Similarly, all the other Critical Factors and Performance Measures were related to each other. Table 13 summarizes the model summer [25-27]. Table 14 summarizes the Coefficients for the CSF's and Performance Measures. Here the Unstandardized Coefficients were taken as the standard data was ignored following to the different responses given by different respondents. Table 15 shows a sample calculation based on the Model derived from Coefficients derived for Critical Success Factors and Performance Measures.

Table-13: Model summary: Regression analysis between CSF's and Performance measures

Sr. no.	Performance Measures	Relationship with Service Quality Critical Success factors		
		Strong	Moderate	Weak
01	High Customer satisfaction	Capacity building and customer focus, Encouragement & Recognition of good work, Strategic process up gradation, Customer relationship management	Standard operating procedures, Encouraging innovations	Top management's proactive role Continuous skill up gradation and flexible system Six Sigma implementation
02	Improved Market share	Continuous skill up gradation and flexible system Six Sigma implementation in life insurance sector Encouraging Product and process innovations Customer relationship management	Capacity building and customer focus Standard operating procedures Encouragement & Recognition of good work Strategic process up gradation	Top management's proactive role
03	Process efficiency and claim settlement	Encouragement & Recognition of good work Strategic process up gradation Six Sigma implementation in life Insurance Sector Encouraging Product and process innovations	Capacity building and customer focus Top management's proactive role Continuous skill up gradation and flexible system Standard operating procedures	Customer relationship management
04	Improved regimentations of the company	Top management's proactive role Continuous skill up gradation and flexible system Standard operating procedures Encouragement & Recognition of good work Encouraging Product and process innovations		Capacity building and customer focus Strategic process up gradation Six Sigma implementation in life Insurance Sector Customer relationship management

Table-14: Coefficients for the CSF's and Performance Measures

MODEL	R	R Square	Adjusted R square	Std. error of the estimate
M1	1.000 ^a	.999	.999	.02239
M2	.916 ^a	.838	.802	.20112
M3	.979 ^a	.959	.950	.11227
M4	.965 ^a	.930	.915	.17546

Table-15: Model from the Study

MODEL	High Customer Satisfaction	Improved market share	Process efficiency and settlement claims	Improved Regimentations of the company
	Unstandardized coefficients B	Unstandardized coefficients B	Unstandardized coefficients B	Unstandardized coefficients B
Constant	.022	-.057	.075	.094
Capacity building and customer focus(F1)	1.074	-.037	.032	-.004
Top Management proactive role(F2)	-.001	-.023	.039	.821
Continuous skill up gradation and flexible systems(F3)	.000	.586	-.065	.116
Standard operating procedures(F4)	.004	-.037	.032	-.079
Encouragement and Recognition of good work(F5)	-.006	.037	.613	-.095
Strategic process up gradation(F6)	-.010	.060	.063	-.020
Six Sigma's implementation in Life Insurance sector(F7)	.003	.100	.065	-.009
Customer relationship management(F8)	-.015	.080	.002	-.024
Encouraging Product and Process Innovations(F8)	.005	.173	.073	.243

EMERGENT IMPLICATIONS

The four categories of practitioners, professionals, academicians, and businesses judged this research to be important. For all Measures of Organizational Performance, the study's formative assessment will be centred on these four categories.

Professionals

Experiential Top and Middle Management Professionals should demonstrate their commitment to Service Quality practises and make informed decisions in

order to motivate other connected workers to engage in the Service Quality project [28]. They must teach both field and office personnel on Service Quality Improvement strategies that will be blended into all commercial activities inside the company and will improve critical-to-quality workflows. Professionals must focus on three qualities of services to gain a better awareness of how customers perceive and evaluate service quality: (1) search attributes, (2) experience attributes, and (3) credibility attributes. They need to understand the organizational gaps which fall under their responsibility.

Practitioners

To fill service gaps and improve those service dimensions that contribute to service quality management, Service Quality practitioners must define the level of boosting service quality in specific service areas. To offer flexibility to the service delivery process, practitioners should comprehend and realise market segmentation, customer preferences, and customer wants, and develop accurate functionality [29][30]. They must evaluate the performance of service operations in terms of time, cost, and profitability, as well as identify components and processes where deviations be reduced, minimised, or eliminated in order to set client expectations.

Industry

The companies can shape and contribute to customers' expectations by ensuring consistency in services provided which in long term will lead to its acceptability by the customers. A key to strong service performance for ensuring consistency in services from the companies would be their knowledge and competence supported by reliable and assured information systems. It is necessary to frame an appropriate organisational structure, system of standards, development and skills plans, as well as their evolution and results utilisation, linkage of analytical methods and innate technology, methods for measuring and comprehending effects for controlling service quality, temporary and permanent measures for evaluation of effective and efficient implementation of service quality practises, and employee involvement.

Acamedicians

Academicians have turned their attention to service quality practises. The findings of this study will aid academicians in comprehending the policy requirements of businesses. Organizational ties, practises that must be standardised for a certain industry as understanding and exploiting Human Resources is currently at a standstill.

CONCLUSIONS

Policy and decision makers in an organisation could use such measures to analyse the status of Service Quality Management and direct improvements in the Service Quality area. This paper will not only help managers and agents understand their customers' needs and requirements (perceptions and expectations) about the services and the quality of those services, but it will also encourage them to implement practises that they previously thought were unimportant for running their business. Also, if all of the Service Quality important aspects are examined by the companies for

implementation to improve customer happiness, the customers would realise the difficulties faced by the companies in meeting their expectations. The initial results of the measures were not encouraging, as the gestation period in the life insurance company is generally 6 to 12 months, but they demonstrated a phenomenal return over time and revealed customers' faith and trust in the companies. To verify the findings in order to pursue them further. Companies must conduct extensive additional research in service areas to confirm the results for future improvement and to expand their consumer base. The sample size should be increased. The authors hope that by reading this article, businesses will gain a better grasp of how to monitor and enhance service quality.

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