Prioritization of Customer Service Quality Dimensions in Indian Cooperative Banks: RIDIT & Grey Relational Approach

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Received: September 8, 2020 Accepted: November 10, 2020 Online Published: May 6, 2021

doi:10.5430/rwe.v12n3p42 URL: https://doi.org/10.5430/rwe.v12n3p42

Abstract

The principal objective of this research paper is to Prioritise Customer Perceived Service Quality (CPSQ) in the proportion of service quality for Indian cooperative banking sector. In order to understand the cooperative banking customer's perspective and their relative significance, thirty three service quality dimensions are considered and deeply analysed. In addition, Questionnaire of Customer Perceives Service Quality (CPSQ) is also collected and implemented. Here, the necessary data is collected in the months of November 2019 and January 2020 respectively by using convenience sampling method. The data is collected from the state of Utter Pradesh, India. The reason behind choosing Utter Pradesh is, it agriculturally strong and has higher population (around 20 Crores) in India. Here, to prioritise the CPSQ scale, we have used Relative to an Identified Distribution (RIDIT) & Grey Relational Analysis (GRA) and later we also compared the results to check the reliability of these ranking methods. To perform this prioritization we have used seven factors such as Efficiency (EFF); Infrastructure (INF); Effectivenes (EFT); Timely Services (TMS); Bank Image (BIG); Safety & Security (SS) and Up to date technology (UDT). Later, GRA and RIDIT analysis are also conducted to distinguish the prioritization of service quality items. The present study and analysis helps to validate the cooperative banks service quality in general by ranking the service quality dimensions, which are specifically important in Indian banking sector to improve and enhance its quality. Finally, the obtained results shows that, it is apparent that managers of cooperative banks in Indian scenario must focus more on cooperative bank quality dimensions to improve the reliability of their customer's perception of cooperative banking in terms of better performance and service quality.

Keywords: Customer Perceived Service Quality (CPSQ), cooperative banks, prioritizations, GREY analysis, RIDT analysis, Uttar Pradesh, India

1. Introduction

Usually, the unsatisfied customer of any existing service provider changes their service environment at any time (Garland, 2002). It happens to be permanent and sometimes limited (Colgate and Hedge, 2001). In recent times, Indian banking industry is engaged with big number of small banks particularly with cooperative branches. Particularly, by considering the Indian cooperative banking scenario, it would be permanent most of the time. Indian cooperative bank customers generally maintain single accounts to their bank. It indicates that, if customer moving from existing one to new one then, it may causes to lose the customer base. In fact, detecting the customers who permanently moved is not much difficult because they close all their existing account and open their new service provider (Bolton and Bronkhorst, 1995; Boote, 1998). But where as in Indian banking scenario it is very difficult to shift from one cooperative bank to another cooperative bank. So, the customers in the current scenario shift their service provider from cooperative bank to other private sector banks. Here, there is a need of attention to focus and indentify the customer's preferences and requirements by the existing service providers.

In this context, the present research study examines various service quality dimensions in Indian cooperative banks perspective. The resultant analysis may help the banking service provider to identify the various service quality dimensions which are necessarily important in terms of customer perception. The proposed research work will provide useful insights to service providers of the cooperative banks, policy makers, managers, marketing

researchers, also to the top management to frame useful policies for their customers, which may minimise the customers' moment from banks.

2. Literature Review

The theory of customer service quality refered as, to what extent the customer's service expectations are fulfilled by the service provider (Parasuraman et al., 1985). SERVQUAL is one of the highly accepted theories of service quality. SERVQUAL is the multi-item dimensional instrument that captures the gap between the customer expectation and customer perception among multiple service quality determinants (Butt and de Run, 2010; Akdag and Zineldin, 2011; Azam et al., 2012; Choudhury, 2013; Panda and Kondasani, 2014). Parasuraman, Zeithaml and Berry (1988) defined that, SERVQUAL can be administered across varied service contexts to analyse and fill the gap in service quality across five factors namely "tangibility, reliability, responsiveness, assurance, and empathy". The researchers examined the argument of the five dimensional structure of the service quality theory, and debated that service quality is appropriate, and it is important to scrutinise the nature of service quality across numerous services settings (Cronin and Taylor, 1992; Bouman and van der Wiele, 1992; Gagliano and Hathcote, 1994; Ekinci and Riley, 1999).

In previous studies, few of various researchers have identified various service quality dimensions that determined customer satisfaction in the banking sector and also identified a lot of differences in the way consumers observe services across different regions and cultures specially in developed nations. One of the important research in this scenarios, such as Levesque and McDougall (1996) highlighted that convenience and competitiveness of the institution were the two most important dimensions that are likely to effect the overall satisfaction levels of specific institution of customer. In developed nations like Malaysia and United Arab Emirates (UAE) some banks identified few key services which are also satisfied by the customers such as fast and well-organized service, sociability of bank employees /personel, secrecy/confidentiality, and rapid transaction (Amin and Isa, 2008). The service provider's ability to deliver the same key services consistently and definitely will impact the level of customer satisfaction in any organisation. Due to this reason, each service provider needs to maintain and expand their customer base to succeed in their respective business and banking. In the recent times, the scope of Indian banking sector is prominently increasing each year and also adjacently lot more players are entering into this sector including digital payments and as well as instant loan approval agencies. So, it is more important for Indian banking sector to understand the evaluation criteria by the modern consumers and to have a proper system by which consumers should stick with them for long term through high satisfaction as well. By taking those points in to consideration, our research is highly focused and have taken the followed factors for prioritising customer service quality dimensions are Efficiency (EFF); Infrastructure (INF); Effectiveness (EFT); Timely Services (TMS); Bank Image (BIG); Safety & Security (SS); Up to date technology (UDT).

Usually, in the banking sector organisation image is an attitude that replicates various product characteristics of an organisation. In the perspective of the organisation, it's image is the close link which will come as a first thought when consumers hear the title of its organization (Flavian et al., 2004; Nguyen and Leclerc, 2011). According to kennedy (1997) the image of any organisation has two principal modules: functional and emotional. The functional module is related to physical dimensions that can be identified and measured in easy way, while the emotional module is associated with the psychosomatic way. However, many researches and researchers has agreed that, the organisation image is the outcome of a process; therefore, company image is the outcome of cumulative procedure by which customers match and contrast the various elements of organisation (Bravo et al., 2009; Nguyen and LeBlanc, 2001). According to Kang and James (2004), organisation image is observed as a strainer in terms of a customer's perception of service quality. Thus, organisation image is the result of all experiences, impressions, beliefs, feelings, and awareness that customers have about a company (Hsiong-Ming et al., 2011). Based on all the literature studies, we have considered bank image is one of the important factors in our scenario.

3. Respondents Profile

Here, data was collected from the customers of Indian cooperative banks, where different locations of largest (Population wise) state i.e., Uttar Pradesh. The profile of the respondents is listed in (Table-1). Out of the complete questionnaires filled in, 72.9% were males and 27.1% females. The point to notice here is, the percentage difference between male and female respondents is high; the traditional reason behind this is males have a dominant role in the rural India especially in the matters of financial and banking sector. Later, by considering the educational qualification, 21.78% of the respondents went to primary level, 39.39% were at secondary level, around 19% were graduates and post graduates and above qualification. This significantly showing that 40% of our research questionnaire was filled by the educated customers.

Table 1. Demographic profile of the samples

Demographic Characteristics	Variables	Frequency	%
Gender	Male	381	72.9
	Female	141	27.1
Respondent Education	Primary education	115	21.78
	Secondary education	208	39.39
	Graduates	101	19.13
	> post-graduation	104	19.70
Income Range of the Respondents	<Rs. 99,000	298	56.44
	Rs. 1,00,000 to 4,99,999	168	31.82
	>Rs. 5,00,000	62	11.74
Qualification	Primary (up to 5th Standard) level	115	21.78
	Secondary (6th to +2) level	208	39.39
	Graduation	101	19.13
	Above Graduation (Professional)	104	19.70

4. Data Analysis

4.1 Analysis of RIDIT

In the year of 1958, Bross was proposed RIDIT analysis and applied the same in numerous business and behaviour research performance studies. The term "RIDIT" is termed as "Relative to an Identified Distribution" and is a likelihood transformation based on some empirical distributions that is taken as a reference class. RIDIT analysis is "distribution free", which means no assumption about the distribution of the population of the research sample (Fleiss et al. 2003). RIDIT is a procedure aimed to support in the investigation of samples or data containing items that are more than characterising categorisations and are well-arranged and that do not reach the standards of refined measurement systems such as those meeting the criteria for equalit-interval or ratio scales (Panda & Sreekumar 2012). RIDIT analysis is very useful statistical method and analysis for items comprising ratings on a 3 or more point scale, indices made up of a number of items and ratings based on universal ratings (Beder& Heim, 1990).The RIDIT number is assigned to a certain set of the variable that is equivalent to the fraction of the reference group which have a lower score on that specific item, plus one-half of the proportion of individuals in the category itself. Then RIDIT is a "weight assigned to a response category that reflects the probability of that category appearing in the reference distributions". A RIDIT has a range that approaches the limits of 0.00 at one end and 1.00 at the other end. In RIDIT analysis, researchers compute an average RIDIT value for a group rather than the proportion of respondents giving each of the responses in the dependent item.

Table 2. RIDITs for service quality items

Items	7	6	5	4	3	2	1	Total Sample
EFF-1	19	312	104	0	35	52	0	522
EFF-2	19	220	154	0	78	51	0	522
EFF-3	16	285	120	0	46	55	0	522
EFF-4	12	270	119	0	67	54	0	522
EFF-5	12	271	134	0	50	55	0	522
EFF-6	147	221	91	43	20	0	0	522

INF-1	151	201	94	47	26	3	0	522
INF-2	133	199	108	52	24	3	3	522
INF-3	147	233	82	39	20	1	0	522
INF-4	102	167	114	67	54	12	6	522
INF-5	127	214	103	44	30	1	3	522
EFT-1	108	284	71	52	7	0	0	522
EFT-2	112	287	60	51	10	0	2	522
EFT-3	102	288	73	46	9	4	0	522
EFT-4	79	235	89	104	12	3	0	522
EFT-5	107	285	81	38	8	2	1	522
TMS-1	150	278	54	27	12	1	0	522
TMS-2	125	288	67	36	6	0	0	522
TMS-3	187	253	56	23	3	0	0	522
TMS-4	115	296	74	32	5	0	0	522
TMS-5	135	307	47	30	3	0	0	522
BIG-3	133	201	87	71	23	3	4	522
BIG-4	154	180	55	103	24	4	2	522
BIG-2	121	223	80	83	12	0	3	522
BIG-1	145	211	60	83	19	3	1	522
SS-1	133	177	106	56	37	10	3	522
SS-2	116	185	115	64	35	4	3	522
SS-3	114	168	118	68	39	9	6	522
SS-4	140	167	123	50	29	10	3	522
UDT-1	48	231	34	0	49	131	29	522
UDT-2	107	264	21	0	38	82	9	522
UDT-3	127	234	32	0	40	82	7	522
UDT-4	73	286	42	0	51	60	10	522
Fi	3516	7921	2768	1309	921	695	95	**17225**
1/2 Fi	1758	3960.5	1384	654.5	460.5	347.5	47.5	
Rj	1758	7476.5	12821	14859.5	15974.5	16782.5	17177.5	
ri	**0.10211**	**0.4340494**	**0.7443252**	**0.862671**	**0.9274021**	**0.97432**	**0.997243**	

Table 3. Comparison data sets and prioritisation for CPSQ items

Items	7	6	5	4	3	2	1	Priority Rating	Rank
EFF-1	0.004	0.259	0.148	0.000	0.062	0.097	0.000	0.571	28
EFF-2	0.004	0.183	0.220	0.000	0.139	0.095	0.000	0.640	33
EFF-3	0.003	0.237	0.171	0.000	0.082	0.103	0.000	0.596	29
EFF-4	0.002	0.225	0.170	0.000	0.119	0.101	0.000	0.616	31
EFF-5	0.002	0.225	0.191	0.000	0.089	0.103	0.000	0.610	30
EFF-6	0.029	0.184	0.130	0.071	0.036	0.000	0.000	0.449	7
INF-1	0.030	0.167	0.134	0.078	0.046	0.006	0.000	0.460	11
INF-2	0.026	0.165	0.154	0.086	0.043	0.006	0.006	0.485	16
INF-3	0.029	0.194	0.117	0.064	0.036	0.002	0.000	0.441	6
INF-4	0.020	0.139	0.163	0.111	0.096	0.022	0.011	0.562	27
INF-5	0.025	0.178	0.147	0.073	0.053	0.002	0.006	0.483	15
EFT-1	0.021	0.236	0.101	0.086	0.012	0.000	0.000	0.457	10
EFT-2	0.022	0.239	0.086	0.084	0.018	0.000	0.004	0.452	8
EFT-3	0.020	0.239	0.104	0.076	0.016	0.007	0.000	0.463	12
EFT-4	0.015	0.195	0.127	0.172	0.021	0.006	0.000	0.537	25
EFCT-5	0.021	0.237	0.115	0.063	0.014	0.004	0.002	0.456	9
TMS-1	0.029	0.231	0.077	0.045	0.021	0.002	0.000	0.405	3
TMS-2	0.024	0.239	0.096	0.059	0.011	0.000	0.000	0.430	4
TMS-3	0.037	0.210	0.080	0.038	0.005	0.000	0.000	0.370	1
TMS-4	0.022	0.246	0.106	0.053	0.009	0.000	0.000	0.436	5
TMS-5	0.026	0.255	0.067	0.050	0.005	0.000	0.000	0.404	2
BIG-3	0.026	0.167	0.124	0.117	0.041	0.006	0.008	0.489	18
BIG-4	0.030	0.150	0.078	0.170	0.043	0.007	0.004	0.482	14
BIG-2	0.024	0.185	0.114	0.137	0.021	0.000	0.006	0.487	17
BIG-1	0.028	0.175	0.086	0.137	0.034	0.006	0.002	0.468	13
SS-1	0.026	0.147	0.151	0.093	0.066	0.019	0.006	0.507	21
SS-2	0.023	0.154	0.164	0.106	0.062	0.007	0.006	0.522	23
SS-3	0.022	0.140	0.168	0.112	0.069	0.017	0.011	0.540	26
SS-4	0.027	0.139	0.175	0.083	0.052	0.019	0.006	0.500	19
UDT-1	0.009	0.192	0.048	0.000	0.087	0.245	0.055	0.637	32
UDT-2	0.021	0.220	0.030	0.000	0.068	0.153	0.017	0.509	22
UDT-3	0.025	0.195	0.046	0.000	0.071	0.153	0.013	0.503	20
UDT-4	0.014	0.238	0.060	0.000	0.091	0.112	0.019	0.534	24

Since the W value is 927.9758821is significantly more than $\chi^2(33\text{-}1) = 46.194$, it can conclude that the responses about the RIDIT measure items between the different samples are statistically different.

4.2 Grey Relation Analysis (GRA)

Grey System was first developed by Deng (1982). GRA is much suitable for solving multi objective optimization problems. In modern machining procedure, optimization technique is used to find the optimal values of the response parameter and the correlation that effect on response variable (Phimoolchat and Muttamara2020). The rationality of traditional statistical exploration methods is based on assumption such as the distribution of population and variations of samples. The term "Grey" stands for poor, incomplete and uncertain, and is especially used in relation to the concept of information (Huang, 2010). Grey Relational Analysis (GRA), is a part of Grey Theory, and a kind of method by which the relational degree of every factor in the system can be analyzed (Meng&Kees, 2007). GRA indicates the relational degree between two measurement sequences by using the discrete measurement method to measure the spaces (Huang, 2010). GRA is used to form a level and recommend a finest alternative on a group of choices (Debata et al, 2010). Grey Relation Analysis uses existing information from the Grey system to vigorously match influence dimensions quantitatively and it is constructed on the level of comparison and inconsistency among total dimensions to establish their structured relation.

Table 4. Grey Relational Grade and ranking of customer perceived service quality in cooperative banks

EFF-1	1	0.75	1	1	0.75	0.75	0.75	-	-	0.75	0.75	0.75	0.75	0.75	0.75	0.6703	28
EFF-2	1	1	1	1	1	0.75	1	-	-	0.375	0.75	0.75	0.75	0.75	0.75	0.6302	32
EFF-3	0.75	0.75	0.75	0.75	0.75	0.75	0.75	-	-	0.42857	0.75	0.75	0.75	0.75	0.75	0.6553	29
EFF-4	0.75	0.75	0.75	0.75	0.75	0.75	0.75	-	-	0.42857	0.75	0.75	0.42857	0.75	0.75	0.6415	31
EFF-5	0.75	1	0.75	0.75	0.75	0.75	1	-	-	0.42857	0.42857	0.75	0.75	0.75	0.75	0.6469	30
EFF-6	0.75	1	0.75	0.75	0.75	0.5	0.75	-	-	1	0.75	0.75	1	0.75	0.6	0.7613	7
INF-1	0.75	0.75	0.75	1	1	0.75	0.75	-	-	1	0.75	0.6	0.5	0.42857	0.42857	0.7546	8
INF-2	1	1	0.75	0.6	0.75	0.6	0.75	-	-	1	0.6	1	0.5	0.75	0.5	0.7384	16
INF-3	0.75	0.75	0.75	0.75	0.75	0.75	0.75	-	-	0.75	0.75	0.75	0.75	0.75	0.6	0.7651	6
INF-4	1	0.75	0.75	0.6	1	0.75	0.75	-	-	0.6	0.6	1	0.5	1	0.6	0.6873	27
INF-5	0.75	1	0.75	0.75	0.42857	0.75	0.75	-	-	1	0.75	0.6	0.75	0.75	0.6	0.7386	15
EFT-1	0.75	0.5	0.75	0.75	0.75	0.5	0.75	-	-	1	0.75	0.75	0.75	1	0.5	0.7521	11
EFT-2	0.75	0.75	0.75	0.75	0.5	0.75	1	-	-	1	0.75	0.75	0.75	0.75	0.75	0.7542	9
EFT-3	0.75	0.5	0.6	0.6	0.75	0.5	0.75	-	-	1	0.75	0.75	0.75	0.75	0.75	0.7474	13
EFT-4	0.5	0.5	0.75	0.75	0.5	0.5	1	-	-	0.75	0.75	0.75	0.75	0.75	0.75	0.7029	24
EFT-5	0.75	0.75	0.6	0.6	0.75	0.5	0.75	-	-	1	0.6	0.75	0.75	0.75	0.75	0.7526	10
TMS-1	0.75	0.75	0.75	0.75	0.75	0.75	0.75	-	-	1	0.75	0.75	0.75	0.75	1	0.7853	2
TMS-2	0.5	0.75	0.75	0.75	0.75	0.75	0.75	-	-	0.75	0.75	0.75	0.75	0.75	1	0.7697	4
TMS-3	0.75	0.75	0.75	0.75	0.75	0.75	0.75	-	-	1	0.75	0.75	0.75	1	1	0.8106	1
TMS-4	0.75	0.75	0.6	0.6	0.75	0.75	1	-	-	1	0.75	0.6	0.75	0.75	1	0.7654	5
TMS-5	0.75	0.75	0.75	0.75	0.75	0.75	0.75	-	-	1	0.75	0.6	0.75	0.75	1	0.7849	3
BIG-3	0.5	0.75	1	1	0.75	0.5	0.75	-	-	0.5	0.5	0.5	0.75	1	0.75	0.7352	18
BIG-4	0.42857	0.75	0.75	0.75	0.75	0.5	0.75	-	-	0.5	0.5	0.5	0.42857	0.75	0.75	0.7394	14
BIG-2	0.6	0.75	0.75	0.75	0.75	0.5	0.75	-	-	0.75	0.75	0.5	0.42857	1	1	0.7354	17
BIG-1	0.6	0.75	0.75	0.75	0.75	0.5	0.6	-	-	1	0.75	0.5	0.42857	0.75	1	0.7478	12
SS-1	1	0.75	0.75	0.6	0.375	0.75	0.6	-	-	0.75	0.75	1	0.75	0.75	0.5	0.7241	20
SS-2	0.75	0.75	0.75	0.6	0.375	0.75	0.6	-	-	0.75	0.75	0.75	0.75	0.75	0.5	0.7150	21
SS-3	1	0.75	1	0.6	0.6	0.75	0.75	-	-	1	0.5	0.75	0.75	0.75	0.5	0.7029	25
SS-4	1	0.75	0.75	0.6	0.5	0.75	0.75	-	-	0.75	0.75	0.75	0.75	1	0.6	0.7303	19
UDT-1	1	0.375	0.6	0.6	0.75	0.75	0.75	-	-	0.75	0.42857	0.75	0.75	0.75	0.375	0.6158	33
UDT-2	0.75	1	0.75	0.75	0.75	0.75	1	-	-	0.75	0.42857	0.75	0.75	0.75	0.75	0.7049	23
UDT-3	1	1	1	1	1	0.375	1	-	-	0.375	0.42857	0.75	0.75	0.75	0.75	0.7125	22
UDT-4	0.75	0.75	0.75	0.75	0.75	0.75	0.75	-	-	0.375	0.42857	0.75	0.75	0.75	0.75	0.6904	26

5. Managerial Implications and Conclusion

In this work, we have sorted the obtained research outcomes by RIDIT and GRA as well as compared the positions of the questionnaire for their degree of importance from customers perspective. Here, we have observed that there is

a positive connection between two methods i.e., RIDIT and GRA, both which are used to prioritize the service quality items in cooperative banks in India. The remarkable observation from the Table VI shows that 15 out of 33 ranks are assigned by the two techniques is matched and there is no significant difference with the rest of the ranks. Most of the times, Indian cooperative bank customers has given more importance to timeliness item with "Banker follows up in a timely manner to customer requests and problems". Indian cooperative banks have their image for late transactions or delayed activities. So, customers willingly expect to give more importance for timely services by the service providers. The second rank given by customers is "banks send and deposit on time money delivery" for their transactions as well as "when it comes to providing services as per promised time" with two methods respectively. The highest ranked scaled item includes the timely services offered to the customer by the cooperative bank managers.

The lowest ranked (RIDIT ranking 33) scaled items are "Cooperative bank employees manage the Speed of services" and (Grey ranking 33) "Customers and banking personnel's are interested to use/provide new electronic bank services. The slightest important dimension as per the positions obtained by the RIDIT & GRA methods agrees to the effectiveness of the services and up to date technology. Since the customers are highly expecting the service providers to update their services based on present technology it is necessary for the service providers to focus and learn the same to increase the number of transactions. Service quality is an emerging strategic weapon in cooperative banking sector in India and it has also become a noteworthy tool to advance reasonable benefit in the sector. Due to high competition in Indian banking industry it is very much necessary for both the service providers and managers to differentiate themselves constantly by evaluating the dimensions of perceived service quality. Hence, by achieving better service quality ensures cooperative bank service providers to stay on top of the competition.

In this paper, we have applied a two way approach i.e RIDIT and GREY analysis to rank the service quality dimensions. The obtained results shows that there is a positive correlation between both the methods. The analysis reveals the positive correlation of 0.97291 between RIDIT and GREY methods which is significant at p=0.05. The tests confirm, that there is no significant variance between RIDIT and GRA methods of ranking. This analysis shows that, the specific dimensions which are acknowledged as important may help for further study.

The present work is contributing few research findings which can be helpful to the literature study on cooperative bank service sector. It analysed the service quality by prioritising the cooperative banking service quality dimensions which are important in Indian banking sector for its own reasons. From this study, it is necessary that, the managers of cooperative banks in Indian scenario have to pay more attention to all service dimensions in order enhance their client's perception of banking service quality. The positive correlation between the rankings of service quality dimensions helps the managers to understand the necessity of to developing appropriate policies to improve the different aspects of their banking service quality.

Table 5. Grey values and ranking

Items	Grey Values	Rank
EFF-1	0.67031	28
EFF-2	0.63018	32
EFF-3	0.65534	29
EFF-4	0.6415	31
EFF-5	0.64694	30
EFF-6	0.76134	7
INF-1	0.75463	8
INF-2	0.73843	16
INF-3	0.76513	6
INF-4	0.68734	27
INF-5	0.73857	15
EFT-1	0.75211	11
EFT-2	0.75422	9

EFT-3	0.74743	13
EFT-4	0.70291	24
EFT-5	0.75261	10
TMS-1	0.78528	2
TMS-2	0.76968	4
TMS-3	0.8106	1
TMS-4	0.76541	5
TMS-5	0.78493	3
BIG-3	0.73518	18
BIG-4	0.73937	14
BIG-2	0.73543	17
BIG-1	0.7478	12
SS-1	0.72406	20
SS-2	0.71504	21
SS-3	0.70285	25
SS-4	0.73032	19
UDT-1	0.61579	33
UDT-2	0.67031	23
UDT-3	0.63018	22
UDT-4	0.65534	26

Table 6. Comparision of RIDIT & Grey Ranking

Items	RIDIT Values	Rank	Grey Values	Rank
EFF-1	0.570681203	28	0.67031	28
EFF-2	0.640006284	33	0.63018	32
EFF-3	0.595600821	29	0.65534	29
EFF-4	0.616362934	31	0.6415	31
EFF-5	0.610246846	30	0.64694	30
EFF-6	0.44885886	7	0.76134	7
INF-1	0.460158206	11	0.75463	8
INF-2	0.485379722	16	0.73843	16
INF-3	0.441259808	6	0.76513	6
INF-4	0.56188379	27	0.68734	27
INF-5	0.483255537	15	0.73857	15
EFT-1	0.45687809	10	0.75211	11
EFT-2	0.451967814	8	0.75422	9
EFT-3	0.462986337	12	0.74743	13
EFT-4	0.5365495	25	0.70291	24
EFCT-5	0.456056476	9	0.75261	10
TMS-1	0.405294363	3	0.78528	2

TMS-2	0.429605681	4	0.76968	4
TMS-3	0.370125897	1	0.8106	1
TMS-4	0.435896824	5	0.76541	5
TMS-5	0.403595749	2	0.78493	3
BIG-3	0.488632312	18	0.73518	18
BIG-4	0.482353625	14	0.73937	14
BIG-2	0.487376619	17	0.73543	17
BIG-1	0.467787787	13	0.7478	12
SS-1	0.507006823	21	0.72406	20
SS-2	0.521637055	23	0.71504	21
SS-3	0.540168827	26	0.70285	25
SS-4	0.500171997	19	0.73032	19
UDT-1	0.636913401	32	0.61579	33
UDT-2	0.509117668	22	0.70486	23
UDT-3	0.502524787	20	0.7125	22
UDT-4	0.533675825	24	0.6904	26

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Appendix

Factor Name	Item	Item Code
Efficiency (EFF)	Queuing time at the bank is minimal	EFF-1
	Cooperative bank employees manage the Speed of services	EFF-2
	Bank is having skilful and experienced workers and staff individuals to handle clients easily	EFF-3
	Bank representatives and staff carry out their responsibility productively till the closing hours	EFF-4
	The current banking administration system is user friendly to the customers, so that employees administer perfectly	EFF-5
	Turnaround time for receiving bank services is adequate	EFF-6
Infrastructure (INF)	Modern equipment is used in this bank	INF-1
	Bank's Inside environment is visually appealing decoration	INF-2
	Layout of the bank furniture is well planned	INF-3
	Bank has adequate parking facilities	INF-4

	Bank building is attractive	INF-5
Effectiveness (EFT)	Bank offers friendly and personalised services to customers	EFT-1
	Customer retention capability is better than their competitors	EFT-2
	Bank employee's ability to acquire new customers and retaining present customers is better than other banks	EFT-3
	if required, bank employees will make personal sacrifices to serve their customers	EFT-4
	All departments in the bank are well cooperated to complete tasks more efficiently	EFT-5
Timely Services (TMS)	Providing services as per the promised time	TMS-1
	Bank services are accurate even at the first attempt	TMS-2
	Banker follows up the customer requests and problems at time to time	TMS-3
	The manner and method of communication between banker and customer are timely and accurate	TMS-4
	Bank send and deposit on time money delivery	TMS-5
Bank Image (BIG)	Cooperative bank have competent and efficient staff reputation	BIG-3
	Have an account in this bank is a status symbol for customers	BIG-1
	Cooperative banks have positive image in the customer mind	BIG-2
	Cooperative bank have competent and efficient staff reputation	BIG-3
	Cooperative banks offer attractive products and services	BIG-4
Safety & Security (SS)	The bank I am using the services is safe	SS-1
	Bank is offering safety and security for all of its financial transactions	SS-2
	Personal and financial data are secured in this bank	SS-3
	Bank Employees desk and table are comfortable for the customers	SS-4
Up to date technology (UDT)	Customers and banking personnel's are interested to use/provide new electronic bank services	UDT-1
	Latest technology of banking gives customer a better overview of finances	UDT-2
	Trouble-free cash dispenser are attached with the bank	UDT-3
	Bank regularly collect and utilise customer information to provide customised products to their customers	UDT-4