

CRM FACTORS AFFECTING ON INTERNET BANKING SERVICES: A STUDY

RAMBABU LAVURI

MBA (UGC-JRF),MA,PGDSRD-NIRD,(PH.D)
DEPARTMENT OF BUSINESS MANAGEMENT
OSMANIA UNIVERSITY
HYDERABAD, TELANAGANA, INDIA

ABSTRACT: CRM is an important tool to every Indian banks and is used as a business strategy to create, retaining both new and existing customers with long term profitability towards banks, and also helps to maintaining sustainable relationship between banks and customers. This research paper evaluates main CRM factors like Customer acquisition, Customer value evaluation, Customer Response, Customer knowledge and Customer information systems affecting on internet banking services. For conducting customer's survey with 427 customers likert scale based questionnaire was developed. Collecting data was analysed using principle component using SPSS 20.0. and tools like Percentage analysis, ANOVAs and Factor analysis used. The results of the ANOVAs study showed that demographical variables significant different with internet banking services and CRM factors, and CRM factors significant different with internet banking services, and results of factor analysis indicates that, all factors like Customer acquisition, Customer value evaluation, Customer Response, Customer knowledge and Customer information systems with their respective dimensions found significant with internet banking.

Keywords: CRM, Customer acquisition, Customer value evaluation, Customer Response, Customer knowledge, Customer information systems

1. INTRODUCTION

Businesses today are using the Internet as a genuine resource for gaining competitive advantage. On-line customization is one useful customer relationship management strategy adopted by e-businesses to add customer value and improve sales of their product and services using the Internet. People are inclined to believe those who have similar interests and living habits. In other words, determining the buying habit of customers on the Internet can benefit both customers and the e-business. From a customer's point of view, identifying customers with similar e-banking product buying habits may help that customer make their decision about a new product. On the other hand, knowing the buying habit of customers can help e-business practitioners to better package their products in an Internet banking environment and design personalized services oriented towards each individual customer. In recent years the customer relationship management area has usefully employed the data mining technology for developing customer-centric strategies. Customer relationship management (CRM) is a planned and sustained interaction with customers to assess their needs through technological platforms. It involves using technology to ascertain the level of customers' satisfaction and organise a company response to sales, marketing and customer service . CRM is a customer-oriented centric that features service response based on the formation of individualized relationships with customers, with the aim of improving customer satisfaction and maximizing profits; identifying the most profitable customers and providing them the highest level of service. Customer Relationship Management practices provides a company with the information necessary to know their customers understand and identify customer needs and effectively build relationships between the company, its customer base, and distribution partners. CRM is an enterprise wide approach to understanding and influencing customer behaviour through meaningful communication to improve customer acquisition, customer retention, customer loyalty, and customer profitability. CRM can be viewed as an application of one-to-one marketing and relationship marketing, responding to an individual customer on the basis of what the customer says and what else is known about that customer. It is a management approach that enables organisations to identify, attract, and increase retention of profitable customers by managing relationships with them , and further identifying strategically significant customers . There are three main elements of CRM strategic capabilities and they are technology infrastructure, human analytics and business architecture. Strategic capability refers to a business' ability to successfully employ competitive strategies that allow it to survive and increase its value over time. Strategic capability focuses on the organization's assets, resources and market position, projecting how well it will be able to employ strategies in the future.

2. REVIEW OF LITERATUR

Customer Relationship Management is commonly perceived as database marketing which focuses on the relationship between promotional marketing and database management tools. There are numerous definitions of CRM. According to Eckerson et al., CRM is the application of technology that interfaces on one to one relationships with customers and a company through integrating database knowledge with the sustained customer service delivery and customer loyalty. Managing a successful CRM programme requires an integrated and balanced approach to technology, process, and people. CRM or Customer Relationship Management is both a process and an initiative that belongs to all the departments of an organisation .

It shows the comprehensive strategy and process of acquiring, retaining, and partnering with selective customers to create superior value for the company and the customer. Customer Relationship Management is a term for the methodologies, technologies and e-commerce capabilities used by the firms to manage customer relationships. CRM involves technology that applies software packages which aid the interaction between the customer and the organisation, enabling an organisation to coordinate all of the communication efforts so that the customer is presented with a simplified and harmonised information. CRM coordinates messages and images around a common profile of the customer.

Customer Relationship Management is the strategic process of shaping the interactions between a company and its customers with the goal of maximizing current and lifetime value of customers for the company as well as maximizing satisfaction for customers. CRM is the integration and collaboration of different business departments to process and access the customer information to provide a unified assessment of customer interaction to enhance the quality of service delivery in the company. CRM can be viewed as an application of one-to-one marketing and relationship marketing, responding to an individual customer on the basis of what the customer says and what else is known about that customer. It is a management approach that enables organisations to identify, attract, and increase retention of profitable customers by managing relationships with them and further identifying strategically significant customers.

3. OBJECTIVES

The present study was conducted based on followings objectives;

- To assess the impact of Internet Banking services on demographical variables of customers?
- To assess the impact of CRM factors on demographical variables of customers?
- To evaluate and analyze the factors of CRM in Internet banking services?

4. HYPOTHESIS

The following are the hypothesis designed with above objectives

- **HO¹**: There is no significant impact of internet banking services on demographical variables of customers.
- **HO²**: There is no significant impact of CRM factors on demographical variables of customers.
- **HO³**: There is no significant impact of CRM factors on internet banking services.

5. RESEARC DESIGN

The study is concerned with the impact of CRM factors on internet banking services based on that source of the data collected from Primary source of data is collected from the respondents through structured questionnaire and it was in order to collect data on the factors which affect internet banking services. Secondary data is collected from various Journals, Periodicals such as Magazines, Business newspapers, and from subject related books and websites. Convenience sampling method is used for the study, with 427 sample size from the selected area i.e. Hyderabad city. The Data collected from Primary and Secondary sources is analyzed through descriptive statistics ANOVA and factor analysis. The study covered 427 participants from Hyderabad city, with the help of appropriate statistical Package like SPSS 20.0.

6. RESULTS

Demographic Variables: The frequency distribution of demographic variables is presented in the following table.

Table-1: Demographical Analysis

Particulars	Classification	No of Responses	Percentage
Age	20-25	95	22.2
	26-30	117	27.4
	31-35	115	26.9
	36-40	75	17.6
	41 and above	25	5.9
Gender	Male	296	69.3
	Female	131	30.7
Education	SSC	34	8.0
	Intermediate	26	6.1
	Degree	183	42.9
	Pg degree	121	28.3
	PhD and above	63	14.8
Occupation	Student	54	12.6

	Govt Employee	96	22.5
	Private Employee	166	38.9
	Business	60	14.1
	Self Employed	51	11.9
Monthly income (in rupees)	Below 20,000	35	8.2
	20,001-30,000	143	33.5
	30,001 - 40,000	123	28.8
	40,001-50,000	77	18.0
	50,001 and above	49	11.5
Total		n = 427	100%

The descriptive analysis of all the demographical variables is shown in the above Table, from that more than 27% of respondents in the group of 26-30 years and 26% of respondents in the group of 31-35 years, followed by 70% of the respondents belonged male and 30% of respondents belonged female, and 42% of respondents studied Graduation and with followed 28% of respondents studied Below Post Graduation, 38% of respondents working as a Private Employees, 22% are the Govt. Employee, and 33% of respondents earned Rs.20,001-30,000 for month and 28% of respondents earned above Rs. 30,001-40,000 respectively.

ANOVA: It is conducted in order in order to understand whether there is any significant difference in opinions of respondents on internet banking services and CRM factors, the results are presented in the following table.

- **HO¹:** There is no significant impact of internet banking services on demographical variables of customers.
- **HO²:** There is no significant impact of CRM factors on demographical variables of customers.

Table-2: ANOVA with demographical variables

S.NO	Dimension	Age		Gender		Education		Occupation		Income Of Family	
		F	Sig.	F	Sig.	F	Sig.	F	Sig.	F	Sig.
1	Internet banking services	7.658	.000	24.211	.000	7.142	.000	43.814	.000	27.514	.000
2	CRM factors	23.214	.000	18.122	.262	10.641	.000	4.424	.000	16.117	.000

It is evident that from the above table, dimensions like Internet banking services, CRM factors of the F value is found to be significant, meaning there by there is significant different with demographical variables like age, education, occupation and income in rupees.

- **HO³:** There is no significant impact of CRM factors on internet banking services.

Table-3: ANOVA with CRM factors and Internet Banking

S.NO	CRM Factors	F	Sig
1	Customer acquisition	9.946	0.01
2	Customer value evaluation	15.451	0.00
3	Customer response	11.612	0.00
4	Customer knowledge	5.554	0.04
5	Customer information systems	7.624	0.00

It is evident that from the above table, CRM factors like Customer acquisition, Customer value evaluation , Customer response, Customer response, Customer knowledge and Customer information systems of the F value is found to be significant, meaning there by there is significant different with Internet banking services, so finally there is significant different with internet banking service by the CRM factors.

MEASURE THE SAMPLING ADEQUACY

KMO and Bartlett's Test : In order measure the sampling adequacy, KMO and Bartlett's test is conducted . The Kaiser - Meyer-Olkin Measure of Sampling Adequacy is a statistic that shows the proportion of the variance in the variable that might be caused the underlying factor. The Kaiser-Meyer-Olkin measure of sampling adequacy tests whether the partial correlations among

variables are small. High values (close to 1.0) generally indicate that a factor analysis may be useful with data. Bartlett's test of sphericity tests the hypothesis that correlation matrix is an identity matrix, which would indicate that variables are unrelated. Small values (less than 0.05) of the significance level indicate that a factor analysis may be useful with data. Table no 2 indicates that in the present test the Kaiser-Meyer-Olkin (KMO) measure was 0.747. Bartlett's sphericity test indicating Chi-Square = 707.459, df = 231 with a significance of 0.000.

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.747
Bartlett's Test of Sphericity	Approx. Chi-Square	707.459
	df	231
	Sig.	.000

PRINCIPLE COMPONENT ANALYSIS: The principle component analysis of the data has extracted the communalities for the different variable and the same is presented in the following table, Extraction communalities are estimates of the variance in each variable accounted for by the components.

		Initial	Extraction
Customer acquisition	My bank uses different approaches to attract target customers	1	0.664
	My bank provides services to meet my specific requirements	1	0.569
	My bank staffs are knowledgeable and possess necessary information on requested services	1	0.673
Customer value evaluation	My bank always delivers superior service	1	0.652
	My bank offers me high quality service	1	0.578
	I enjoy my bank services	1	0.655
	I am confident with the security level of my bank	1	0.771
	I can put my trust on any services provided	1	0.647
Customer Response	My bank rapidly responds to my problems, suggestions, and complaints	1	0.669
	My bank offers me with convenient services	1	0.833
	My bank staffs are sufficiently empowered to solve difficult banking problems	1	0.531
Customer knowledge	My bank's operating hours are convenient to me	1	0.497
	My bank understands my individual needs and circumstances	1	0.621
	The terms and conditions of my bank are better than others	1	0.677
Customer information systems	Electronic bank provides me with a security system to protect my transaction	1	0.724
	My bank has modern equipments and technologies	1	0.787
	ATM machines are available at most places	1	0.673
Extraction Method: Principal Component Analysis.			

The Communalities indicate the amount of the variance in each variable that is accounted for initial communalities are estimates of the variance in each variable accounted for by all components of factor. Extraction communalities are estimates of the variance in each variable accounted for by the factor (or components) in the factor solution.

In the table above , My bank offers me with convenient services(Customer Response) with 0.833, followed with , My bank has modern equipments and technologies(Customer information systems) and I am confident with the security level of my bank (Customer value evaluation) with 0.787, 0.771 respectively. Lowest communality is extracted by My bank's operating hours are convenient to me (Customer knowledge) with a communality 0.497.

Table-6: Total Variance Explained

Component	Initial Eigen values			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	1.902	8.644	8.644	1.902	8.644	8.644
2	1.732	7.872	16.516	1.732	7.872	16.516
3	1.628	7.398	23.914	1.628	7.398	23.914
4	1.475	6.704	30.618	1.475	6.704	30.618
5	1.420	6.455	37.073	1.420	6.455	37.073
6	1.263	5.739	42.812	1.263	5.739	42.812
7	1.135	5.160	47.973	1.135	5.160	47.973
8	1.038	4.719	52.691	1.038	4.719	52.691
9	1.026	4.665	57.356	1.026	4.665	57.356
10	.978	4.445	61.801			
11	.925	4.206	66.007			
12	.889	4.041	70.049			
13	.814	3.699	73.747			
14	.795	3.612	77.359			
15	.760	3.454	80.813			
16	.709	3.221	84.035			
17	.695	3.161	87.195			
18	.631	2.867	90.062			
19	.623	2.832	92.894			
20	.564	2.564	95.458			
21	.534	2.425	97.883			
22	.466	2.117	100.000			

Extraction Method: Principal Component Analysis.

This table shows the actual factors that were extracted . First Factor explains the variance in the dependent variable to an extent 8.644, followed by second , third and fourth factors with 7.872, 7.398, and 6.704 respectively thus, 9th factor are explaining the cumulative variance in the Dependent variable to an extent of 57.4 %. The same is expressed in the Scree plot.

Figure-1: Scree Plot

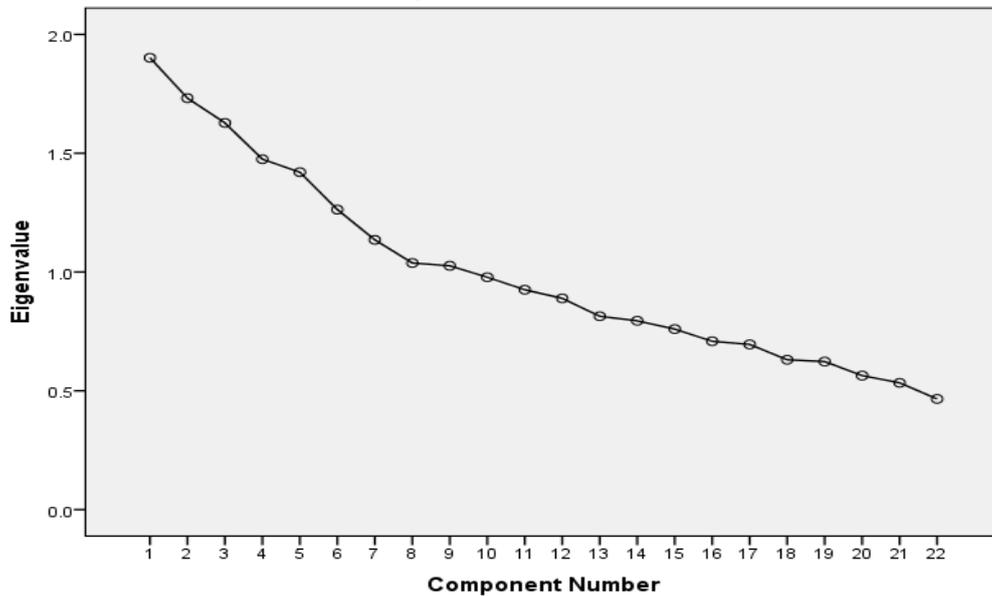


Table-7:Component Matrix^a

Dimensions	Component								
	1	2	3	4	5	6	7	8	9
My bank uses different approaches to attract target customers	-.236	.384	-.063	.135	.406	.266	-.295	-.131	-.008
My bank provides services to meet my specific requirements	.077	.275	-.067	-.253	.133	-.303	.068	.440	-.141
My bank staffs are knowledgeable and possess necessary information on requested services	-.037	.484	-.085	-.249	.110	.047	.452	.061	-.214

My bank always delivers superior service	.524	-.032	.104	.323	.231	-.272	-.097	.121	-.096
My bank offers me high quality service	.469	.114	.492	.356	.196	.093	-.018	-.127	.072
I enjoy my bank services	.370	.061	-.094	-.017	-.163	.456	.359	-.031	.201
I am confident with the security level of my bank	.523	.096	-.056	.131	.191	.226	.436	-.246	-.170
I can put my trust on any services provided	.453	.042	.216	.473	.082	-.099	-.164	.134	.093
My bank rapidly responds to my problems, suggestions, and complaints	-.281	.375	-.304	.210	.319	.103	-.042	.024	.313
My bank offers me with convenient services	.159	-.126	-.149	-.075	-.223	.445	-.100	.344	.536
My bank staffs are sufficiently empowered to solve difficult banking problems	-.248	.270	-.090	.272	.276	.239	-.148	-.048	-.238
My bank's operating hours are convenient to me	-.348	-.148	-.008	.034	.218	.064	.000	-.382	.235
My bank understands my individual needs and circumstances	.041	.361	-.190	.038	-.303	.353	-.202	.211	-.359
The terms and conditions of my bank are better than others	-.160	-.205	-.154	.477	-.419	-.143	.153	-.188	-.078
Electronic bank provides me with a security system to protect my transaction	.122	-.051	.292	-.416	.504	-.161	.059	-.007	.253
My bank has modern equipments and technologies	-.216	.312	-.127	.443	-.073	-.317	.126	.353	.273
ATM machines are available at most places	.385	-.045	-.018	-.272	-.041	.136	-.560	-.007	-.117
Extraction Method: Principal Component Analysis.									
a. 9 components extracted.									

The principal component analysis has been extracted for 9 factors. The 1st factor includes the variable like "My bank always delivers superior service" and so on, followed with 2nd factor includes the variables like My bank staffs are knowledgeable and possess necessary information on requested services, 3rd factor includes variable like. My bank offers me high quality service, 4th factor includes the variables like The terms and conditions of my bank are better than others, 5th factor includes the variables like Electronic bank provides me with a security system to protect my transaction, 6th factor includes variable like I enjoy my bank services, 7th factor includes variable like My bank provides services to meet my specific requirements, 8th factor includes variable like My bank provides services to meet my specific requirements and 9th factor includes the variables like My bank offers me with convenient services.

7. ACKNOWLEDGEMENT

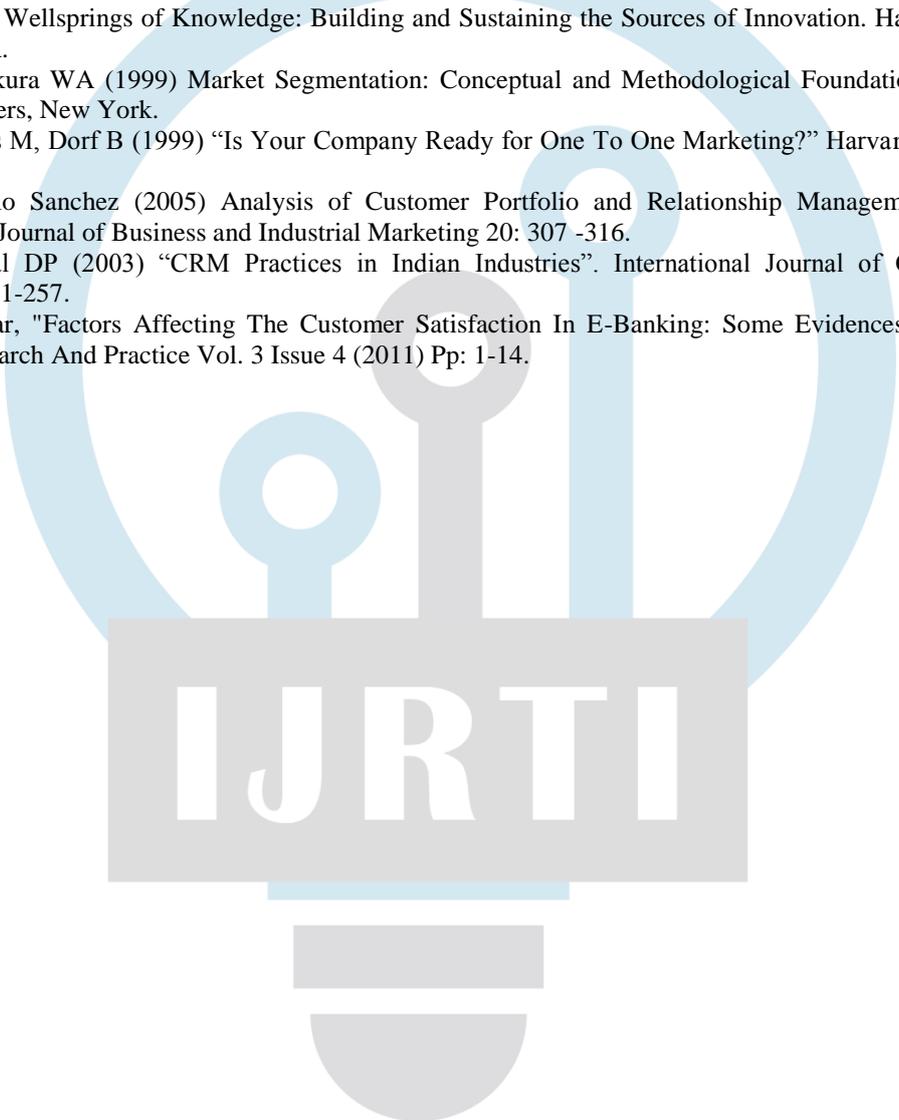
I thankful and grateful to the earlier contributions as a references of the journals for their extremely useful suggestions to improve quality of the article for carryout this task.

8. CONCLUSION

The present paper attempts to examine a contributions of various dimensions of CRM towards Internet banking services. Bank peoples are to achieve their goals with help of customer relations for sustaining and attracting new customers and retaining the existing customers. There are three two major objective and data collected with through questionnaire. It was analysed by the percentages, ANOVAs, and Factor analysis. As per the results 27% of respondents in the group of 26-30 years and 26% of respondents in the group of 31-35 years, followed by 70% of the respondents belonged male and 30% of respondents belonged female, and 42% of respondents studied Graduation and with followed 28% of respondents studied Below Post Graduation, 38% of respondents working as a Private Employees, 22% are the Govt. Employee, and 33% of respondents earned Rs.20,001-30,000 for month and 28% of respondents earned above Rs. 30,001-40,000, followed with the results of the ANOVAs showed that demographical variables significant different with internet banking services and CRM factors, and CRM factors significant different with internet banking services, and results of factor analysis indicates that, all factors like Customer acquisition, Customer value evaluation, Customer Response, Customer knowledge and Customer information systems with their respective dimensions found significant with internet banking.

REFERENCES

- [1] Balakrishnan H, Krishnaveni R (2014) The SIJ Transactions on Industrial, Financial & Business Management (IFBM) 2: 15-20.
- [2] Carl Osunde, "A Study on Customer Relationship Management Practices in Selected Commercial Banks with Reference to Nigeria", Journal of Entrepreneurship & Organization Management.
- [3] Chen I, Popvich K (2003) Understanding customer relationship management (CRM): People, process and technology. Business Process Management.
- [4] Day GS, Van den Bulte C (2002) Superiority in Customer Relationship Management: Consequences for Competitive Advantage and Performance, Marketing Science Institute, Cambridge, MA.
- [5] Eckerson W, Watson H (2000) Harnessing Customer Information for Strategic Advantage: Technical Challenges and Business Solutions, Special report, The Data Warehousing Institute, Chatsworth, CA.
- [6] Glazer R (1999) "Winning in Smart Markets," Sloan Management Review.
- [7] Hobby J (1999) Looking After the One Who Matters, Accountancy Age, 28-30. 5. Buttle FA (2001) The CRM Value Chain, Marketing Business.
- [8] Leonard D (1998) Wellsprings of Knowledge: Building and Sustaining the Sources of Innovation. Harvard Business School Press, Boston, MA.
- [9] Michel W, Kamakura WA (1999) Market Segmentation: Conceptual and Methodological Foundations (2nd edn), Kluwer Academic Publishers, New York.
- [10] Peppers D, Rogers M, Dorf B (1999) "Is Your Company Ready for One To One Marketing?" Harvard Business Review 77: 151-160.
- [11] Rajagopal, Romulo Sanchez (2005) Analysis of Customer Portfolio and Relationship Management Models: Bridging Managerial Gaps, Journal of Business and Industrial Marketing 20: 307 -316.
- [12] Singh D, Agrawal DP (2003) "CRM Practices in Indian Industries". International Journal of Customer Relationship Management 5: 241-257.
- [13] Vijay M. Kumbhar, "Factors Affecting The Customer Satisfaction In E-Banking: Some Evidences Form Indian Banks", Management Research And Practice Vol. 3 Issue 4 (2011) Pp: 1-14.

A large, light blue watermark logo is centered on the page. It features a stylized lightbulb shape with a circular top and a semi-circular base. Inside the circle, there are three vertical lines of varying heights, resembling a stylized 'I' or a similar symbol. Below the circle is a grey rectangular box containing the letters 'IJRTI' in a bold, white, sans-serif font. Below the box is another grey semi-circular shape, completing the lightbulb-like appearance.

IJRTI