

CORE BANKING SOLUTIONS AND DIGITALISATION OF INDIAN BANKING
SECTOR- A STUDY BASED UPON THE PERCEPTIONS OF RURAL
UNDERGRADUATE STUDENTS OF DAKSHINA KANNADA DISTRICT

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INTRODUCTION:

A massive change in the banking practices of bankers and customers brought about by technological advancements paved the way for digitalisation of banking transactions. Paradigm shift from over the counter banking to floorless banking facilitated by Core Banking Solutions is a drastic change appreciated and admitted particularly by younger generation customers of banks. Digital India campaign launched by our honourable prime minister Sri Narendra Modi on 1st July 2015 gave a great push to the bankers ' to visualise their mission of paperless banking by extending their network even to remote areas of the country through electronic means like computers, mobile phones, i pads etc. Electronic banking is the brain child of Core Banking Solutions. Core Banking Solutions is a computer software which enables a customer to operate his account from anywhere and at any time without approaching the banker personally at the bank branches. As per the directives issued by Reserve Bank of India, installation of CBS is mandatory on the part of banks to have interconnection with all the bank branches.

OBJECTIVES OF STUDY:

- To understand the perceptions of rural undergraduate students of Dakshina Kannada District about the challenges of CBS in digitalisation of banking sector
- To know the ecstasy level of banks customers towards Core Banking Solutions installed by bankers in general in rural villages of Dakshina Kannada District.

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SIGNIFICANCE OF STUDY:

Today Digitalisation is a topic of utmost relevance in India in all the sectors of the economy including banking sector. Core Banking Solutions serve as a powerful device of digital banking concept in India. Literature survey reveals that so far no research work is undertaken to understand the perceptions or rural undergraduate students of Dakshina Kannada District about the role of CBS in digitalisation of banking transactions. To fill this research-gap this study is undertaken by considering the perceptions of rural undergraduate students of Dakshina Kannada District.

LITERATURE SURVEY

1. Manjushree S in her article, “An implementation of Core Banking Solutions with special reference to SBI, Shivamogga” said, the introduction of Core Banking Solution has made a significant impact on the SBI Shivamogga Branch. She suggested that the growth percentage would further be increased if the bank gives effective services on Core Banking Solutions and also educates and increases awareness level of CBS to the customers.
2. K C Chakrabarty in his article “Banking Technology beyond CBS: Issues and way forward” stated, that technology advancements result in broader and inclusive banking sector by ensuring 24X7 hours of service.
3. Dr.Anurag.B.Singh and MS.Priyanka Tandonin their article ‘A study of Financial Performance: A Comparative Analysis of SBI and ICICI Bank’ evaluated the financial performances of the banks after the introduction of the CBS.
4. Mrs. Geetha and Dr. C S Ramanarayanan in their article “The impact of Core Banking Services in SBM of Mysore City” found that the CBS in SBM has created awareness about the presence of the banking sector everywhere and has given the benefits of banking to common man.

RESEARCH METHODOLOGY:

The study carried is both descriptive and empirical in nature. Primary and Secondary data are used for the purpose of study. 100 undergraduate students of rural villages of Mangalore city particularly, Mulki, Haleyangadi, Pavanje and Mukka villages are surveyed with the help of a structured questionnaire to collect Primary data. Secondary data is incorporated from text books, journals and the internet sources.

HYPOTHESES:**I. Role of Core Banking Solutions in digitalisation of banking sector**

H0: There is no significant difference between male and female students as regards their opinion regarding role of Core Banking Solutions in digitalisation of banking sector

H1: There is significant difference between male and female students as regards their opinion regarding role of Core Banking Solutions in digitalisation of banking sector

II. Challenges of usage of Core Banking Solutions

H0: Rural undergraduate students of Dakshina Kannada District perceive that there are no challenges in the usage of Core Banking Solutions

H1: Rural undergraduate students of Dakshina Kannada District perceive that there are challenges in the usage of Core Banking Solutions

III. Impact of various core banking channels on respondents

H0: Ecstasy is not felt among respondents towards various aspects of Core Banking channels

H1: There is adequate level of ecstasy among respondents towards various aspects of Core Banking channels

DATA ANALYSIS:

To get meaningful information about the subject the data has been collected through a survey conducted by using a questionnaire among 100 undergraduate students of rural villages, particularly, Mulki, Haleyangadi, Pavanje and Mukka villages of Dakshina Kannada District. Simple random sampling method is used for choosing the sample. Statistical techniques used for analysis are Percentage analysis, Mean, Standard Deviation and Chi-square test.

Table 1 : Gender wise classification of respondents

Gender	No. of respondents	Percentage
Male	55	55
Female	45	45
Total	100	100

Source: Primary data

As shown in Table: 1, 55 percent of students covered under survey were male students and 45 percent were female students.

Table 2: Different types of accounts held by the respondents in Commercial Banks

Stream of study	Saving Bank a/c (No. & %)	Current a/c (No & %)	Fixed deposit a/c (No. & %)	Recurring deposit a/c (No & %)	Not having bank a/c (No. &%)	Total (No. & %)
Arts	25(100)	0 (00)	3 (3)	0 (00)	0 (0)	25 (100)
Commerce	65 (100)	1 (1)	4 (4)	2 (2)	0 (00)	65 (100)
Science	10 (100)	0 (00)	3 (3)	0 (00)	0 (00)	15 (100)
Total	100 (100)	1 (1)	10 (10)	2 (2)	0 (0)	100 (100)

Source: Primary data

Among 25 Arts students surveyed, all 100 percent of students have saving bank a/c, 3 percent of students have fixed deposit a/c, and none of the Arts students have current a/c and Recurring deposit a/cs and percentage of Arts students having no accounts in banks is nil. Among 65 Commerce students surveyed, all 100 percent students have Saving bank a/c, 1percent have current a/c, 4 percent have Fixed deposit a/c and 2 percent of them have recurring deposit a/c in commercial banks. Among 10 Science students surveyed, all 100 percent have saving bank a/c, 3 percent have fixed deposit a/c and none of them have current deposit a/c and recurring deposit a/c in commercial banks. Study observes that all students irrespective of their stream of study have opened savings bank accounts in banks.

Table 3:Multi choice responses regarding the usage of different core banking channels by respondents

Core Banking channels	Multi responses	Percentage
ATMS	100	35.47
Internet banking	75	26.60
Mobile banking	90	31.91
Telephone banking	00	00
NEFT/RTGS	05	1.78
Credit Cards	02	0.70

Personally visiting the bank branches	10	3.54
Total Multi responses	282	100

Source: Primary data.

Among the different Core banking channels under usage, ATMs are used by all the student respondents, and it accounts for 35.47 percent of Multi responses. Multi choice responses of the respondents are fairly high for Internet banking and Mobile banking. NEFT/RTGS and Credit cards are also preferred by respondents. But their usage level is low. The point to be noted here is that, multi choice responses of respondents for personally visiting the bank branches is just 3.54 percent. It is a clear indication that respondents of rural area also prefer to conduct their transactions digitally by using various electronic means. It may also mean that Core Banking Solutions play a significant role in digitalisation of banking transactions.

Table 4: Gender-wise Opinion of students regarding role of Core Banking solutions in the digitalisation of banking activities

–Cross tabulation

		Opinions of students regarding persisting role of Core Banking solutions in the digitalisation of banking activities			Total
		Neither agree nor disagree	Agree	Strongly agree	
Gender	Male	5	10	40	55
	Female	5	40	0	45
Total		10	50	40	100

Table 4.1

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	57.576 ^a	2	.000
Likelihood Ratio	73.725	2	.000
Linear-by-Linear Association	33.390	1	.000
N of Valid Cases	100		

a. 1 cells (16.7%) have expected count less than 5. The minimum expected count is 4.50.

Testing of Hypothesis I:

I. Role of Core Banking Solutions in digitalisation of banking sector

H₀: There is no significant difference between male and female students as regards their opinion regarding the role of Core Banking Solutions in digitalisation of banking sector

H₁: There is a significant difference between male and female students as

regards their opinion regarding role of Core Banking Solutions in digitalisation of banking sector

From Table 4.1, it is very clear that the calculated value of chi square is 57.576^a which is greater than the table value, that is 13.816 in the 0.001 level of significance in the chi-square table, so we reject null hypothesis and accept the alternative hypothesis. Table 4 also reveals that majority (40) male students and (0) female student strongly agree, while only 10 male students, but majority 40 female students agree that Core Banking Solutions play a very important role in digitalisation of banking sector. Male students strongly agree, while female students just agree that Core Banking solutions play significant role in the digitalisation of banking activities. Hence it is proved that there is significant difference in the opinion of male and female students regarding the role of Core Banking Solutions in the digitalisation of banking sector. **We therefore conclude that there is significant difference in the opinion of male and female students regarding the role of Core Banking Solutions in the digitalisation of banking sector.**

ISSUES AND CHALLENGES IN CORE BANKING SOLUTIONS:

Respondents were asked to state their responses on five point Likert type questions relating to various challenges faced by them while using Core Banking channels. Their responses are presented gender wise in Table number 5.

Table 5: Gender wise opinion of respondents on various challenges of Core Banking Solutions

Core banking challenges	Gender					
	Male			Female		
	Agree	Strongly agree	Total	Agree	Strongly agree	Total
Less scope for personal advice from bankers regarding banking transactions	37	18	55	33	12	45
Problematic for transactions due to technical problems	30	25	55	32	13	45
Fear about security of transactions due to internet fraud	18	36	55	25	20	45
Lack of knowledge about how to operate Mobile apps	26	29	55	36	9	45
Lack of transparency in levying bank charges	21	34	55	29	16	45

Source: Primary data

Testing of Hypothesis II:

II. Challenges of usage of Core Banking Solutions

H0: Rural undergraduate students of Dakshina Kannada District perceive that there are no challenges in the usage of Core Banking Solutions

H1: Rural undergraduate students of Dakshina Kannada District perceive that there are challenges in the usage of Core Banking Solutions

From table number 5, it is very clear that, both male and female students either strongly agree or agree that there are many challenges in the usage of Core Banking Solutions. **We therefore conclude that Rural undergraduate students of Dakshina Kannada District perceive that there are many challenges in the usage of Core Banking Solutions**

Table 6: Respondents' ecstasy level on various aspects of Core Banking System

Facilitates anywhere & anytime banking				
	Frequenc y	Percen t	Valid Percent	Cumulative Percent
Strongly disagree	2	2.0	2.0	2.0
Disagree	4	4.0	4.0	6.0
Neither agree nor Valid disagree	8	8.0	8.0	14.0
Agree	42	42.0	42.0	56.0
Strongly agree	44	44.0	44.0	100.0
Total	100	100.0	100.0	

Table 6.1:

Time saving				
	Frequency	Percent	Valid Percent	Cumulative Percent
1.00	4	4.0	4.0	4.0
2.00	3	3.0	3.0	7.0
3.00	11	11.0	11.0	18.0
4.00	38	38.0	38.0	56.0
5.00	44	44.0	44.0	100.0
Total	100	100.0	100.0	

Supporting multi currency operation

Table 6.2:

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1.00	2	2.0	2.0	2.0
2.00	6	6.0	6.0	8.0
3.00	4	4.0	4.0	12.0
4.00	45	45.0	45.0	57.0
5.00	43	43.0	43.0	100.0
Total	100	100.0	100.0	

Table 6.3:**Easy transaction**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1.00	2	2.0	2.0	2.0
2.00	8	8.0	8.0	10.0
3.00	8	8.0	8.0	18.0
4.00	40	40.0	40.0	58.0
5.00	42	42.0	42.0	100.0
Total	100	100.0	100.0	

Table 6.4:**More convenient**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1.00	4	4.0	4.0	4.0
2.00	8	8.0	8.0	12.0
3.00	4	4.0	4.0	16.0
4.00	42	42.0	42.0	58.0
5.00	42	42.0	42.0	100.0
Total	100	100.0	100.0	

Lower costs

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1.00	4	4.0	4.0	4.0

Table 6.5:

2.00	7	7.0	7.0	11.0
3.00	6	6.0	6.0	17.0
4.00	37	37.0	37.0	54.0
5.00	46	46.0	46.0	100.0
Total	100	100.0	100.0	

Table 6.6:

		Statistics					
		Facilitates anywhere & anytime banking	Time saving	Supporting multi currency operation	Easy transaction	More convenient	Lower costs
N	Valid	100	100	100	100	100	100
	Missing	0	0	0	0	0	0
Mean		4.2200	4.1500	4.2100	4.1200	4.1000	4.1400
Std. Deviation		.90543	1.00880	.92436	.99778	1.06837	1.07327

Testing of Hypothesis III:**III. Impact of various core banking channels on respondents**

H0: There is no ecstasy among respondents towards various aspects of Core Banking channels

H1: There is adequate level of ecstasy among respondents towards various aspects of Core Banking channels

From the above tables (Table number 6 to 6.6), it is very clear that respondents' ecstasy level towards various aspects of Core Banking namely, Facilitates like anywhere & anytime banking, Time saving, supporting multi currency operation, Easy transaction, More convenient, and lower cost factor is more than the agree level that is 4. The statistics table (Table no 6.6) clearly shows that Mean is more than 4 (more than the agree level) in respect of all these factors. The standard deviation of various aspects of core banking shows that there is no much deviation from the Mean. That means the values are clustered around the Mean figure. Therefore we may conclude

that respondents have ecstasy towards various aspects of Core banking. **Hence the stated null hypothesis is rejected and alternative hypothesis is justified.**

Findings:

- Respondents of rural area also prefer to conduct their transactions digitally by using various electronic means.
- There is difference in the opinion of male and female students regarding the persisting role of Core Banking Solutions in the digitalisation of Banking sector.
- There is no difference in the opinion of male and female students regarding the challenges of Core Banking Solutions in the digitalisation of banking sector.
- Respondents' ecstasy level towards various aspects of Core Banking namely, Facilitates anywhere & anytime banking, Time saving, supporting multi currency operation, Easy transaction, more convenience, and lower cost factor is more than the agree level that is 4. Standard deviation reveals that there is no much deviation from the mean.
- Respondents' ecstasy towards Core banking solutions is high in the study area.

Suggestions:

- There is a need to give special attention to the security of transactions while transacting online.
- More user friendly devices and apps should be installed.
- There should be transparency in levying charges for the services rendered by the bankers.
- Internet connectivity should be improved.
- Provide a help center in each state to solve public issues.
- Digital literacy and awareness programs must be organized in large numbers.

Conclusion:

Digital India campaign launched by our honourable Prime minister Sri Narendra Modi, gave a great push to the usage of Core Banking channels in the banking sector. Increased usage of technology and technology driven services are highly noticed among customers, particularly younger generation customers. There is a need to create more awareness among older generation customers which cannot be ignored. No doubt digital banking has brought huge revolutions in

the field of banking, making banking a friendly exercise for people. Black money in circulation in the country may also be tracked successfully through complete digitalisation.

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