# Core Banking Solutions and Reformation of Banking Sector-A Study Based upon the Perceptions of Bank Employees of Dakshina Kannada District

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#### Introduction

We are living in a world of great uncertainty. Scientific and technological innovations are creating uncertainty and bringing about unforeseen changes in every segment of the economy, significantly in the banking sector. Banking Industry being highly influenced by digital transformation, is trying to embrace new technologies to manage the risk created by digital economy. Up-skilling of existing banking staff has become an absolute necessity on the part of bankers. According to KPMG's recent Global CEO survey report, 99 percent of CEOs were taking actions to develop existing or future talent. 50 percent of CEOs reported that there is some level of skill gap emerging in their business on account technological transformation. Technology is expected to revolutionise the entire banking practices in the 21st century. Technology will have a great impact on bank workforce, while it may not lead to reduction in workforce, but staff performance will undoubtedly enhanced by supporting technology. Core Banking Solutions and its innovative customized products are instrumental for bringing massive changes in the banking sector. Customised products of CBS have created unprecedented opportunities to change and improve banking services. People are using Core Banking channels regularly, due to which their bank visits, have been reduced drastically. More over approximately 50% of Indian population represents youngsters and hence their behaviours and preferences will have a deep impact on the future of banking industry in the 21st century. The era of rethinking and reformation of banking sector has been already started and receiving greater momentum in recent times. Fire of innovation is being fuelled by Core Banking Solutions.

#### **Objectives of Study:**

To study how and to what extent Core Banking Solutions have contributed to rethinking and reformation of banking sector in 21st century in Dakshina Kannada District.

To study the challenges faced by the bankers in 21st century due to transformation brought about by CBS

To identifythe most customised innovative products of CBS Era in Dakshina Kannada District

To analyse the parameter that how CBS products are perceived as profitable by the bank customers and employee category.

#### Significance of Study:

The survival and prosperity of banks in 21st century depends upon how do they respond to the transformation taking place in the banking field.

For this they need to rethink, redesign and reform their strategies. This study focuses mainly on Core Banking Solutions and its implications on bank customers and employees in the 21st century, which is more relevant considering the momentum that CBS is providing to the banking sector at present.

#### Literature Review:

Philip Strahan (2008) in his article on "Liquidity Production in 21st century Banking" opined that in 21st century, banks' deposits are less important, but funding liquidity from lines of credit and loan commitments have become more important. According to him banks dominate in producing funding liquidity when compared to many other institutions because of their comparative advantage in managing funding liquidity risk due to their access to government guaranteed deposits and central bankliquidity.

Dr. A .Jayakumar, G. Anbalagan (2014) in their research article on the topic "Banking In 21st Century: Challenges of Innovative Banking Technology of the Banking Industry – Modern Approach" explained the various services provided through advanced Core Banking techniques like Magnetic Ink Characters Recognition, Any Time Banking, Electronic Fund Transfer, Debit and Credit cards, Smart cards etc. Their study was mainly aimed at understanding the network system nature of smart cards and challenges of smart cards as a system innovation in the banking industry.

·Dr. Jitendra K. Sharma (2017) in his research paper on the topic "A Study on Innovation in Banking and its Impact on Customer Satisfaction" attempted to compare the impact of innovative technology on customers satisfaction of public and private sector banks in Bhopal city and found that private sector banks have an edge in terms of success in innovation when compared to public sector banks.

David T. Llewellyn(2018) in his article on "Banking in the 21st Century: The Transformation of an Industry" opined that banks will retain their powerful core competencies in 21st Century. But they may be required to radically review, rethink and reform the businesses before they get into them. How core competencies can be exploited for their competitive advantage will depend upon the tactics adopted by them for restructuring of banking firms.

Several research studies were undertaken by eminent scholars about innovations in the field of banking in 21st century and its impact on bank employees and customers. But no research work is undertaken regarding the role of CBS in rethinking and reformation of banking sector 21st century. Hence this study is undertaken by considering the opinions and perceptions of 100 bank employees of

Dakshina Kannada District.

#### **Research Methodology:**

The study is both empirical and descriptive in nature. 100 Bank employees of Dakshina Kannada Districtare surveyed with the help of a questionnaire to collect primary data. Convenience sampling method is used for selecting the employees. Both public sector and private sector bank employees have been considered for the purpose of study. Secondary data is incorporated from working papers, newspapers, journals and internet.

#### **Hypotheses:**

Literacy level, Education and awareness of the respondents in Dakshina Kannada District does not have any bearing on CBS Contribution towards rethinking and reformation of banking sector

There is no significant degree of relationship between gender of therespondents and their perception regarding contribution of CBS towards reformation of banking sector in 21st century.

There is no significant relationship between public sector and private sector bank employees and their opinion regarding the contributions of CBS in bringing out rethinking and transformation in banking sector.

There is no significant degree of differences between male and female employees as regards their understanding towards profitability of CBS to customers and bankers.

### **Limitations of Study:**

Employees were asked to give general opinions regarding various aspects of CBS and its impact on their working style, on bank profitability and about the changes noticed by them in the preferences, likes, dislikes and attitudes of the customers. Detailed study on this topic can be undertaken by including specific questions on market trends, technology infrastructure design and about the recent developments taking place in the field of banking.

#### Data Analysis:

Data collected by conducting a survey among 100 bank employees of Dakshina Kannada District is analysed by using statistical tools to derive meaningful information. SPSS (20 version) is used for statistical purpose. To know the opinions and perceptions of bank employees about the impact of Core Banking Solutions on Rethinking and Reformation of banking sector,5-point Likert type scale questions were included in the questionnaire. Statistical tools like percentage analysis, Mean, Standard deviation, % Mean, Chi square tests and ANOVA are used for the purpose of interpretation of results.

**Table 1: Demographic profile of Respondents** 

Demographic	Classification	Number of	Percent
factors		Respondents	
	Male	56	56
Gender	Female	44	44
	20 to 30 years	22	22
Age group	30 to 40 years	48	48
	40 to 50 years	19	19
	50 years to 60 years	11	11
	Clerk/ Office Assistant	30	30
Designation of	Officers	54	54
respondents in banks	Assistant General Manager	08	08
	Manager	08	08
	Less than 5 years	10	10
Years of experience	5 -10 years	30	30
	10 – 15 years	35	35
	15 and above	25	25
Number of hours	Less than 5 hours per day	04	04
respondents work on	5 – 8 hours per day	80	80
computer	More than 8 hours per day	16	16
Type of Bank where	Public sector bank	58	58
serving	Private sector bank	42	42

Source: Primary data

Table 1 reveals that both male and female employees of both public sector and private sector Banks have been surveyed and male employees form 56 percent of total respondents. 58 percent of respondents are working in public sector banks. 48 percent of respondents belong to the age group of 30 to 40 years. 54 percent of respondents are officers. 35 percent of respondents have 10 to 15 years of work experience. And 80 percent of respondents work on computer for 5 to 8 hours per day. 16 percent of respondents

work on computer for more than 8 hours per day. It means that Banking operations are fully computerised and manual entry system is vanished from the banking floor after the adoption of CBS.

Table 2: Distribution of respondents on the basis of their perception regarding the contribution of CBS towards Rethinking and Reformation of Banking sector in 21st century

Perception of	Strongly	Disagree	Neither	Agree	Strongly	Mean/	%Mean
respondents	Disagree		agree		Agree	SD	
regarding			nor				
contribution of			disagree				
CBS towards							
rethinking &	00	00	00	68	32	4.32±.46883	86.4%
reformation of	(0%)	(0%)	(0%)	(68%)	(32%)		
banking sector in							
21st century							

Source: primary data

Table 2 clearly reveals that, none of the respondents disagree or strongly disagree,68 percent of respondents agree and 32 percent of respondents strongly agree that CBS has contributed to the Rethinking and Reformation of Banking sector in 21st century. The percentage mean shows

that 86.4% (4.32±.46883 Mean and Standard Deviation) respondents strongly opine that CBS is responsible for Rethinking and Reformation of Banking sector in 21st century.

Table 3: Perceptions of respondents about factors leading to Rethinking & Reformation of Banking sector in 21<sup>st</sup> century brought about by CBS

Sl	Statements	Stro	Disa	Neith	Agree	Stron	Mean/	%Mean
No		ngly	gree	er		gly	SD	
		Disa		agree		Agree		
		gree		nor				
				disag				
				ree				
1	Literacy level, education	00	00	08	75	17		
	and awareness level of	(0%)	(0%)	(8%)	(75%)	(17%)	4.09±.49431	81.8%
	customers have a bearing on							
	the contribution of CBS in							
	rethinking &reformation							
	banking sector in 21st							
	century							

2	Long queues of customers	00	00	11	68	21		
	in the bank counters for	(0%)	(0%)	(11%)	(68 %)	(21%)	4.1±.55958	82%
	dealing with the Banks are	( , , ,	(*,*)	(, 0)	(00,0)	(==,0)		0=70
	not found							
3	Generic customer services	00	00	00	87	13		
	offered by the bank	(0%)	(0%)	(0%)	(87%)	(13%)	4.13±33800	82.6%
	employees are no longer	(0,0)	(0,0)	(0,0)	(07,0)	(1070)		02.070
	preferred.							
4	Customers are less willing	00	00	05	45	50		
	to take the advice of the						4.45±.59246	89%
	bankers for secondary							
	products like mortgages and							
	investments, instead they							
	prefer to research							
	themselves.							
5	Customers expect a more	00	00	00	13	87		
	tailored and personalised	(0%)	(0%)	(0%)	(13%)	(87%)	4.87±.33800	97.4%
	experience, when they							
	rarely need to contact their							
	banks in person at branches							
6	Because of cyber security	00	00	03	27	70		
	issues, keeping financial	(0%)	(0%)	(03%)	(27%)	(70%)	4.67±.53286	93.4%
	information safe has							
	become a biggest challenge							
	for both bankers and							
	customers							
7	Banks make huge	00	00	00	37	63		
	investment on data	(0%)	(0%)	(0%)	(37%)	(63%)	4.63±48524	92.6%
	protection.							
8	Information technology is	00	00	00	5	95		
	playing a dominant role in	(0%)	(0%)	(0%)	(5%)	(95%)	4.95±.21904	99%
	Banking							
9	Globalisation has opened up	00	00	00	79	21		
	the banking horizon very	(0%)	(0%)	(0%)	(79%)	(21%)	4.21±.40936	84.2%
	wide, leading to severe							
	competition among							
	domestic and foreign banks.							
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strong muscle powers are entering into Indian banking Industry with their own innovative products   11   Because of complete automation, banks are giving preference to domain experts and technology specialists in their recruitment   12   Employees without technical knowledge are already trained or are being trained.   13   Employees sitting with large bound ledger books in Banks are out of scene now.   14   Complexities of banking   00   00   00   00   00   00   00	6
Industry with their own innovative products	
innovative products	
11   Because of complete   00   00   00   14   86   4.86±.34874   97.2     giving preference to domain experts and technology specialists in their recruitment   12   Employees without technical knowledge are already trained or are being trained.   13   Employees sitting with large bound ledger books in Banks are out of scene now.   00   00   00   00   00   00   00	
automation, banks are giving preference to domain experts and technology specialists in their recruitment  12 Employees without technical knowledge are already trained or are being trained.  13 Employees sitting with large bound ledger books in Banks are out of scene now.  10 (0%) (0%) (0%) (0%) (14%) (86%) 4.86±.34874 97.29  11 (14%) (86%) 4.86±.34874 97.29  4.86±.34874 97.29  4.86±.34874 97.29  4.86±.34874 97.29  4.86±.34874 97.29  4.86±.34874 97.29  4.86±.34874 97.29  4.86±.34874 97.29  4.86±.34874 97.29  4.86±.34874 97.29  4.86±.34874 97.29  4.86±.34874 97.29  4.86±.34874 97.29  4.86±.34874 97.29  4.86±.34874 97.29  4.86±.34874 97.29  4.86±.34874 97.29  4.86±.34874 97.29  4.86±.34874 97.29  4.86±.34874 97.29	
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experts and technology   specialists in their   recruitment   12   Employees without   16   16   16   16   17   17   18   18   19   19   19   19   19   19	0
specialists in their recruitment   00   00   00   16   84     technical knowledge are already trained or are being trained.   13   Employees sitting with large bound ledger books in Banks are out of scene now.   000   00	
Tecruitment   12   Employees without   15   Employees without   16   16   16   16   16   16   16   1	
12   Employees without technical knowledge are already trained or are being trained.   00   00   00   00   00   00   00	
technical knowledge are already trained or are being trained.    13   Employees sitting with large bound ledger books in Banks are out of scene now.   (0%)	
already trained or are being trained.	
trained.  13 Employees sitting with large bound ledger books in Banks are out of scene now.  14 Employees sitting with large books in Banks are out of scene now.  15 Employees sitting with large books in (0%) (0%) (0%) (2%) (98%) (98%) (98%) (98%) (98%)	<b>o</b>
13 Employees sitting with large bound ledger books in Banks are out of scene now. 00 00 00 2 98 (98%) 4.98±.14071 99.6	
bound ledger books in Banks are out of scene now. (0%) (0%) (0%) (2%) (98%) 4.98±.14071 99.69	
Banks are out of scene now.	
	ó
14 Complexities of banking 00 00 00 30 70	
have risen, there is a (0%) (0%) (0%) (30%) (70%) 4.70±.46057 94%	
paradigm shift from	
"conventional banking" to	
"convenience banking", and	
from "mass banking" to	
"class banking."	
15         Submission of MIS reports         00         00         00         11         89	
to the top management and (0%) (0%) (0%) (11%) (89%) 4.89±.31447 97.8	0
various other reports to the	
RBI, other regulators and	
Government is done online	
to ensure efficiency and to	
reduce the cost of	
operations.	

16	Banks recruit more number	00	00	00	18	85		
	of officers with high	(0%)	(0%)	(0%)	(18%)	(85%)	4.82±.38612	96.4%
	computer and technical							
	knowledge & less number							
	of clerks at banks as CBS							
	has reduced clerical works							
17	Adoption of CBS is	00	00	00	20	80		
	profitable to both bankers as	(0%)	(0%)	(0%)	(20%)	(80%)	4.8±40402	96%
	well as customers							

#### **Testing of Hypothesis:**

Literacy level, Education and awareness of the respondents in Dakshina Kannada District does not have any bearing on the amount of CBS Contribution towards rethinking and reformation of banking sector

From table 3, it is very clear that, 8 percent of respondents neither agree nor disagree, 75 percent of respondents agree 17 percent of respondents strongly agree and none of the respondents disagree and strongly disagree that Literacy level, education and awareness level of customers have a bearing on the contribution of CBS in rethinking & reformation of banking sector in 21stcentury. The percentage mean shows that 81.8% (Mean and Standard Deviation4.09±.49431) respondentsstrongly opine, that Literacy level, education and awareness level of customers have a bearing on the contribution of CBS in rethinking & reformation banking sector in 21st century as it falls in

the category of 81% to 100%.

Hence null hypothesis is rejected and alternative hypothesis is justified. We therefore conclude that Literacy level, Education and awareness of the respondents in Dakshina Kannada Districthave an impact on the amount of CBS Contribution towards rethinking and reformation of banking sector.

Table 3 reveals Mean, Standard deviation and Percentage mean calculated on the perceptions of respondents on various factors leading to Rethinking &Reformation of Banking sector in 21st century.Percentage mean on each factor falls in the category of 81% to 100% which clearly shows that respondents strongly opines that CBS is responsible for Rethinking &Reformation of Banking sector in 21st century. Mean and Standard deviation presented in table 2 on various factors also justify the same.

Table 4: Gender-wise Opinion of respondents regarding the contribution of CBS towards rethinking and Reformation Banking sector in 21st century

Gender	Opinions of contribution and Reforma	Pearson Chi- square value		
	Neither agree nor disagree	Agree	Strongly agree	
Male Female	00 00	24 44	32 00	36.975

Source: Primary data

#### **Testing of Hypothesis:**

There is no significant degree of relationship between gender of the respondents andtheir perception regarding contribution of CBS towards rethinking and reformation of banking sector in 21stcentury.

Table 4 reveals that the calculated value of chi square is 36.975 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 (32) male respondents and no (0) female respondents strongly agree,

while only 24 male respondents, but all 44 female respondents agree that Core Banking Solutions contribute towards rethinking and reformation of banking sector in 21st century. Male respondents strongly agree, while female students just agree that Core Banking solutions play an important role in the reformation of banking sector. We therefore conclude that there issignificant difference in the opinion of male and female respondents regarding the role of Core Banking Solutions in the reformation of banking sector.

Table 5:Perceptions of public sector and private sector bank employees regarding the contributions of CBS in bringing out rethinking and transformation in banking sector

Type of Bank	Opinions of contribution and Reform	Pearson Chi- square value		
	Neither agree nor disagree	Agree	Strongly agree	
Public sector	00	26	32	34.077
Private sector	00	42	00	5 5 5

Source: Primary data

#### **Testing of Hypothesis:**

There is no significant relationship between public sector and private sector bank employees and their opinion regarding the contributions of CBS in bringing out rethinking and transformation in banking sector.

Table 5 reveals that the calculated value of chi square is 34.077 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 5 also reveals that, majority (32) respondents of public sector banks strongly agree and 26

respondents agree that CBS is responsible forbringing out rethinking and transformation in banking sector. But all respondents (100%)of private sector banks agree that Core Banking Solutions contribute towards rethinking and reformation of banking sector in 21st century. Respondents of public sector banks strongly agree, while respondents of private sector banks just agree that Core Banking solutions play an important role in the reformation of banking sector. We therefore conclude that there is significant difference in the opinion of public and private sector respondents regarding the role of Core Banking Solutions in the reformation of banking sector.

Table 6.1:Gender-wise Opinion of respondents regarding their understanding towards profitability of CBS to customers and bankers

Gender	Opinions of reunderstanding CBS to custon	Pearson Chi- square value		
	Neither agree nor disagree	Agree	Strongly agree	
Male Female	00 00	20 00	36 44	19.643

Source: Primary data

Table 6.2: Gender wise opinion of respondents regarding their understanding towards profitability of CBS to customers and bankers.

#### **ANOVA**

	Sum of	df	Mean	F	Sig.
	Squares		Square		
Between	2 1/12	1	3.143	23.956	000
Groups	3.143	1	5.145	23.930	.000
Within Groups	12.857	98	.131		
Total	16.000	99			

Source: Primary data

#### **Testing of Hypothesis:**

There is no significant degree of differences between male and female employees as regards their understanding towards profitability of CBS to customers and bankers.

From table 6.1 it is clear that calculated value of chi square is 19.643 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.

From table number 6.2, it is very clear that The Sig. value in this study is 0.00. This value is less than .05. Because of this, we may conclude that null hypothesis stating that there is a statistically no significant difference between male and female employees as regards their understanding towards profitability of CBS to customers and bankersis rejected. ANOVA (0.005) shows that there is relationship

and significant degree of differences between male and female employees as regards their understanding towards profitability of CBS to customers and bankers.

#### **Findings:**

- Banking operations are fully computerised and manual entry system is vanished from the banking floor after the adoption of CBS
- The percentage mean shows that 86.4% (4.32±.46883 Mean and Standard Deviation) of respondents strongly opine that CBS is responsible for Rethinking and Reformation of Banking sector in 21st century.
- Percentage mean on each factor leading to Rethinking & Reformation of Banking sector in 21st century falls in the category of 81% to 100% which clearly shows that respondents strongly opine that CBS is responsible for Rethinking & Reformation of Banking sector in 21st century.
- Literacy level, Education and awareness of the respondents in Dakshina Kannada District have a bearing on the amount of CBS Contribution towards rethinking and reformation of banking sector
- There is a significant degree of relationship between gender of the respondents and their perception regarding contribution of CBS towards rethinking and reformation of banking sector in 21 stcentury.
- There is a significant relationship between public sector and private sector bank employees and their opinion regarding the contributions of CBS in bringing out rethinking and transformation in banking sector
- There is relationshipand significant degree of differences between male and female employees as regards their understanding towards profitability of CBS to customers and bankers.

#### **Suggestions:**

- There is a need to create more awareness among customers, particularly among illiterate customers of rural areas regarding the usage of CBS channels.
- It is found from the study that, among various Core Banking channels, ATMs alone are most commonly preferred and used by the customers. There is a need to create more awareness about other channels like, Internet Banking, Mobile Banking, UPI etc.
- Rethinking and reformation of banking sector should be in line with the requirements of customers. Unless customers accept the changes positively, bankers rethinking strategy would be a big failure.

#### **Conclusion:**

CBS is instrumental for changing the banking industry by contributing to digitalisation of banking sector. Banks which support innovation and adoption of new technologies have unprecedented opportunities to change and improve their financial services. Restructuring the business model, Design thinking, making the customers focal point of the decision making process would bring novel approach to the creation of financial products and services of tomorrow.

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