

Employees Perception towards IT usage @ System Management in District Central Co-operative Banks (DCCBs) in Tamil Nadu

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Abstract

The employee perception is vital role in the operational efficiency of the organization. The involvement of the Information Technology (IT) has reduced the work burden on the employees in the banking sector. The IT has been playing a vital role in simplification of the processes in the banking sector with lot of potential benefits arising to the banking sector in the form of operational efficiency. IT is used in DCCBs and its branches to increasing productivity, profitability, banks process time, quick services to the customers etc.,. IT has a lot of influence on DCCBs. The success of IT in DCCBs depends upon the IT awareness of employees. They make very limited use of IT. The employees are also not well trained in IT. There is no study on the Employees' perception towards IT usage @ system management in DCCBs and its branches. The study is aimed at obtaining the employees perception towards the operation of IT in the system management process in DCCBs at Dharmapuri District. The main objectives of the study on implementation of IT in various stages, satisfaction level of IT training programmes and to identify benefits of DCCBs and the limitations of the study the employees are hesitant in providing data towards the IT policies at the first time of approach for data collection. It is based on survey of the opinions of employees with use of IT, This questionnaire contained questions relating to the study on objective s based. The sample size of the study is fixed to be 222 based on the Z sample size calculator. The employees reveal that the there is lack of usefulness of websites, on-line transactions services, database management, filling system and research are the areas where they feel that there is clearly less benefits in these areas due to the implementation of the IT. The future policies of the DCCBs and its branches have to concentrate on giving the employees full access (the access is only to 2/3rd of employees) to computers which will help to enhance their technical efficiency and improve the overall working of the employees. The IT implementation in the various areas of overdraft facilities, applications and overall management activities has to be improved to increase the satisfaction level of the employees. The DCCBs are working well towards the IT implementation and employees are benefitted from the same. There future policies of the DCCBs should concentrate on full automation of the transactions and giving 100 percent access to the employees to improve the efficiency of the DCCBs in the country.

Keywords: Employees Perception, Implementation of IT in DCCBs, IT usage @ System Management in DCCBs, Employees satisfaction level with use of IT, Benefits with use of IT

Introduction

The employee perception is vital in the operational efficiency of the organization. The involvement of the Information Technology (IT) has reduced the work burden on the employees in the banking sector. The banking sector has been managed manually over a long period of time. The technological advancement has made the banking sector to come into its fold and adopt towards technological strategy in day-to-day operations. The banking sector after the involvement of IT has gradually reduced the human resources and makes quality of

service delivered to the account holders at right time. The IT has changed the dimensions of all the sectors in general and banking sector in particular. The IT has been playing a vital role in simplification of the processes in the banking sector with lot of potential benefits arising to the sector in the form of operational efficiency. It has the ability to influence the minds of the policy makers to involve in the up-gradation of the working of the sector.

There are various changes that has been brought into the effect in the field of banking sector. The implementation of the IT has increased the pace of the transactions occurring worldwide. There has been wide increase in the range of the financial products offered by the banks in the globalised world. The IT is making the banking sector to adopt to the changes with the increased

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competition thriving in the sector. The IT helps to meet out the competition with the best of the abilities of the banks technological adoption. The process of technological adoption has improved the operational efficiency of the banks in the modern era. There are vital changes in the banking sector based on the technological advancement which has reduced the timing of the service rendered to the account holders. On the whole the IT has transformed the banking transactions complex activities into a very usual working environment in the banking organizations.

Research Gap

The review of literature provides the scope for the area of research that is existing in the branch of the study. The study which has the broad area of employees' perception towards the IT on the system management has wide range of studies that are conducted to identify the employees' perception. The range of studies prominently explained about the benefits of the usage of the IT in the process of banking activities. There are lack of studies on the field of the DCCBs in Dharmapuri District involving the various stages of implementation of the benefits and satisfaction. The benefits of IT implementation in the banking sector are vastly discussed in the review of literature but the studies are quite less in the District Central Co-operative Banks (DCCBs). The majority of the studies have left out the field of the cooperative banking sector in the main stream studies growth and development, financial performance of co-operative banks. The benefits and satisfaction level of the IT in the banking sector is mostly done in the field of the mainline banks. Therefore the study aims to fill the research gap of conducting a study in the field of DCCBs focusing on the employees benefits with use of IT and satisfaction level of the employees in the Salem District.

Statement of the Problem

The IT implementation has operational problems in its adoption and it is facing challenges from the human resources of the banking sector. The adoption of the IT is having tough time from the part of the employees as it leads to the large scale employee reduction. The employment reduction will play in the hands of the employees either to adopt it or make it tougher for the management to adopt. The operational difficulties have to be addressed by the stakeholders to have positive impact due to the adoption of IT in banking sector. There are problems of security also has it involves financial transactions all through the banking sector. The security issues have to be given the foremost importance in addressing the fears of the employees who are going to face the account holders. They have to be clear in explaining the level of security given for the online transactions by the banks. This will enable them to face the account holders with confidence and convince them to adapt to IT. The operational problems in adapting to IT

are vast but the employee perception and attitude is the most important problems focused by the study. The employees first of all should operate with efficiency to fully reap the benefits of the IT adaption. The various problems of security, employee reduction, understanding level and various operational skills define the output of the IT adaptation. The IT adaptation has to overcome all these problems to have an effect on the employee satisfaction levels to make them work efficiently towards the objectives of the District Central Co-operative Banks (DCCBs).

Importance of the Study

The banking sector is having vital role in maintaining the finances of the country. The sector has been working all over to country which has large presence of human resource to maintain the successful working of the banks. The banking sector is having lot of pressure to provide the services at right time with accuracy. The human labor force has played vital role in the operation of the banking sector but the vastness of the transactions has made the banking sector to adopt to the automation of the transactions through IT. The automation helps in reducing the operational expenses and also reduction in timing of the transactions for the customers. The DCCBs are quite different from the operational style of the mainline banks. They are much more traditional in their operational techniques. Even the DCCBs have adapted to the automation using the IT for their operational activities. The study assumes significance based on the fact that how automation have transformed the operations of the banks in the country. There are vast numbers of Co-operatives banks operating all over country. The study will highlight the usage of IT in DCCBs, various benefits and satisfaction obtained by the employees which will help to understand the perception of the employees towards the IT implementation of DCCBs. This will help to gain the knowledge on the implementation of the IT in banking operations of the DCCBs and their impact on the working of the employees. This will help to assess the working efficiency of the employees due to the implementation of the IT in DCCBs.

Objectives of the Study

The following are the objectives of study

- 1) To study the various stages of implementation of IT in various banking transactions in the select District Central Co-operative Banks.
- 2) To examine the satisfaction level of the employees towards the IT training programmes offered in the bank.
- 3) To identify the benefits obtained in the banking operations after the implementation of the IT.
- 4) To study offer suggestions of implementation of IT, satisfaction level of IT training programmes and identify the benefits with use of IT in DCCBs.

Research Methodology

The research methodology gives the blueprint of the study how the research problem is going to solved. The research design adopted for the study is empirical in nature which is based on recording of the opinions of the employees. The study is conducted with the help of the primary data which is collected with the help of structured Questionnaire from employees of District Central Co-operative Banks (DCCBs). The sample size of the study is fixed to be 222 based on the Z sample size calculator. The employees of the banks are treated as the sample unit for the study. The study makes use of the percentage analysis, chi-square, one-sample t-test and factor analysis as the statistical tools. The period of the study is 6 months from December, 2018 to May, 2019. The data collected is tabulated and classified based on the needs of the study.

Hypotheses

- 1) There is no association between the demographic variables and various attributes of employees perception towards IT usage.
- 2) There is no relationship between the various variables that are used to measure the satisfaction level towards the IT training programmees
- 3) There is no relationship between the various variables of benefits of the employees towards the new banking operations.

Scope of the Study

The scope of the study explains the boundaries within which the study is conducted. The study is aimed at obtaining the employee perception towards the operation of IT in the system management process in select DCCBs in the Dharmapuri District. The study aims at assessing the perception using various stages of implementation, satisfaction level of the employees and identifies the perception towards the timing of the banking operations. The study is conducted as empirical in nature with 222 employees belonging to the DCCBs in Dharmapuri District.

Limitations of the Study

The employees are hesitant in providing data towards the IT policies at the first time of approach for data collection. The study not covered functions and financial performance of District Central Co-operative Banks (DCCBs) in Dharmapuri District.

Analysis and Interpretation

The data collected using the structured interview schedule was tabulated and analyzed based on the objectives of the study. The analysis gives the solution for the research problem investigated. The following part explains about the various findings that were identified based on the collected data.

Demographic Distribution: (Table-1)

The demographic segmentation gives the basic layout about the employees based on the social economic background. This majority of the employees working in the DCCBs are male with 56.80 percent belonging to this category. The age group of the employees reveals that the majority belongs to 41-50 years. The educational qualification of the employees have been high with most of them have the qualification of Post Graduation. The monthly income of the employees is on the high standards when compared to the normal population with the income group of Above Rs. 40,001 category having the presence of 43.70 percent. The employees of the DCCBs are from the rural areas with 51.40 percent in that category. The majority of the employees in the sample have experience of only 5 years which reveals that the DCCBs have appointed new employees in the past decade. The employees selected mostly belong to the middle level management. The medium level of the computer knowledge is the most selected option by the majority of the employees involved in the study.

Table – 1 Demographic Distribution of the DCCBs Employees

Variables	Groups	Frequency	Percent
Gender	Male	126	56.80
	Female	96	43.20
	Total	222	100.00
Age	Upto 30 Years	20	9.00
	31-40 Years	80	36.00
	41-50 Years	95	42.80
	51-60 Years	27	12.20
	Total	222	100.00
Marital Status	Married	206	92.80
	Unmarried	16	7.20
	Total	222	100.00
Educational Qualification	SSLC	2	0.90
	HSC	4	1.80
	UG	80	36.00
	PG	114	51.40
	Professional	13	5.90
	Others	9	4.10
	Total	222	100.00
Monthly Income	Below Rs. 10000	2	0.90
	Rs.10001-Rs. 20000	16	7.20
	Rs.20001-Rs. 30000	71	32.00
	Rs. 30001-Rs. 40000	36	16.20
	Above Rs. 40001	97	43.70
	Total	222	100.00
Place of Residence	Urban	76	34.20
	Semi-Urban	32	14.40
	Rural	114	51.40
	Total	222	100.00
Years of Experience	Upto 5 Years	65	29.30
	6-10 Years	51	23.00
	11-15 Years	32	14.40
	16-20 Years	64	28.80
	Above 20 Years	10	4.50
	Total	222	100.00
Employee Grade	Top Level	42	18.90
	Middle Level	158	71.20
	Low Level	22	9.90
	Total	222	100.00
Level of Computer Knowledge	High Level	23	10.40
	Medium Level	189	85.10
	Low Level	10	4.50
	Total	222	100.00

(Source: Primary Data)

Attributes of IT System Implemented in DCCBs: (Table-2)**Table-2** Attributes of IT system Implemented in DCCBs

Variables	Groups	Frequency	Percent
Types of Computers Used	Laptops	8	3.60
	Desktops	143	64.40
	Workstations	9	4.10
	Servers	56	25.20
	Supercomputers	5	2.30
	Others	1	0.50
	Total	222	100.00
Internet connection	Yes	219	98.60
	No	3	1.40
	Total	222	100.00
Types of Internet Connection	Dial Up	10	4.50
	Lease line	21	9.50
	Broadband	175	78.80
	Other	16	7.20
	Total	222	100.00
	Yes	222	100.00
Using Computer in Operating Transactions	No	---	---
	Total	222	100.00
	Good	24	10.80
Opinion on Using IT	No opinion	10	4.50
	Poor	150	67.60
	Very Poor	38	17.10
	Total	222	100.00
	Fully	126	56.80
	Partially	49	22.10
Extent to which Bank Is computerized	In progress	32	14.40
	Not yet started	15	6.80
	Total	222	100.00
	Below 25%	3	1.40
	26%-50%	16	7.20
Percentage of Bank and its Branches access to Computer	51%-75%	53	23.90
	Above 76%	150	67.60
	Total	222	100.00
	Yes	215	96.80
	No	7	3.20
Cash Counter Machine	Total	222	100.00
	1	108	48.60
	2	99	44.60
	3	6	2.70
	4	2	0.90
	No	7	3.20
	Total	222	100.00
Fake Note Detector Machine	Yes	207	93.20
	No	15	6.80
	Total	222	100.00
	1	170	76.60
No of Fake Detector	2	33	14.90
	3	4	1.80
	No	15	6.80
	Total	222	100.00
	Yes	73	32.90
Electronic Token System	No	149	67.10
	Total	222	100.00
	Yes	222	100.00
Printer Machine	No	---	---
	Total	222	100.00
	1	5	2.30
No of Printer Machine	2	95	42.80
	3	81	36.50
	4	35	15.80
	5	6	2.70
	Total	222	100.00
	Yes	220	99.10
CCTV	No	2	0.90
	Total	222	100.00
	2	2	0.90
No of CCTVs	3	33	14.90
	4	150	67.60
	5	19	8.60
	6	14	6.30
	8	4	1.80
	Total	222	100.00
	Yes	220	99.10
ATM services Provided	No	2	0.90
	Total	222	100.00
	Yes	222	100.00

(Source: Primary Data)

The attributes of the IT system implemented has the studies to know the understanding of the employees towards the technologies involved. The desktop has the highest presence in the DCCBs when it comes to the types of computers used (64.40%). The employees of the DCCBs have access to the internet connection mostly as only three of them replied they don't have it. The broadband is the mostly used type of internet connection in the DCCBs. All the employees involved in the study use IT for the transactions carried out in the bank. The employees have the opinion of poor for using IT in the transactions. The employees to the extent of 56.80 percent reveal that their bank is fully computerised for internal storages. The percentage of bank and its branches of the DCCBs have access to the computer to the percent of 67.60. The cash counter machine has been in all the branches of the DCCBs. The number of cash counter machine in the banks and its branches has been one which is supported by 48.60 percent. The fake note detector machine has been facilitated in the bank to the extent of 93.20 percent. There is one fake machine detector in the DCCBs which is revealed by 76.60 percent of the employees. The electronic token system is available in the DCCBs which is

clear from the opinion of 67.10 percent. The printer machine is the old technology and it is found in all the branches and most of the branches has printer machine to the extent of two machines. The Closed Circuit Televisions (CCTVs) is also found in all the branches due to the security reasons and number of CCTVs is four on the majority. The ATM services also been given in all the banks and its branches of the DCCBs which is clear from the opinions of the employees.

Computerization of Transactions in DCCBs: (Table -3)

The computerization of the DCCBs is determined based on the various transactions carried out in the banks and its branches and twenty transactions were taken to determine the extent of computerization of transactions in DCCBs. The opinions of the employees were raised using a three point scale which is quoted as Fully Computerised (FC), Partly Computerised (PC), Not at all Computerised (NAC). The transactions of the DCCBs have been categorized based on the opinions of the employees.

Table-3 Computerization or IT of Transactions in DCCBs

S. No	Transactions	FC	Percent	PC	Percent	NAC	Percent
1.	Overdraft facility	71	32.00	76	34.20	75	33.80
2.	Bills collection	83	37.40	79	35.60	60	27.00
3.	Prepare the monthly reports/statement	193	86.90	24	10.80	5	2.30
4.	Prepare the daily collections and payments	192	86.50	24	10.80	6	2.70
5.	New Locker facility	128	57.70	37	16.70	57	25.70
6.	Different type of deposits (Term/ FD/ RD)	124	55.90	63	28.40	34	15.80
7.	DD/MT/MICR/Cheque transactions	112	50.50	70	31.50	40	18.00
8.	Investment transactions	111	50.00	65	29.30	46	20.70
9.	General ledger Accounts	186	83.80	32	14.40	4	1.80
10.	Prepare Financial report/ statements	193	86.90	27	12.20	2	0.90
11.	Prepare to trial balance and balance sheet	187	84.20	31	14.00	4	1.80
12.	Electronic Information Display (EID) for interest rate	153	68.90	50	22.50	19	8.60
13.	Display General information of bank	100	45.00	84	37.80	38	17.10
14.	Download various applications or forms from bank	23	10.40	39	17.60	160	72.10
15.	Touch screen facilities (TSFs)	4	1.80	28	12.60	190	85.60
16.	Filling system through on-line	11	5.00	31	14.00	180	81.10
17.	On-line Public Access Catalogue (OPAC)	7	3.20	27	12.20	188	84.70
18.	Advertisement/ Recruitment through online	12	5.40	112	50.50	98	44.10
19.	Overall management activities through on-line	13	5.90	114	51.40	95	42.80
20.	Administration activities through online	71	32.00	139	62.60	12	5.40

(Source: Primary Data) - (FC – Fully Computerized, PC- Partly Computerized and NAC – Not at all Computerized)

The opinions reveal that the transactions of Bills collection (37.40 percent), Prepare the monthly reports/statement (86.90 percent), Prepare the daily collections and payments (86.50 percent), New Locker facility (57.70 percent), Different type of deposits (Term/ FD/ RD) (55.90 percent), DD/MT/MICR/Cheque transactions (50.50 percent), Investment transactions (50.00 percent), General ledger Accounts (83.80 percent), Prepare Financial report/ statements (86.90 percent), Prepare to trial balance and balance sheet (84.20 percent), Electronic Information Display (EID) for interest rate (68.90 percent) and Display General information of bank (45.90 percent) have been fully computerized in the

DCCBs is explained by the opinions of the employees. The transactions that are partly computerized are Overdraft facility (34.20 percent) and administration activities through online (62.60 percent). The transactions that need computerization based on the opinions of the employees are Download various applications or forms from bank (72.10) Touch screen facilities (TSFs) (85.60 percent), Filling system through on-line (81.10 percent), On-line Public Access Catalogue (OPAC) (84.70 percent) Advertisement/ Recruitment through online (44.10 percent) and Overall management activities through on-line (42.80 percent).

Benefits of Use of IT in DCCBs: (Table -4)

The benefits that arise due to the implementation of the IT in banking transactions of the DCCBs were identified and given to get the opinions of the employees in the **likert five point scales**. The majority of the employees feel that Accuracy of information (55.90 percent), Easy preparation of daily report/statements etc. (55 percent), Quick preparation balancing of accounts (61.30 percent), Improved work efficiency (45 percent) and Easy clearance of customers enquiries (55 percent) have agreed to the statements and they feel that these are the major

benefits that have been given to the account holders. The reduction in the workload has got neutral responses from the employees to the extent of 53.60 percent. The employees has disagreed on the majority to the following benefits which are Video conferencing of co-operative banks and others (33.80 percent), Useful of Website (38.30 percent), Network connectivity to own branches and other branches (31.50 percent), On-line transactions services (36.90 percent), Data base management (32.90 percent), Filling systems (36.90 percent) and Research (44.60 percent). These are areas where the DCCBs have to concentrate to improve their services.

Table-4 Benefits of Use of IT in DCCBs

S. No	Benefits of use of IT	SA	%	A	%	N	%	DA	%	SDA	%
1.	Accuracy of information	77	34.70	124	55.90	12	5.40	9	4.10	---	---
2.	Easy preparation of daily report/statements etc.	80	36.00	122	55.00	13	5.90	7	3.20	---	---
3.	Reduced in work load	16	7.20	43	19.40	119	53.60	44	19.80	---	---
4.	Quick preparation balancing of accounts	63	28.40	136	61.30	13	5.90	10	4.50	---	---
5.	Improved work efficiency	38	17.10	100	45.00	50	22.50	18	8.10	16	7.20
6.	Easy clearance of customers enquiries	55	24.80	122	55.00	30	13.50	11	5.00	4	1.80
7.	Video conferencing of co-operative banks and others	2	0.90	12	5.40	92	41.40	75	33.80	41	18.50
8.	Useful of Website	2	0.90	42	18.90	69	31.10	85	38.30	24	10.80
9.	Network connectivity to own branches and other branches	11	5.00	58	26.10	37	16.70	70	31.50	46	20.70
10.	On-line transactions services	4	1.80	49	22.10	42	18.90	82	36.90	45	20.30
11.	Data base management	4	1.80	47	21.20	44	19.80	73	32.90	54	24.30
12.	Filling systems	---	---	26	11.70	58	26.10	82	36.90	56	25.20
13.	Research	---	---	6	2.70	30	13.50	99	44.60	87	39.20
14.	Any other (Specify)	---	---	---	---	---	---	---	---	---	---

(Source: Primary Data) = SA- Strongly Agree, A- Agree, N-Neutral, DA-Disagree and SDA- Strongly Disagree

Table- 5 Employee Satisfaction Level about key factors of IT in DCCBs

S. No	Satisfaction Level of IT Programmes	HS	%	S	%	N	%	DS	%	HDS	%
1.	Availability of On-line service in all the branches	60	27.00	92	41.40	24	10.80	35	15.80	11	5.00
2.	On-line services provide by the bank/branches to the customers	36	16.20	99	44.60	29	13.10	33	14.90	25	11.30
3.	Bank provides catalogue details through on-line	21	9.50	60	27.00	72	32.40	53	23.90	16	7.20
4.	People/customers interaction with more bank details through IT	23	10.40	76	34.20	56	25.20	53	23.90	14	6.30
5.	All transactions are easily automated through IT (e-calculation / e-solutions)	20	9.00	65	29.30	62	27.90	55	24.80	20	9.00
6.	IT facilitate better connectivity with head office and branches	39	17.60	98	44.10	43	19.40	26	11.70	16	7.20
7.	All the information are confidentially maintained with the use of IT	24	10.80	89	40.10	50	22.50	53	23.90	6	2.70

(Source: Primary Data) = HS-Highly Satisfied, S- Satisfied, N-Neutral, DS-Dissatisfied and HDS Highly Dissatisfied

Employee Satisfaction Level about Key factors of IT in DCCBs: (Table – 5)

The satisfaction level of the employees towards the key factors is assessed to know their perception about the job. The key factors of IT were given in a **five point likert scale** to analyze the opinions of the employees. The seven factors given to get the opinions of the employees has given the opinions that they are satisfied with the six factors provided by the banks and those factors are Availability of On-line service in all the branches (41.40

percent), On-line services provide by the bank/branches to the customers (44.60 percent), People/customers interaction with more bank details through IT (34.20 percent), All transactions are easily automated through IT (e-calculation / e-solutions) (29.30 percent), IT facilitate better connectivity with head office and branches (44.10 percent) and all the information are confidentially maintained with the use of IT (40.10 percent). The key factor that has got neutral response from the employees is Bank provides catalogue details through on-line (32.40 percent).

Table- 6 Employee Satisfaction Level with Use of IT operating activities in DCCBs

S. No	Satisfaction	HS	%	S	%	N	%	DS	%	HDS	%
1.	Using computer or IT in calculation of wages, Salary and other allowances in your bank	48	24.1	124	62.30	11	5.50	12	6.00	4	2.00
2.	Preparation of the Trail Balance, General Ledger Account and Balance Sheet through computer	78	39.2	93	46.70	12	6.00	16	8.00	---	---
3.	Checking the daily collections and payments through computers/IT/On-line	46	23.1	97	48.70	27	13.60	20	10.10	9	4.50
4.	Various Electronic services (E-Services) provide by bank to the customers	26	13.10	66	33.20	38	19.10	58	29.10	11	5.50
5.	Using electronic Funds transfer (E-fund transfer) in your bank and its branches as well as customers	34	17.10	74	37.20	25	12.60	54	27.10	12	6.00
6.	Using EDI/EIS/NEFT/RTGS in your bank and its branches as well as customers	50	25.10	111	55.80	20	10.10	16	8.00	2	1.00

(Source: Primary Data) = HS-Highly Satisfied, S- Satisfied, N-Neutral, DS-Dissatisfied and HDS Highly Dissatisfied

Table -7 Chi-square Test

S. No	Variables Involved		Chi-Square Value	df	P -Value	Remarks
1.	Educational Qualification	Extent to which Computerized	30.527	15	0.010	Highly Significant
2.	Monthly Income	Internet Connection	3.919	4	0.417	Not Significant
3.	Age	Type of Computer Used	19.569	15	0.189	Not Significant
4.	Place of Residence	Extent Computerized	6.955	6	0.325	Not Significant
5.	Years of Experience	Percentage of Bank (Comp)	16.215	12	0.182	Not Significant
6.	Opinion on using IT	Duration of Training Attended	70.348	9	<0.001	Highly Significant
7.	Extent Computerized	Feel about IT programmed Provided	20.171	6	0.003	Highly Significant
8.	Extent Computerized	Overall Satisfaction	35.614	12	<0.001	Highly Significant
9.	Level of Computer Knowledge	Other Banks connected through Network	11.024	2	0.004	Highly Significant
10.	Percentage of Bank (Comp)	Overall Satisfaction	51.715	12	<0.001	Highly Significant

(Source: Primary Data)

Employee Satisfaction Level with Use of IT operating activities in DCCBs: (Table -6)

The employee satisfaction level towards the various IT operating activities in DCCBs is measured using six variables. The employees are satisfied towards all the variables given in the study. The variables are Using computer or IT in calculation of wages, Salary and other allowances in your bank (62.30 percent), Preparation of the Trail Balance, General Ledger Account and Balance Sheet through computer (46.70 percent), Checking the daily collections and payments through computers/IT/On-line (48.70 percent), Various Electronic services (E-Services) provide by bank to the customers (33.20 percent), Using electronic Funds transfer (E-fund transfer) in your bank and its branches as well as customers (37.20 percent) and Using EDI/EIS/NEFT/RTGS in your bank and its branches as well as customers (55.80 percent). The employees are completely satisfied with the usage of IT in the operating activities of the DCCBs.

Chi- Square Analysis: (Table-7)

There were ten pairs of variables from the demographic segment and attributes of IT segment to ascertain the

association between the variables which will relate to the objectives of the study how demographic characteristics helps in the understanding of the employees about the IT and its implementation. The pairs of variables that are associated based on the chi-square analysis are educational qualification and extent to which computerized (**0.010**), Opinion of using IT and duration of training attended (**<0.001**), Extent computerized and Feel about IT programme provided (**0.003**), Extent computerized and overall satisfaction (**<0.001**), Level of computer knowledge and other banks connected through networks (**0.004**) and Percentage of Bank Computerized and Overall satisfaction (**<0.001**). All these pairs have found p-value which is found to be statistically significant @ one percent level. This pair signifies the association between the demographic variables and attributes of the IT. The future policy making target these association levels between the variables which will ensure the efficiency in the implementation of the IT. The various pairs that didn't find the significance level are Monthly Income and Internet connection, Age and Types of computer used, Place of residence and extent computerized and Years of experience and Percentage of Bank Computerized. These pairs are statistically insignificant @ five percent level.

One – Sample t-test: (Table-8)

The one sample t-test was used to find the relationship between the variables that were given to assess the benefits that are arising due to the involvement of the IT in the transactions of the DCCBs. The thirteen variables involved in the study are statistically significant at one percent level. The variables that are significant and their p-values are Accuracy of information (<0.001), Easy preparation of daily report/statements etc. (<0.001), Reduced in work load (<0.001), Quick preparation balancing of accounts(<0.001), Improved work efficiency(<0.001), Easy clearance of customers enquiries(<0.001), Video conferencing of co-operative banks and others (<0.001), Useful of Website(<0.001), Network connectivity to own branches and other branches (<0.001), On-line transactions services (<0.001), Data base management (<0.001), Filling systems(<0.001) and Research (<0.001). These variables are seems to be benefits from the employees point of view which helps to measure the benefits obtained by the implementation of IT in the DCCBs.

Relationship between Monthly Income and Satisfaction Level of Employees on IT Services: (Table-9)

The monthly income plays a significant role on the satisfaction level of the employees towards the IT programmes implemented by the DCCBs. The monthly income of the employees is significant @ one percent level of significant with the variables of Using computer

or IT in calculation of wages, Salary and other allowances in your bank (0.009), Preparation of the Trail Balance, Availability of On-line service in all the branches (<0.001), IT facilitate better connectivity with head office and its branches (0.010) and all the information are confidentially maintained with the use of IT (0.013), On-line services provide by the bank/branches to the customers (0.012) and Bank provides catalogue details through on-line (0.015).

The monthly income and satisfaction level variables are significant @ five percent level and those variables are People/customers interaction with more bank details through IT (0.042), Various Electronic services (E-Services) provide by bank to the customers (0.025), General Ledger Account and Balance Sheet through computer (0.036) and Using electronic Funds transfer (E-fund transfer) in your bank and its branches as well as customers (0.033).

The monthly income and satisfaction level variables are not significant which are as follows Checking the daily collections and payments through computers/IT/On-line (0.191), Using EDI/EIS/NEFT/RTGS in your bank and its branches as well as customers (0.379) and All transactions are easily automated through IT (e-calculation / e-solutions) (0.197).

The summary of the analysis reveal that the thirteen variables selected for assessing the satisfaction level of the employees found that ten variables of satisfaction level are influenced by the monthly income and these ten variables of satisfaction levels are related with the monthly income.

Table-8 One – Sample Test

S. No	Benefits	Mean	SD	Std Error Mean	t	Sig Value
1.	Accuracy of information	4.21	0.72	0.05	25.02	<0.001**
2.	Easy preparation of daily report/statements etc.	4.23	0.70	0.05	26.36	<0.001**
3.	Reduced in work load	3.86	0.82	0.06	15.74	<0.001**
4.	Quick preparation balancing of accounts	4.14	0.71	0.05	23.76	<0.001**
5.	Improved work efficiency	3.57	1.09	0.07	7.76	<0.001**
6.	Easy clearance of customers enquiries	3.96	0.87	0.06	16.56	<0.001**
7.	Video conferencing of co-operative banks and others	2.36	0.88	0.06	10.81	<0.001**
8.	Useful of Website	2.61	0.94	0.06	6.19	<0.001**
9.	Network connectivity to own branches and other branches	2.63	1.21	0.08	4.53	<0.001**
10.	On-line transactions services	2.48	1.10	0.07	7.02	<0.001**
11.	Data base management	2.43	1.13	0.08	7.51	<0.001**
12.	Filling systems	2.24	0.96	0.06	11.71	<0.001**
13.	Research	1.79	0.77	0.05	23.20	<0.001**

(Source: Primary Data)

Table -9 Monthly Income and Satisfaction Level of Employees on IT Services

S. No	Variables	Sum of Squares	Df	Mean Square	F- Value	Sig
1.	Using computer or IT in calculation of wages, Salary and other allowances in your bank	9.48	4	2.369	3.459	0.009**
		131.518	192	0.685		
		140.995	196			
2.	Preparation of the Trail Balance, General Ledger Account and Balance Sheet through computer	7.663	4	1.908	2.632	0.036*
		139.169	192	0.725		
		146.802	196			
3.	Checking the daily collections and payments through computers/IT/On-line	6.832	4	1.708	1.543	0.191
		212.477	192	1.107		
		219.310	196			

4.	Various Electronic services (E-Services) provide by bank to the customers	14.197	4	3.549	2.843	0.025*
		237.187	190	1.248		
		251.385	251.39			
5.	Using electronic Funds transfer (E-fund transfer) in your bank and its branches as well as customers	14.953	4	3.738	2.681	0.033*
		264.964	190	1.395		
		279.918	194			
6.	Using EDI/EIS/NEFT/RTGS in your bank and its branches as well as customers	3.222	4	0.806	1.057	0.379
		146.270	192	0.762		
		149.492	196			
7.	Availability of On-line service in all the branches	42.019	4	10.505	9.417	<0.001**
		216.403	194	1.115		
		258.422	198			
8.	On-line services provide by the bank/branches to the customers	19.839	4	4.960	3.284	0.012**
		292.995	194	1.510		
		312.834	198			
9.	Bank provides catalogue details through on-line	14.449	4	3.612	3.153	0.015*
		222.265	194	1.146		
		236.714	198			
10.	People/customers interaction with more bank details through IT	11.789	4	2.947	2.535	0.042*
		225.578	194	1.163		
		237.367	198			
11.	All transactions are easily automated through IT (e-calculation / e-solutions)	7.518	4	1.879	1.524	0.197
		239.196	194	1.233		
		246.714	198			
12.	IT facilitate better connectivity with head office and branches	16.482	4	4.120	3.407	0.010**
		234.603	194	1.209		
		251.085	198			
13.	All the information are confidentially maintained with the use of IT	13.116	4	3.279	3.270	0.013**
		194.522	194	1.003		
		207.638	198			

(Source: Primary Data)

Factor Analysis – Satisfaction of Employees towards IT Programmes: (Table-10)

The factor analysis was used to know the main factors that contribute to the satisfaction level of the employees towards IT programme. The KMO and Bartlett's Test of sampling adequacy has the value of 0.859 and p-value for the same is significant @ one percent level. The factor analysis was used to reduce the variables into factors to know the various influential factors for the satisfaction level of the employees. There are three factors extracted using the factor analysis.

Satisfaction Level of IT programme by the Employees of DCCBs

Table - 10 KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.859
Bartlett's Test of Sphericity	Approx. Chi-Square	1587.907
	Df	78
	Sig.	<0.001

Factor – I – Automation Factor

The first factor was derived from seven variables and variables and their values are People/customers interaction with more bank details through IT (0.857), All transactions are easily automated through IT (e-calculation / e-solutions) (0.826), On-line services provide by the bank/branches to the customers (0.805), Bank provides catalogue details through on-line (0.797),

Availability of On-line service in all the branches (0.709), All the information are confidentially maintained with the use of IT (0.572) and IT facilitate better connectivity with head office and branches (0.559). These variables have converged on the formation of the first factor. The nature of the variables as mostly variables focus on the automation of all the works in the DCCBs helps it to named as Factor of Automation.

Factor – II – Fund Transfer and Collection

The second factor is formed with the help of three variables and they are Using electronic Funds transfer (E-fund transfer) in your bank and its branches as well as customers (0.839), Various Electronic services (E-Services) provide by bank to the customers (0.824) and Checking the daily collections and payments through computers/IT/On-line (0.689). These variables constituted the second factor and its nature orients toward fund transfer. The factor is named to be Fund Transfer and Collection

Factor – III – Accounts Maintenance

The third factor is formed with the help of the variables of Using computer or IT in calculation of wages, Salary and other allowances in your bank (0.847), Preparation of the Trail Balance, General Ledger Account and Balance Sheet through computer (0.831) and Using EDI/EIS/NEFT/RTGS in your bank and its branches as well as customers (0.584). The third factor aims at usage of IT in accounts maintenance. Therefore the factor is named as Accounts Maintenance factor.

Rotated Component Matrix^a

	Components		
	1	2	3
People/customers interaction with more bank details through IT	0.857		
All transactions are easily automated through IT (e-calculation / e-solutions)	0.826		
On-line services provide by the bank/branches to the customers	0.805		
Bank provides catalogue details through on-line	0.797		
Availability of On-line service in all the branches	0.709		
All the information are confidentially maintained with the use of IT	0.572		
IT facilitate better connectivity with head office and branches	0.559		
Using electronic Funds transfer (E-fund transfer) in your bank and its branches as well as customers		0.839	
Various Electronic services (E-Services) provide by bank to the customers		0.824	
Checking the daily collections and payments through computers/IT/On-line		0.689	
Using computer or IT in calculation of wages, Salary and other allowances in your bank			0.847
Preparation of the Trail Balance, General Ledger Account and Balance Sheet through computer			0.831
Using EDI/EIS/NEFT/RTGS in your bank and its branches as well as customers			0.584

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 5 iterations.

The factor analysis has reduced the dimensions of the thirteen variables of satisfaction level of the employees into three factors. The DCCBs has to focus on the factors of Automation, Fund Transfer and Collection and Accounts Maintenance to further improve the satisfaction level of the IT employees. Therefore these three factors help to assess the satisfaction level of the IT employees which acts as the key areas.

Major Findings

- ❖ The majority of the DCCBs and its branches have the access to computer to the extent of 67.60 percent which reveals that 1/3rd of the banks in the DCCBs are yet be having access to the computer.
- ❖ The electronic token system is not available in the majority of the branches which will cause lot of problems for the employees in the streamlining the accountholders in day to day activities.
- ❖ The opinions of the employees reveal that the bills collection, display general information of the banks, Overdraft facility, download various applications, filling system through online, advertisement for recruitment and overall management activities are areas which are not fully computerized to the expectation of the employees as explained by the opinions.
- ❖ The employees reveal that the there is lack of usefulness of websites, on-line transactions services, database management, filling system and research are the areas where they feel that there is clearly less benefits in these areas due to the implementation of the IT.
- ❖ The monthly income of the employees do not have significant relationship with the satisfaction level of checking daily collections and payments, using EDI/NEFT/RTGS and easy automation through IT.

Suggestions

- ✓ The future policies of the DCCBs and its branches have to concentrate on giving the employees full access (the access is only to 2/3rd of employees) to computers which will help to enhance their technical efficiency and improve the overall working of the employees.
- ✓ The electronic token system will help the employees to have some order in carrying out the transactions and these banks have to introduce token system in DCCBs and its branches will help to improve the order working and reduce the transactions time without chaos of the account holders.
- ✓ The IT implementation in the various areas of overdraft facilities, applications and overall management activities has to be improved to increase the satisfaction level of the employees.

Conclusion

The DCCBs are having vital role in the financial inclusion policies of the government in the country. These banks even though play subdued role in the main frame when compared to the commercial banks they are having active role in the involving below poverty people in the banking frame of the country. The cooperative sector banks are having high confidence of the people living below the poverty line. The DCCBs are having much of the role to minimize their operational timings for the transactions to match the standards of the commercial banks. The DCCBs are adapting to the IT and its implementation is very much evident from the opinions of the employees in the study area. The DCCBs are working well towards the IT implementation and employees are benefitted from the same. There are some major areas of the banking transactions that are to be focused like online-transaction services, database management and research will further

improve the working of the employees. There future policies of the DCCBs should concentrate on full automation of the transactions and giving 100 percent access to the employees to improve the efficiency of the DCCBs in the country. This will help to match the working of the DCCBs to the standards of the frontline commercial banks in the country with much ease.

References

- [1]. Joel Edwinraj. D. "Information technology in Co-operative Banks", *Tamilnadu Journal of Co-operation*, Vol: 4, No: 11, September- 2004, p.31.
- [2]. National Co-operative Development Co-operation p.18.
- [3]. Dr. Vijaya. C "Computers in co-operative Breathing", *Tamilnadu journal of co-operation*, Vol: 88, No: 4, July-1996, p.23
- [4]. File://IWINDOWS/ Desktop/samy.
- [5]. Joel Edwinraj. D. "Information technology in Co-operative Banks", Op.cit p.31.
- [6]. Joel Edwinraj. D. "Information technology in Co-operative Banks", Ibid. p.30.
- [7]. Raman R. "Indian Co-operative Movement – A Profile 2004", by *National Co-operative Union of Indian*, New Delhi, p.32.
- [8]. Rajendran. K. "Development of Training Programmes at Vellore Central Co-operative Bank", *Tamilnadu Journal of Co-operation*, Vol: 5, No: 11, September - 2005, p.21.
- [9]. Dash. D. K. "Innovative Banking through Technology", *MadhusudanInsitute of Co-operative Management*, 2006, p.34.
- [10]. Joel Edwinraj. D. "Information Technology: The Emerging Driving Force in Co-operative Banks", *Co-operative Perspective*, Vol: 40, No: 1, April – June - 2005, p.5.
- [11]. Joel Edwinraj. "Information Technology (IT) in Co-operative Banks," *Tamilnadu Journal of Co-operation*, Vol: 4, No: 11, September - 2004, p. 30.
- [12]. Jayasudha. S. M. "Information Technology in Co-operatives – With Special Reference to Co-operative Banks", *Tamilnadu Journal of Co-operation*, Vol: 3, No: 8, June - 2003, p.25.
- [13]. Dash. D. K. "Computerization in Urban Co-operative Banks: a case study of Amanath Co-operative Bank Bangalore", *Co-operative Perspective*, Vol.35, No:4, January-March - 2001, p.75.
- [14]. Balasubramanya S. "IT wave breaks over banking", *The City*, Aug – Sept 2002
- [15]. Rajashekhara K. S., "Application of IT in Banking", *Yojana*, July 04
- [16]. VijMadhu, "The New World of Banking: A Paradigm shift", *Journal of Management Research*, Vol.3, December 2003.
- [17]. Gulati V. P., "Information Technology Application in Indian Banking: Better Late than Never!", "Newsletter", Volume 6, No. 3, July 1996.
- [18]. G Ananthakrishnan, "Customer Service in Banks", *Vinimaya*, Vol. XXV, No.3, (2004-05)
- [19]. RaoAkulaRajagopal, "Sprightliness of Urban Cooperative Banks : A Study"
- [20]. Uppal R. K., "Customer Perception of E-Banking Services of Indian Banks: Some Survey Evidence", *The ICAFI University Journal of Bank Management*, Volume-VII Issue-1 (Feb. 2008) Pages 63-78
- [21]. www.Banknetindia.com
- [22]. <http://en.wikipedia.org/wiki/Bank#History>
- [23]. http://en.wikipedia.org/wiki/Banking_regulation
- [24]. http://en.wikipedia.org/wiki/Banking_in_India#Early_history
- [25]. www.rbi.org.in/scripts/publications
- [26]. <http://www.scribd.com/doc/4569884/The-Reserve-Bank-of-India89>.

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