

Paradigm Shift in Productivity in Indian Banking Industry

(With Special Reference to Employee Productivity)

Abstract

The present study is aimed to analyze the Paradigm Shift in Productivity in Indian Banking Industry. The present study also analyzed the productivity of various bank groups on the basis of Employee productivity. Ratio analysis had been employed to reach the objective of the study. Results of the study indicated that there was a great paradigm changes in technology had increased the productivity of banks to the greatest heights.

Keywords: Paradigm, Employee Productivity, E-Banking, E-Delivery, Profitability.

Introduction

Paradigm shift means shift in capital structure, ownership, consolidation, HRM governance, technology banking environment & public policy. Since the launching of economic reforms in 1991, the Indian Banking Industry (IBI) has been undergoing rapid and comprehensive changes. The effects are profound in all spheres of banking justifying the use of the term paradigm shift to describe the current status. During the paradigm shift the performance of all bank groups has dynamically changed. The Indian banking sector is passing through a testing challenging and exciting period. One could call the change paradigm shift in Indian banking. It is true that the Indian banks are accustomed to changes. Since independence, they have already gone through three major shifts:- (i) A period of consolidation of banks (up to 1966) (ii) A period of historic expansion in both geographical and functional terms (from 1966 to mid-1980s) (iii) A period of consolidation of branches (from mid-1980s to 1991). The present phase which has begun in 1991 is important because of other reasons. For instance the sources of current changes are different. First, earlier changes were policy included while the present ones are market driven, having the influence especially of globalization. Second, changes are profound, both in coverage and depth. Infact, the role of banking is being redefined from a mere financial intermediary to provider of various financial services under one roof – more like a financial super market. Third, the changes are rapid and abrupt and leave very little time to the banks either to understand or to adjust to them. The regulatory framework for banks was one area which has seen a sea-change after the financial sector reforms and economic liberalization & globalization measures were introduced in 1992-93. There is a paradigm shift in Indian banking industry. The mergers and acquisitions in the banking sector must be market-led rather than promoted by Govt. or regulator. At the same time, there must be close monitoring and supervision of merging institutions to preclude threats to systematic stability. Second, advanced risk management systems, sophisticated IT infrastructure, human expertise and a comprehensive database are pre-requisites for Indian banks to adopt the New Basel Capital. Accordingly Indian banks must also improve their internal audit, loan review and internal rating systems. Third, capital requirements must be supplemented by adequate provisioning for non-performance assets. Fourth, HRM has assumed ever- greater importance, particularly in the post-VRS scenario. The measures should include retaining of staff, performance linked compensation packages, transparent promotions and transfer policies, etc. Fifth, regulatory issues relating to conversion of banks and Development Financial Institutions into universal banks should include enforcing corporate governance, transparency, consolidation of accounts, risk management and firewalls to prevent conflicts of interest relating to the operational aspects. Indian banks need to re-orient their business strategies to meet the challenges of a 'buyer's



Manjeet Singh

Associate Professor
& Head,
PG Deptt. of Commerce &
Management,
SGTB Khalsa College,
Sri Anandpur Sahib

market' and in this regard, Public Sector Banks (PSBs) have certain core strengths which they can utilize to make the best of new opportunities.

Review of Literature

Muniappan, G.P. (2012) studied paradigm shift in banks from a regulator point of view. He concluded the positive effect of banking sector reforms on the performance of banks. He suggested many effective measures to strengthen the Indian banking system. The reduction of NPAs, more provisions for standards of the banks, IT, sound capital bare are the positive measures for a paradigm shift. A regulatory change is required in the Indian banking system. Ballabh, J. (2012) studied the various techniques to increase the employees productivity. The changing economic environment needs many changes in the banking sector. The paper stressed on the following aspects to increase the employee productivity i.e. technology support for enhancing customer service, merging e-contact and eye-contact, strategies for redeployment, strategies to make employees more productive etc.

Padwal, S. (2014) stressed more emphasis on technology in banks. The technology had been the main facilitator in the process of transformation. The future of banking depends on technology.

Maliappan, V. (2015) analyzed that IT revolution has brought stunning changes in the business environment perhaps no other sector has been influenced by advances in technology as much as banking and finance, as a result, the banking pose a totally new look today. Uppal, R.K. (2016), made an attempt to study the comparative efficiency of e-bank and traditional banks and to suggest some differentiating strategies for the improvement of e-banking especially for traditional banks. The study is based on a sample of 60 employees working with e-channels and having experience in dealing with customers through e-channels. Customers are also attracted from traditional banks to e-banks which are an indicator of better quality service. Therefore in order to retain customers, traditional banks must seriously think of e-banking.

Kumar, T. S. (2016) studied the bank nationalization in India marked a paradigm shift in the focus of banking as it was intended to shift the focus from class banking to mass banking. Internationally also efforts are being made to study causes of financial inclusion and designing strategies to ensure financial inclusion of the poor disadvantaged. The banks also need to redesign their business strategies to incorporate specific plans to promote financial inclusion of low income group treating it both a business opportunity as well as a corporate social responsibilities. Financial inclusion can emerge as

commercial profitable business. Kamakodi, N. (2017) examined how computerization has influenced the banking habits and preference of Indian customers and which factors influence these preferences. Changing of residence, salary account and non-availability of the technology based services were given as the three main reasons for changing the bank.

Lal, R.C. (2017) concludes that the main challenge ahead in the new millennium in banking and financial sector contain changing economic and banking environment, global competition, capital structure, transparency in reporting accounts, employee productivity, risk management, market discipline, sound human resource management, training and development.

Uppal, R.K. (2018) analyzed that the quality of e-banking services in the changing environment. The paper concludes that the customers of e-banks are satisfied with the different e-channels and their services in the spread of e-banking services. This paper also suggests some measures to make e-banking service more effective in the future.

Objectives of the Study

To analyze the paradigm shift in productivity in various bank groups and in Indian banking industry.

Research Methodology

In order to achieve the objective the whole banking industry had been divided into five groups. Group one G-I consisted all nationalized banks of India; Group two G-II consisted State Bank of India and its (merged) Associates; Group three G-III consisted Private sector banks; Group four G-IV consisted Foreign Banks operating in India and Group five G-V consisted all new private sector banks of India. The present study also analyzes the productivity of various bank groups on the basis of Employee productivity. Ratio analysis had been employed to reach the objective of the study.

Study of Productivity of Various Bank Groups – In Pre and Post e-Banking Era

Productivity is a ratio of input & output. When we talk of productivity, we enter into the area of employee efficiency, branch efficiency which has definite bearing on the profitability. If the funds are used efficiently due to higher productivity of personnel it will definitely lead to higher profitability. Therefore, the most important aspect of organizational profitability management is its productivity. The present study analyzed the employee productivity (D/E, C/E, BUS/E, TEXP/E, TE/E and EST.EXP/E). The mean gap between two periods that is pre and post e-banking period has been calculated of parameter.

Table: 1.1
Employee Productivity in Pre and Post- E-Banking Era

Group	Variable	Employee Productivity					
		D/E	C/E	BUS/E	TEXP/E	TE/E	EST.EXP/E
G-I	Average						
	X ₁	0.83	0.39	1.22	0.09	0.10	0.02
	X ₂	2.60	1.55	4.15	0.23	0.26	0.04
	Mean Gap	1.77	1.16	2.93	0.14	0.16	0.02
	S.E.	1.19	0.65	1.82	0.11	0.13	0.02
	t-Value	2.37	2.83	2.56	1.96	1.97	1.68
LOS	*	*	*	-----	-----	-----	
G-II	X ₁	0.79	0.39	1.18	0.10	0.10	0.02
	X ₂	1.91	1.18	3.09	0.18	0.20	0.03
	Mean Gap	1.12	0.79	1.91	0.08	0.09	0.01
	S.E.	0.41	0.47	0.76	0.03	0.03	0.01
	t-Value	4.37	2.68	4.02	5.07	5.11	2.43
	LOS	**	*	**	**	**	*
G-III	X ₁	1.04	0.53	1.56	0.13	0.14	0.02
	X ₂	2.38	1.46	3.83	0.22	0.24	0.03
	Mean Gap	1.34	0.93	2.27	0.10	0.11	0.01
	S.E.	0.54	0.47	1.01	0.04	0.04	0.01
	t-Value	3.93	3.20	3.60	4.31	4.58	3.51
	LOS	**	*	**	**	**	**
G-IV	X ₁	5.22	2.69	7.92	0.62	0.70	0.02
	X ₂	5.31	4.17	9.48	0.57	0.65	0.04
	Mean Gap	0.09	1.48	1.57	0.05	0.04	0.02
	S.E.	0.75	0.38	1.05	0.17	0.17	0.01
	t-Value	0.18	6.32	2.38	0.50	0.40	3.15
	LOS	-----	**	*	-----	-----	*
G-V	X ₁	3.78	2.44	6.23	0.71	0.73	0.06
	X ₂	5.62	4.44	10.06	0.80	0.93	0.09
	Mean Gap	1.85	2.00	3.83	0.09	0.20	0.04
	S.E.	0.73	0.53	1.22	0.16	0.13	0.01
	t-Value	4.04	6.02	5.02	0.91	2.50	5.14
	LOS	**	**	**	-----	*	**
Indian Banking Industry	X ₁	0.91	0.43	1.34	0.11	0.11	0.02
	X ₂	2.28	1.48	3.76	0.22	0.24	0.04
	Mean Gap	1.37	1.05	2.43	0.11	0.13	0.02
	S.E.	0.62	0.55	1.17	0.04	0.04	0.01
	t-Value	3.52	3.05	3.31	4.54	4.66	3.15
	LOS	**	*	**	**	**	*

Source: Performance Highlights, IBA, Mumbai, 199772017;

X₁ – Average in Pre-E-banking Period;

X₂ – Average in Post E-banking Period

* Mean is significant at the 0.05 level (1-tailed);

**Mean is significant at the 0.01 level (1-tailed).

Employee Productivity

The employee productivity shows the efficiency of bank employees. It has been calculated in six ratios.

Deposits per Employee (D/E)

The average of deposits per employee was only 0.83 pc during pre-e-banking period but they had become almost three-times in post e-banking period. The gap between pre and post e-banking period is 1.77 pc. The t-test shows significant change in means of two periods in D/E at 5 pc LOS. Similarly, in G-II the average of D/E was almost equal to G-I which was 79 pc in pre e-banking period. Now in post e-banking period there is a tremendous change of 1.91 pc which follows a gap of 1.12 pc. There is a significant change between the means of two periods in D/E at 1pc LOS.

Credit per Employee (C/E)

The average of credit per employee in G-I was only 0.39 pc during pre-e-banking period but there is tremendous increases in post e-banking which has become 1.55 pc. The gap between pre and post e-banking period is very large, i.e.1.16 pc. The t-test shows significant change in means of two periods in C/E at 5 pc LOS. Similarly, in G-II the average of C/E is very small in pre-e-banking i.e. 0.39 pc but it has become almost three-times more in post e-banking period with a wider gap of 1.91 pc in two periods. The t-test shows significant change in means of two periods at 1pc LOS in C/E.

Business per Employee (BUS/E)

In G-I the mean of business per employee was 1.22 pc during pre-e-banking period but it has become very large in post e-banking period i.e. of

4.15 pc. There is a wider mean gap of 2.93 pc in pre and post e-banking. The t-test shows significant change in means of two periods at 5 pc LOS. Now when we study the G-II we come to know that in pre-e-banking period the mean was 1.18 pc but in post e-banking period the mean is 3.09 pc. The mean gap is of 1.19 pc. The t-test shows significant change in means of two periods at 5 pc LOS. The average of BUS/E in post e-banking period is 3.83 pc which was less in pre-e-banking period i.e. of 1.56 pc. The too large mean gap between two periods is of 2.27 pc. The t-test shows significant change in means of two periods in BUS/E at 1pc LOS. In G-IV the average of BUS/E is very large than other periods in post e-banking period as well as in pre-e-banking period. So in pre-e-banking period the mean was 7.92 pc and in post e-banking period it is 9.48 pc. The t-test shows significant change in means of two periods at 5 pc LOS.

Total Expenditure per Employee (TEXP/E)

The average of total expenditure per employee was only 0.9 pc in G-I in pre-e-banking period but there is little change of 0.23 pc in post e-banking period. The gap between pre and post e-banking period is 0.14 pc. The t-test shows insignificant change in means of two periods. In G-II there is a minor mean gap of only 0.08 pc between pre & post e-banking period. The mean during pre-e-banking period was 0.10 pc and it increases upto 0.18 pc in post e-banking period. The t-test shows significant change in means of two periods at 1pc LOS. The average of TEXP/E in the third group had a mean of 0.13 pc in pre-e-banking period. Now it has become 0.22 pc in post e-banking period. It follows the mean gap of only 0.01 pc between the two periods. The t-test shows significant change in means of two periods at 1pc LOS. In G-IV there is a minor change in pre & post e-banking period from 0.62 to 0.57 pc which is very important to be noted. The mean gap is of 0.04 pc which is insignificant according to t-test.

Total Earning per Employee (TE/E)

The total earning of per employee was only 0.10 pc in G-I during pre-e-banking period which is now 0.26 pc in post e-banking period the gap between the two periods is 0.16 pc which follows an insignificant change according to t-test. In G-II the TE/E of pre-e-banking period was equal to the mean of pre-e-banking period of G-I which has become double in post e-banking period. There is a little mean gap of 0.09 pc between pre & post e-banking period. The t-test shows significant change in means of two periods at 1pc LOS. Now if we analyze G-III we conclude that TE/E was at 0.14 pc and they have increased up to 0.24 pc. 0.11 pc which shows the minor gap between the two periods. The t-test shows significant change in means of two periods at 1pc LOS.

Established Expenditure per Employee (Est. EXP/E)

The mean of Est. expenditure of per employee of G-I was only 0.02 pc during pre-e-banking period which is double in post e-banking period. There is a little mean gap of 0.02 pc between

pre-e-banking period & post e-banking period which is insignificant change according to t-test. In G-II the Est. EXP/E was equal to the pre-e-banking period of G-I but now it has become 0.03 pc. The mean gap is negligible in the two periods. The t-test shows significant change in means of two periods at 5 pc LOS. Now if we analyze G-III we conclude that in Est. EXP/E the mean of both the periods is similar to the G-I but according to t-test the LOS is at 1pc only. The Est. EXP/E in G-IV, the average of pre-e-banking period was 0.02 pc which has become almost two times in post e-banking period. The mean gap between post & pre-e-banking period is 0.02 pc. The t-test shows significant change in means of two periods at 5 pc LOS. Now when we study the Est. EXP/E of G-V we come to know that average during pre e-banking period was 0.06 pc and during post e-banking period is 0.09 pc. The mean gap is of only 0.04 pc. The t-test shows significant change in means of two periods at 1pc LOS.

Table: 1.2 Employee Productivity Index of Various Bank Groups in Pre and Post e-Banking Period

Group	Variable	Productivity Index
	Average	Employee Productivity
G-I	X ₁	42.22
	X ₂	47.42
	Mean Gap	5.20
	S.E.	3.72
	t-Value	2.23
	LOS	-----
G-II	X ₁	42.22
	X ₂	45.37
	Mean Gap	3.15
	S.E.	1.28
	t-Value	3.92
	LOS	**
G-III	X ₁	42.64
	X ₂	46.34
	Mean Gap	3.79
	S.E.	1.57
	t-Value	3.84
	LOS	**
G-IV	X ₁	52.54
	X ₂	55.75
	Mean Gap	2.21
	S.E.	2.27
	t-Value	1.56
	LOS	-----
G-V	X ₁	54.01
	X ₂	60.95
	Mean Gap	6.94
	S.E.	2.82
	t-Value	3.93
	LOS	**
Indian Banking Industry	X ₁	42.35
	X ₂	46.52
	Mean Gap	4.17
	S.E.	1.86
	t-Value	3.58
LOS	**	

Employee Productivity Index

The per employee productivity index was 42.22 pc in pre-e-banking period which becomes 47.22 pc in post e-banking period. This marginal growth shows a mean gap of 5.20 pc in two means. The t-test shows insignificant change in means of two periods. Similarly, the mean gap of pre-e-banking period was similar to that of G-I but the nominal increases in post e-banking period has become 45.37 pc. This horizontal progress in mean gap shows a difference of 3.15 pc. The t-test shows significant change in means of two periods at 1% LOS. The post e-banking period of G-III, the average has become 46.37 pc which was 42.64 pc in pre-e-banking period. The mean difference between pre & post e-banking period is 3.79 pc. The t-test exhibits significant difference in the means of two periods at 1 pc LOS. The fully IT oriented bank group had a mean of 52.54 pc in pre-e-banking period. The employee productivity index has become 55.75 pc in post e-banking period. The little mean gap between the two periods is only 2.21 pc which shows an insignificant LOS. Similarly, G-V indicates a vertical growth in employee productivity index. It has become 60.95 pc from 54.01 pc. The mean gap between two periods is of 6.94 pc. The t-test exhibits a significant difference in the means of two periods at 1 pc LOS. Overall, average of employee productivity index has steady growth in post e-banking period. It has become average 46.52 pc in post e-banking period as compare to 42.35 pc in pre-e-banking period. This shows a slow progress in Indian banking industry. The mean gap between these two periods is 4.17 pc which is significant at 1 pc LOS.

If we compare the mean gap among all bank groups then we conclude that G-V has edge over other groups. The mean gap of G-IV is at the bottom. The mean gap of G-I is more than the G-II and III which are 3.15 pc & 3.79 pc. The main reason of slow productivity of G-I, II and III is that they are partially IT-oriented bank groups.

Employee Productivity

The maximum paradigm shift is observed in G-V in business per employee productivity because mean is the highest in this group. In deposits per employee mean gap between two periods in all the bank groups is significant except G-IV. In G-IV, the mean in pre and post e-banking period is almost equal. There is horizontal growth in credit per employee in all the bank groups. The total expenditure increased in all the bank groups in post e-banking period than pre-e-banking period but in G-IV it started decreasing because this group is heavily spending on IT and other infrastructure. Due to the introduction of e-channels total earnings of per employee increased but this increase is moderate.

Major Reasons of Shift of Productivity

Impact of IT

With the development of information technology, the world has become a global village and it has brought revolution in the banking operations. The banks appeared to be on the fast track for IT based products and services. The impact of IT on employee productivity in G-II and III is on the edge and is significant in all bank groups. This new

technology has radically altered the traditional ways of doing business.

Impact of E-Delivery Channels

The present study analyzes the impact of each e-channel on productivity.

Impact of Fully Computerization

Banking which forms a core industry of any economy should be growth oriented. Computerization is a positive step to the bank growth. With the aid of computers, the bank-work can be done faster. Not only the present work load can be reduced to a great extent but also the bank can expand its working area with the same man power.

Impact of ATMs

ATM is the device that allows customers who have an ATM card to perform routine banking transactions in 24 hours a day, and seven days in a week without interacting with the human. Now if we analyze the table we conclude that only G-IV has low impact while other bank groups of employee productivity have very remarkable effect of ATM services.

Impact of M-Banking

Mobile banking is fast and becoming one of the most popular e-product. The impact of M-banking on G-V is moderate and in G-I and IV M-Banking has very low effect.

Impact of I-Banking

The latest way in IT is Internet banking. It is becoming more obvious that the internet has unleashed a revolution that is impacting every sphere of life. The impact of I-banking on various bank groups is as follows. Internet-banking has changed the phase of Indian banking industry and it is affecting the Indian banking industry too much. G-II and III of employee productivity have amazing changes due to I-banking.

Impact of Tele-Banking

Tele-banking is sometime negatively affecting Indian banking industry in different sector. In employee productivity, tele-banking is highly affecting the G-II, III and V.

Conclusion

The importance of commercial banks in directing the activities in an economic system be it a capitalist or a socialist, is needed overwhelming. A well planned, organized, efficient and viable banking system is a necessary concomitant of economic & social infrastructure in an economy. Banking occupies a crucial place in under taking the development effort and acts as a vehicle for socio-economic transformation as well as a catalyst to economic growth. Over the years, especially after liberalization, globalization and privatization, Indian banking system has become quite complicated and varied. Banks have evolved into a technology for delivering a wide range of financial services and are no longer a merely process of financial intermediation. IT has become responsible to bring a paradigm shift in performance of the banks. The perceptions and expectations of the customers and employees are continuously changing. The major inference in Indian banking industry is that it is positively affecting the total productivity and variations are totally negligible in dependent variable

due to independent variable. From the on-going discussion, we can conclude that employee productivity has tremendously increased in post e-banking period and there is a paradigm shift in the performance of all the bank groups.

References

1. Lal, R.C. (2007), 'Banking Transformation through IT in India', *Journal of Commerce and Trade*, Vol. 2, No.2, (October), pp. 46-48
2. Uppal, R.K. (2008), 'Customer Perception of E-Banking Services of Indian Banks: Some Survey Evidence', *The ICFAI Journal of Bank Management*, Vol. VII, No.1, (February), pp.63-74
3. Dr. Padmanava Mohapatra (2017), 'A Demographic Study of Customer Satisfaction on Indian Banking Products in City Life' *Asian Journal of Research in Banking and Finance*, Vol. 7, issue 8, pp100-113.
4. Borade Sanjay, "A Permanent Solution-Without Structural Changes, recapitalizing Public Sector Bank will lead to the same Problems," *Business India*, Nov. 6-9, 2017, pp.32-36.
5. Sharma Himani and Reeta Yadav, "The Relationship between Organisation Justice and Work Engagement: Trust as Mediator" *Prabandhan Indian Journal of Management* Vol.11, Issue 3, March, 2018 pp.50-61.
6. Kumari Neeraj and Singh Devi, "Impact of Organisational Culture on Employee Performance" *Prabandhan: Indian Journal Of Management*, Vol. 11, Issue 6, June,2018 pp. 53-63.
7. Jayaraman T.K. and Sharma Ajeshni, "Measuring Banking Efficiency in India: An Empirical Study of Commercial Banks" *Indian Journal of accountancy*, Vol.50(1) june,2018,pp. 28-36.
8. Symss Jacqueline and Dr. Saradhi Raveendra, et al. 'Determinants of Non-Performing assets in Indian Banking Sector' *The Management Accountant*, July, 2018 pp. 91-98.
9. Ghosh Nabhita and Dr. Srinivas K.T. " Bubbling NPA Looms Large - A Study on varied NPA Ratios of Indian and Foreign Banks" *The Management Accountant*, August, 2018 pp.98-107.