

# **IMPACT OF MERGERS AND ACQUISITIONS IN REENGINEERING THE INDIAN TELECOM SECTOR**

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**Abstract:** *Indian telecom industry was disrupted with the entry of Reliance Jio in the year 2016. It introduced low cost call and data resulted in extreme competition amongst the existing players in the market. In the disruption situation, the competitors tried to offer services at low prices in order to retain its customers and market share, and hence impacting growth in revenues and profitability. This resulted in financial stress in this particular sector during the entry of Reliance Jio. Reforms implemented by Telecom Regulatory Authority of India (TRAI) and Department of Telecommunications (DoT) post liberalization have drastically altered the business environment in the Indian telecom sector. This sector has emerged as a significant performer in the Indian services domain. The telecom companies have opted for Mergers and Acquisitions (M&A) as a strategic tool to enhance their performances. The objective of this study is to explore the overall strategic impact of M&A in the telecom industry. In this paper, emphasis is given on 10 M&A deals in the BSE-listed Indian telecom companies during a timeframe spanning from 2000 to 2019 to determine the effect of M&As in this sector and how they have brought about changes, if any, in the business performance of the acquirer companies. The focus of our study is to measure the change in performance levels of the companies, if any, in the post-merger phase as compared to the pre-merger ones through selected HR and financial parameters like HCROI (Human Capital Return on Investment), Compensation of employees to PAT ratio, EPS (Earnings Per Share) and market share. The findings indicate a mixed outcome.*

**Keywords:** *Mergers and Acquisitions, Performance, Telecom Companies, Reengineering*

## **I. INTRODUCTION**

India is presently the world's second-largest telecommunications market with a subscriber base of 1.17 billion and has registered strong growth in the past decade and a half. According to a report by GSM Association (GSMA) in association with the Boston Consulting Group (BCG), the Indian mobile economy is developing at a great pace and will contribute significantly to India's Gross Domestic Product (GDP). Downloading of Apps in the country developed approximately 215 per cent between 2015 and 2017. This shows the increase in the usage of teleservices. The liberal and reformist policies of the Government of India have been instrumental, along with strong consumer demand for the rapid growth in the Indian telecom sector. The government has enabled easy market access to telecom equipment and a fair and proactive regulatory framework that has ensured availability of telecom services to consumer at affordable prices. The deregulation of Foreign Direct Investment (FDI) norms has made the sector one of the fastest growing and a top five employment opportunity generator in the country. Mergers and acquisitions have been used as an effective strategic corporate restructuring tool in the business scenario worldwide for a long time dating back to 1897.

They are effective tools in the hands of the management to achieve greater efficiency by exploiting synergies and growth opportunities. The service industry forms the backbone of social and economic development of a country. Across the globe, the service sector has been playing a dominant role in the growth of economies. The service sector in India is highly dynamic and has grown to a considerable size, contributing to 56.5% in the GDP in 2018-19. Telecommunications industry is one of the most profitable and rapidly developing industries in the world. According to the annual report 2018-19 published by DoT, Government of India, the Indian telecom sector has registered a phenomenal growth during the past few years and has become second largest telephone network in the world, after China. The well-known mergers and acquisitions in the telecom sectors include acquisition of Command Cellular Services by Hutchison from USHA Martin, acquisition of stakes in Idea cellular by Aditya Birla group from the Tata group, merger of AIRCEL Ltd. with G T L Infrastructure Ltd, acquisition of Hutch services in India by Vodafone etc. In this paper, emphasis is given on 10 M&A deals in the Indian telecom sector during a timeframe spanning from 2000 to 2019. The focus of our study is to measure the change in performance levels of the companies, if any, in the post-merger phase as compared to the pre-merger ones.

## **II. REVIEW OF LITERATURE**

The work of Rao and Rao (1987) was one of the earlier attempts to analyse mergers in India. In the post 1991 period, several researchers have attempted to study mergers and acquisitions in India (Beena (1998), Roy (1999), Das (2000), Saple (2000), Basant (2000), Kumar (2000), Pawaskar (2001) and Mantravedi and Reddy (2008)). In the recent times human capital has emerged as a dominant force in organizations and there is irrefutable evidence that the efficacy of this factor is of importance when studying the economic performance of an enterprise. It has an important role in changing or eroding the enterprise value. (Kesti, 2011; Bernardino & Miller, 2008; Seleim et. al., 2007; Bontis et. al.,1999). An established method of measuring the firm performance and effectiveness is human capital return on investment (HCROI). The study by Hitt et. al. (2000) examined the direct and moderating effects of human capital on professional service firm performance. The results showed that the leveraging of human capital had a positive effect on performance. The influence of a firm's HRM system on its financial performance has generated considerable interest in the academic area. It has invoked the researchers to come up with different findings that help to establish the interrelationship between HRM and finance. (Guest (1997); Chan et. al., (2004); Becker and Huselid (1998); Singh (2003); Becker and Gerhart (1996)). When studying mergers and acquisitions, it was found that research began to focus on the human dynamics and people management issues, only in the late 1980s (Cartwright & Cooper, 1990). It is said that the "HR can make or break the Mergers and Acquisitions" (Schraeder and Self (2003)).

**Petkova, M. and Do, T.Q. (2012):** explored whether the European acquirers in the telecom sector failed to deliver value to their shareholders in the period ranging from 1995 to 2005 and also discussed the possible motives behind the intentions to engage in M&A. The main inference drawn from the study was that acquisitions in general fail to create value to the shareholders, which might be due to many factors. They concluded that despite the negative evidence concerning post-acquisition performance, firms still choose to engage in acquisitions on account of external or internal motives.

**Yet Shook and Roth (2011)** found that HR practitioners were not involved in planning decisions related to downsizings, mergers and/or acquisition. So they suggested that these practitioners need to play a more active role during the planning stages to ensure that training and development supports the financial goals of these change events.

**Sharkas et. al. (2010):** focused on abnormal returns for bidder, target and combined firms in bank mergers. The outcomes revealed that overall announcements of bank mergers generated positive wealth effects for the combined shareholders.

**Majumdar, S. K. et. al. (2009):** evaluated the impact of the various mergers of the local exchange companies in the United States telecommunications industry that have taken place between 1988 and 2001 on technology investment levels among the firms. They conceived that the 'efficiency defense' for merger approvals did not hold and the findings call into question the validity of fundamental tenets of contemporary competition policy.

**Yaylaci, U. (2005):** explored the consequences of mergers and acquisitions in the telecommunications industry for the period 1988 to 2001 and established a significant evidence that mergers were followed by substantial deterioration in profitability and operational performance, in addition to a significant decrease in the investment on new technology.

**Park et. al. (2002):** had profound impact in the research field related to M&A in the telecom sector. They investigated how market participants react to M&A involving telecommunications companies. The evidence suggested that such activities convey bad news to the market, to the shareholder value and a cross-border deal, rather than a domestic M&A deal, was the main driver of the negative market reaction. This suggested that value creation or synergy through an M&A deal was not a warranty even though it can generate an increase in size of the firm.

**Khemani (1991):** probed that the multiple forces that influence the decisions for engaging in M&A and deduced that profitability was the ultimate objective. One of the primary motives behind any strategic corporate decision is to maximise shareholder value.

### **III. OBJECTIVES**

The objective of this study is to explore the overall strategic impact of mergers and acquisitions in the telecom sector of India. We aim to comprehend whether M&A in this sector have led to the improvement in performance of the merging firms or has the performance deteriorated after the merged entity was formed. In this study, the performance of the sampled firms was examined via some human resource and financial parameters like HCROI, Compensation of Employees to PAT, EPS and Market Share. The magnitude of change from the pre to the post-merger phase with respect to these aspects was studied and compared.

### **IV. HYPOTHESIS**

Based on the objectives the following hypotheses were developed: -

H<sub>1</sub>. There is no significant change on HCROI of the acquirer firms across telecom industry in India after merger and acquisition.

H<sub>2</sub>. There is no significant change on the EPS of the acquiring firms across telecom industry in India post-merger and acquisition.

H<sub>3</sub>. There is no significant change in the market share of the acquiring firms across telecom industry in India after merger and acquisition.

H<sub>4</sub>. There is no significant change in the compensation to PAT ratio of the acquiring firms across telecom industry in India after merger and acquisition.

### **V. METHODOLOGY**

The research work is empirical in nature. The study is database oriented. Data and facts have been collected from India's leading business and economic database and research company CMIE's (Centre for Monitoring Indian Economy Pvt. Ltd.) database prowess 4.14. These facts have been supplemented by information from different business dailies, magazines and the websites of the Ministry of Corporate Affairs, Ministry of Statistics and Programme Implementation (MOSPI), TRAI, Press Information Bureau, Government of India and the respective companies.

The research methodology entails the following: - From the proweess database we found that 8 BSE listed telecom companies has undergone mergers and acquisitions during the period of 2000-2019. Thus the target population of this study are these 8 telecom companies. Total 25 M&A has taken place in these companies in the said period. Out of those 25 M&A, 12 were with the subsidiaries of the acquiring companies and many had overlapping M&A in that period. Out of the 13 non-subsidiary M&As, 10 reported non-overlapping M&As during the period of our study. Those 10 M&As were selected as the subject of our study.

**Sampling Frame:** An attempt is made to trace the outcome of the M&A deals in the Indian telecom sector by examining the seven companies, which are as follows: - Bharti Airtel Ltd., G T L Ltd., Idea Cellular Ltd., Mahanagar Telephone Nigam Ltd., Nettlelix Ltd. and Tata Communications Ltd. The main line of business for 28.57% of the sampled firms was cellular mobile service and also basic telephone services (28.57%). The others concentrate on wireless infrastructure (14.29%), internet service (14.29%) and communication services (14.29%). By recording the year of incorporation, we calculated the firm age of the sampled firms. It revealed that firm age of 42.86% i.e. 3 of the firms is between 15 to 20 years at present; there are equal numbers of firms (3) in the 26 to 30 years' age bracket and just 14.29% i.e. 1 of the firms is aged above 30 years. With respect to the age of companies since merger, it was noted that presently 40% i.e. 4 of the companies is in the 11 to 15 years' age bracket since the year of their mergers. Equal numbers of firms are there in the age group of 0 to 5 years and 6 to 10 years. The sampled firms are chosen on a Pan-India basis. Majority (57.14%) of the firms is concentrated in Western India.

## **VI. RESULTS & DISCUSSION**

The study is based on a short run analysis of two periods- Viz. three years prior to the merger and three years immediately after the merger. The secondary data which has been collected was subjected to descriptive and inferential analysis. This research work tried to test the hypotheses relating to the impact of merger and acquisition on the various parameters and thus derive at conclusion about whether the event of merger and acquisition has made an impact on the performance of these firms. The IBM software SPSS 20.0 and MS Excel were used to compute and analyse the data. The ratios for each of the performance parameters were estimated for all the ten mergers individually. This was followed by the Shapiro-Wilk normality test. On the basis of the normality results, paired t test at 95% confidence level was carried out for dataset following normal distribution and Wilcoxon Paired Sign-Rank Test was computed for dataset not following normal distribution. This enabled us to compare means of the subject over time in the two differing situations i.e. performance before the merger and performance after the merger. t-test and Wilcoxon test were chosen because those are easy to understand and perform as well as used widely. The following formulae have been used for computation purposes: -

**HCROI:**  $[\text{Revenue} - (\text{Operating Expenses} - \text{Compensation})] / \text{Compensation}$

**EARNINGS PER SHARE:**  $[(\text{Profit After Tax} - \text{Preference Dividend})] / \text{Number of Shares}$

**MARKET SHARE:**  $(\text{Company's Total Income} / \text{Industry's Total Income}) \times 100$

**TOTAL COMPENSATION TO PAT RATIO:**  $(\text{Compensation to Employees}) / (\text{Profit After Tax})$

### **A. HCROI t Test:**

**Table-1: Paired Samples Statistics**

	Mean	N	Standard Deviation	Standard Error
HCROI PRE	3.8210	10	5.18077	1.63830
HCROI POST	.2430	10	1.90680	.60298

**Table-2: Paired Samples Statistics**

	Mean	Standard Deviation	Standard Error	95% Confidence Interval of the difference		t	DF	LOS (2-tailed)
				Lower	Upper			
HCROI PRE -POST	3.57800	4.83613	1.45	.11844	7.03756	2.340	9	.044

Since the calculated value of t (2.340) for N=10 (as in Table II) exceeds the table value (2.262), we can reject the null hypothesis. The results are significant at 0.05 level of significance (p=0.44). This indicates that the means of the pre and post HCROI values are significantly different. From the paired samples statistics table (Table I), we observe that the pre-merger HCROI mean is significantly greater than that of the post-merger period. We therefore conclude that it is more likely to have been due to some systematic and deliberate cause. If all other confounds are eliminated, this systematic cause must have been the vent of merger.

$$\eta^2 = (2.340)^2 / [(2.340)^2 + 10] = 35.38\%$$

So 35.38% of the variability in the reduced performance in the HCROI scores can be explained by this merger. We conclude that the phenomenon of merger did not improve the HCROI of the companies in the post-merger period. Previous research has proved that there is a positive association between different human capital indicators post-merger and acquisition period.

**B. EPS t Test:**

**Table-3: Paired Samples Statistics**

	Mean	N	Standard Deviation	Standard Error
EPS PRE	6.63	10	12.40	3.9
EPS POST	3.83	10	5.35	1.6

**Table-4: Paired Samples Statistics**

	Mean	Standard Deviation	Standard Error	95% Confidence Interval of the difference		t	DF	LOS (2-tailed)
				Lower	Upper			
EPS PRE -POST	2.79	7.67	2.42	2.69	8.29	1.15	9	.279

The calculated value of t for N=10 is 1.153 (as in Table IV). The result is not significant at 0.05 level of significance (p=0.279). Since the calculated value of t is lower than the table value, there is no reason to reject the null hypothesis. Hence we can say that change in the earnings per share of the companies on the post-merger phase is not significant.

$$\eta^2 = (1.153)^2 / [(1.153)^2 + 10] = 11.74\%$$

So 11.74 % of the variability in the abridged performance in the earnings per share scores can be explained by this merger. We deduce that the phenomenon of merger did not benefit the earnings per share of the companies in the post-merger period. Previous research has shown that the activity of mergers and acquisitions has a mixed impact on EPS and share price of enterprises post-merger.

**C. Market Share t Test**

**Table-5: Paired Samples Statistics**

	Mean	N	Standard Deviation	Standard Error
MS PRE	2.67	10	4.17	1.32
MS POST	2.01	10	2.59	.821



**Table-6: Paired Samples Statistics**

	Mean	Standard Deviation	Standard Error	95% Confidence Interval of the difference		t	DF	LOS (2-tailed)
				Lower	Upper			
MS PRE -POST	6.54	2.94	0.94	1.46	2.78	0.69	9	.502

The calculated value of t for N=10 is 0.699 (as in Table VI). The result is not significant at 0.05 level of significance (p=0.502). There has been no significant change in the market share of the company's post-merger. We observe that the post-merger market share is slightly lesser than that of the pre-merger period.

$$\eta^2 = (0.699)^2 / [(0.699)^2 + 10] = 4.66\%$$

So 4.66% of the variability in the abridged performance in the market share scores can be explained by this merger. We surmise that the phenomenon of merger did not perk up the market share of the companies in the post-merger period. Past study relating to investment bank market share and performance of acquiring firms depicted that market share was positively related to contingent fee payments charged by the banks and also to the percentage of deals completed in the past by the bank. It was unrelated to the performance of the acquirers.

**Table-7: Test Statistics<sup>a</sup>**

	Compensation To PAT post – Compensation To PAT Pre
Z	-.051 <sup>b</sup>
Asymp. Sig. (2-tailed)	.959
Exact Sig. (2-tailed)	1.000
Exact Sig. (1-tailed)	.500
Point Probability	.039

a. Wilcoxon Signed Ranks Test b. Based on negative ranks.

Table 7 shows that the negative mean rank is less than the positive mean rank. This suggests that the compensation to employees to PAT ratio measure post-merger is likely higher than that in the pre-merger period. So we can infer that the phenomenon of merger has accentuated this performance parameter. Previous research has shown small and sometimes positive changes in wages in the post-acquisition phase and others have successfully proved that wages rise following acquisition.

## VII. CONCLUSION

This paper studied four parameters which can throw light on the performance of the Indian telecom companies in the pre and post-merger phases during 2000-2019. Only the HR parameter HCROI revealed a significant change in the post-merger period. All the remaining three aspects selected for computing the performance divulged no significant change in the period post-merger. The ratio between compensation of employees and PAT has been the only parameter where the performance has improved after the merger. Since three out of four parameters have shown no significant enhancement during the post-merger phase, it may be concluded that the change in the overall performance of the seven telecom firms due to merger in the period of 2000-2019 was not of much significance. M&A are often referred as corporate marriages and alliances. Just like all marriages are not destined for a happy relationship; similarly, all the phenomena of merger are also not prolific. In fact, the reverse is true majority of the time. Despite the popularity of mergers and acquisitions, evidence has shown that the majority have failed to improve performance and to achieve anticipated strategic and financial objectives set forth in the premerger planning phase.

The year 2008 witnessed a financial meltdown all over the world. The global economic recession had taken its toll on the Indian economy as well. The period of our study coincides with this period of recession. It is known that an organization takes time to get acclimatized with the new work environment after a merger. Since the merger & acquisition under consideration in the study coincided with the period of recession, the newly formed entities must have experienced numerous problems. They faced difficulties in coping with the adverse macro financial situation and integrating the merged firms on the other. This in turn might have affected the overall productivity of the firm. An economy takes time to recuperate after a financial meltdown. It is influenced by the spill over effect of the phenomenon. Spill over effect refers to a secondary effect that follows from a primary effect, and may be far removed in time or place from the event that caused the primary effect. In this study, the post-merger period of the firms corresponded with the period immediately after the recession. So quite naturally, the corporate was undergoing spill over effects at that time. The prowess database has not reported the hierarchy-wise distribution while computing the compensation of the employees. Due to this limitation, equal weightage was given to all the employees. With more detailed data on this, our study would have been more robust. Another limitation is the timeframe of the study. This study, a part of research covering a large gamut of issues, necessitated the restriction of the time period to the ten- year timeframe spanning from 2000-2019. Though the sample size of 10 finally merged or acquired pairs of firms appears to be limited, it forms the 40% of the population size (total 25 M&As). No control group was used in the study. Due to obvious constraint of unavailability of data, the target firms which had undergone mergers were not considered in the study. However, this study paves a way towards further research using longer time periods and inter-sectoral studies. It also encourages future studies on several other HR and financial aspects which are influenced by the events of mergers and acquisitions.

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