

Intangible Assets Accounting Practices in Infosys Technologies Ltd: A Case Study

Aruna Saini & Ramdhan Saini

Abstract

This study examines the intangible assets accounting practices in Infosys Technologies Ltd by computing four important measures namely; Economic Value Added, Market Value Added, Brand Value and Total Shareholders Return and the variations of these four important indicators during the period from 2002-03 to 2008-09. The company possesses a very good image in the capital market and the investors are willing to pay more for its shares due to its positive growth in Economic Value Added (EVA), Market Value Added (MVA), Total Shareholders Return (TSR) and Brand Value over the years. The study has revealed that Infosys Technologies Ltd has been performing well in terms of generating wealth in excess of what was expected by the shareholders and earning an adequate return to compensate shareholders for the risk taken. The TSR is very encouraging and carries a good message to the shareholders through satisfaction of their expectations. The Company has acquired a good quantum of Brand value as its brand earning in the market is very attractive. The practice of disclosure of intangible accounting parameters in the Annual Reports of the Company has definitely attracted public interest and acts as a confidence building measure in the corporate world. The study suggests that the Company should undertake detailed analysis to identify the causes of decrease in MVA and TSR in the last two years of the study period and formulate its strategy to combat the situation and to add to its value creation activities.

Keywords: *Intangible assets, EVA, MVA, TSR, Brand Value, Value Creation, Market Capitalization.*

Introduction

In the earlier period, the value of a corporate was mainly driven by its tangible assets' values presented in the balance sheet. The management of companies valued tangible resources and linked all their performance goals and matrices to those assets. Even in a merger and acquisition scenario, the prices were based on the value of their tangible assets. The market capitalization of companies also followed the value of the tangible assets shown in the balance sheet. A study of 3500 companies reveals that the balance sheet explained 95% of the market value in 1978. Up to the early 1990s, the difference between traditionally reported book value and market value of companies is seldom above 25%. In the latter half of the

1990s, the relationship between market value and tangible assets value changed dramatically. By early 2000, the book value of the assets represented less than 15% of the total market value. The gap between market value and book value in traditional balance sheets has been attributed to the presence of intangible assets not represented in the books. The intangible assets are becoming the key drivers of the market value in this new economy.

Intangible assets are those assets that create value beyond tangible assets. It is a claim to future benefits that does not have a physical or financial embodiment. The value of intangible assets reflects the company's strength to earn increased proportion of return compared to its competitors with the same level of tangible assets. The definition of intangible assets is given in the IAS-38 as an identifiable non-monetary asset without physical substance. AS-26 defines an intangible asset as "an identifiable non-monetary asset without physical substance held for use in the production or supply of goods or services, for rental to others, or for administrative purposes." According to this standard, intangible assets should be recognized only if, (a) it is probable that the future economic benefits that a reattributable to the assets will flow to the enterprise, and (b) the cost of the assets can be measured reliably. The intangible assets of a company include its brand, its ability to attract, develop and nurture a cadre of competent professionals, and its ability to attract and retain marquée clients.

In the present information age every corporate is striving hard to maintain and, if possible, to increase its market share and building a good corporate image in the society. In corporate accounting and reporting practices the intangible assets have assumed a very important role. But in the absence of any legal compulsion in this regard, the practice followed by the corporate world is not uniform and only a few of the companies deal with this subject in the annual reports published by them.

Keeping this background in view, a modest effort has been made to make an in-depth study in respect of intangible assets accounting of the Infosys Technologies Limited, a leading information technology company in India during the period from financial year 2002-03 to 2008-09.

Objectives of the Study

The objectives of this study are as follows:

- 1 To present a brief review of the theoretical background concerning different aspects of intangible value and its impact on the value creation by a company.
- 2 To measure intangible values of Infosys Technologies Ltd by computing four important measures namely; Economic Value Added (EVA), Market Value Added (MVA), Brand Value and Total Shareholders Return (TSR).
- 3 To study the variations of these four important indicators during the period under study through the computation of Mean, Standard deviation (SD), and Co-efficient of Variation (CV) of each measure.
- 4 To analyze and interpret these individually to assess the level of intellectual value possessed by the company.

Methodology of the Study

The company that has been selected for this study is one of the leading information technology companies in India and fairly represents Indian information technology industry. The data used in this study for the period from 2002-03 to 2008-09 have been taken from the published annual reports of the Infosys Technologies Ltd. The data have been suitably re-arranged, classified, analyzed and interpreted appropriately as per the requirement of the study with the help of different statistical tools and techniques.

Limitations of the Study

This study has the following limitations:

- 1 The study has been carried out mainly by computing four important measures of intangible values.
- 2 The study has used the secondary data for analysis and interpretation collected from the published annual reports of the company.
- 3 The study is limited to seven years only i.e. from the year 2002-03 to 2008-09.

Profile of the Company

Infosys Technologies Ltd. established in 1991 is a leading consulting firm and an IT service solution provider in India and abroad. It has six subsidiary companies as on March 31, 2009. The turnover of the Company during 2008-09 was Rs.20264 crore with a post tax profit of Rs.5819 crore. The software export revenues aggregated Rs. 20,004 crore. Of these, 65.6% of the revenue came from North America, 25.3% from Europe and 9.1% from the rest of the world. Infosys defines design and delivers technology enabled business solutions that help Global 2000 companies win in a Flat World. It also provides a complete range of services by leveraging its domain and business expertise and strategic alliances with leading technology providers. Infosys' service offerings span business and technology consulting, application services, systems integration, product engineering, custom software development, maintenance, re-engineering, independent testing and validation services, IT infrastructure services and business process outsourcing. Infosys has a global footprint with over 50 offices and development centers in India, China, Australia, the Czech Republic, Poland, the UK, Canada and Japan.

Review of the Theoretical Background with Major Findings

In the corporate world now it is perceived and recognized that intangible assets could make or break a company. Information technology companies have a high level of intangible assets which create value for the company. To improve its performance and position a company should as a strategy try to leverage intangible assets. With business expanding globally and rapidly, it is very important to have a strong base of intangible assets that only remain countable in the long run to pervade across functions and hierarchies. Intangible accounting attempts to explain the excellence achieved by a company in augmenting shareholders value creation through its intellectual properties. There are a plethora of methods for measuring the value of intangibles. The intangible values of Infosys Technologies Ltd have been measured in terms of certain indicators such as Economic Value Added (EVA),

Market Value Added (MVA), Total Shareholders Return (TSR), Brand Valuation etc.

Economic Value Added

Economic Value Added (EVA) introduced by US-based consultancy firm Stern Stewart and Co. is the way to measure the performance of companies based on achieving the objective of enhancing shareholders' wealth. It measures the profitability of a company after taking into account the cost of capital. It is the post-tax return on capital employed (adjusted for the tax shield on debt) less the cost of capital employed. It indicates the minimum return required by the shareholders to invest in the company's shares. It is the excess of actual return (net operating profit after tax) earned by a firm over such minimum return (weighted average cost of capital) required by the shareholders and investors. Companies which earn higher returns than cost of capital create value, and companies which earn lower returns than cost of capital are deemed destroyers of shareholder value. Economic Value Added is the measure to calculate what is left for the shareholders after paying off interest to the lenders and charging the expected cost of capital from the shareholders. Thus, it is the residual income with the company after charging for the cost of capital provided by lenders and shareholders. If the Economic Value Added is positive the business is taken to have generated wealth in excess of what is expected by the shareholders and vice versa. But if the figure of Economic Value Added for a year drops to zero or turns negative this indicates that the shareholders' expectations have not been met by the company. The idea behind EVA is that shareholders must earn a return that compensates for the risk taken. Economic Value Added can be expressed in an equation form as-

$$\text{Economic Value added} = \text{NOPAT} - (\text{WACC} \times \text{Capital Employed})$$

$$\text{Where, NOPAT} = \text{Net Operating Profit After Tax}$$

$$\text{WACC} = \text{Weighted Average Cost of Capital}$$

NOPAT is calculated from net profit after tax as appeared in the Profit and Loss Account by adding back interest payments, non operating expenses and subtracting non operating income. Stern and Stewart have mentioned 164 types of adjustments which are made with the net profit to calculate NOPAT, and to convert accounting profit to economic profit. These are kept out of purview of this article for time and space constraints. Weighted average cost of capital is the weighted average of the cost of all types of own capital and borrowed capital with weights equivalent to the proportion of each element in the total capital of the company. Capital employed denotes all funds belonging to the equity shareholders, preference shareholders and all interest bearing loan capital. The table I shows the economic value added of Infosys Technologies Limited during the study period from 2002-03 to 2008-09.

Table-I: Economic Value Added of Infosys Technologies Ltd

(Rs. in Crore)

Particulars	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
Operating Profit	1079	1357	2048	2654	3877	4640	6434
Tax on Operating Profit	201	228	326	313	386	685	919
Net Operating Profit after Tax (A)	878	1129	1722	2341	3491	3955	5515
Average Capital Employed	2493	3125	4331	6177	9147	12527	16025
Weighted Average Cost of Capital (%)	16.99	14.09	13.63	12.96	14.97	13.32	12.18
Cost of Capital (B)	424	440	590	801	1369	1669	1952
Economic Value Added (A-B)	454	689	1132	1540	2122	2286	3563
Average (Mean)= 1684 Standard Deviation= 993.78 Coefficient of Variation= 59.02%							

Source: Computed from Annual Reports of Infosys Technologies Ltd from 2002-03 to 2008-09.

Economic Value Added (EVA) of Infosys Technologies Ltd has shown an increasing trend during the study period from 2002-03 to 2008-09. It was Rs 454 crore in 2002-03 which increased to Rs 3563 crore in 2008-09. The increase in EVA during the study period was mainly due to more than proportionate increase in NOPAT compared to cost of capital. The NOPAT showed an increase of 628% during the study period while the cost of capital showed an increase of 460% during the same period. The EVA was the lowest during the year 2002-03 and the highest during the year 2008-09 while the weighted average cost of capital in percentage was the highest during the year 2002-03 and the lowest during the year 2008-09. The mean EVA during the seven years' period under study was Rs. 1684 crore with standard deviation of 994 and co-efficient of variation of 59%. It signified that Infosys Technologies Ltd had been performing well in terms of generating wealth in excess of what was expected by the shareholders and earning an adequate return to compensate shareholders for the risk taken.

Market Value Added

Stewart has introduced another measure of shareholders' value called Market Value Added (MVA). It tells how much value a company has added to or subtracted from its shareholders' investment. MVA, therefore, denotes the confidence of the capital market in the performance of a company. It is used as a supplementary to economic value added to evaluate the performance of a company in the stakeholders' value creation. It is determined by the excess of market value of debt and equity over economic book value. The MVA is a measure of the investors' perception of value added. It may be considered as a cumulative measure of corporate performance. Whether a company has a positive or negative MVA depends on the level of the rate of return compared to cost of capital. The successful

companies add their MVA and thus increase the value of capital originally invested while the unsuccessful companies decrease the value of the original invested capital.

Market Value Added can be expressed in an equation form as-

$MVA = \text{Current market value of debt and equity} - \text{Economic book value,}$

Where Economic book value = Share capital + Reserve + Debt

Table II shows the market value added of Infosys Technologies Limited during the study period from 2002-03 to 2008-09.

Table-II: Market Value Added of Infosys Technologies Ltd

(Rs. in Crore)

Particulars	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
Average Market Value Of Equity	26847	32909	61073	82154	115307	82362	75837
Current Market Value Of Debt	-	-	-	-	-	-	-
Market Value Of Debt & Equity (A)	26847	32909	61073	82154	115307	82362	75837
Book Value Of Debt & Equity (B)	2861	3253	5242	6897	11162	13490	17809
Market Value Added (MVA) (A-B)	23986	29656	55831	75257	104145	68872	58028
Net MAV During	-	5670	26175	19426	28888	-35273	-10844
Average (Mean) = 59396	Standard Deviation = 25345.48		Coefficient of Variation = 42.67%				

Source: Computed from Annual Reports of Infosys Technologies Ltd from 2002-03 to 2008-09.

The market value added of Infosys Technologies Limited shows an increasing trend during the first five years and a decreasing trend during the last two years of the study period. The MVA was Rs 23986 crore in 2002-03 which increased to 104145 crore in 2006-07 but thereafter it decreased to Rs 58028 crore in 2008-09. The highest MVA during the year 2006-07 was mainly attributable to the rise in the average market value per share. The seven years average of MVA was Rs 59396 crore with a standard deviation of 25345 and co-efficient of variation of 42.67% thereby projecting a high degree of variation during the period. The year-wise net market value added (MVA) has projected a mixed trend during the period under study. From Rs 5670 crore in the year 2003-04, it went up to Rs 26175 crore in the next year (2004-05) thereafter it came down to Rs 19426 crore in 2005-06 and again shot up to Rs 28888 crore during the next year (2006-07). The year-wise net market value added registered a sharp decline in 2007-08 and 2008-09 and came down to Rs -35273 crore and Rs -10844 crore respectively. If we analyze the main reason of sharp

decline in 2007-08 and 2008-09 we can see that while the decrease in average market value of equity during the last two years was about 34% over the preceding year 2006-07, it was an increase in book value of equity about 60% during the same period (2007-08 and 2008-09) over the preceding year (2006-07). It signified that Infosys Technologies Ltd had performed well in terms of market value added during the first five years of the study period, while in the last two years it failed to do so.

Total Shareholders' Return (TSR)

Total Shareholders' Return (TSR) is a composite indicator which takes into account total shareholders' fund and the dividend declared or proposed by the company. It represents the change in the capital value of a company over a period of one year, plus dividends, expressed as a percentage of gain or loss on the beginning capital value. Thus the TSR is calculated by dividing the sum of the increase in capital value of equity during the period plus dividend paid out by the company during the financial year by capital value of the company at the beginning of the financial year under review. Capital value implies capital employed excluding Debt capital. The exclusion of debt capital provides more accuracy in measuring the Total Shareholders' Return (TSR). This may be expressed in percentage form as-

$$\text{TSR} = \frac{[(\text{Closing capital value} - \text{Beginning capital value}) + \text{Dividend}] \times 100}{(\text{Beginning Capital value})}$$

Table III shows the total shareholders' return of Infosys Technologies Limited during the study period from 2002-03 to 2008-09.

Table-III: Total Shareholders' Return of Infosys Technologies Ltd

(Rs. in Crore)

Particulars	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
Closing Capital Value	2861	3253	5242	6897	11162	13490	17809
Beginning Capital Value	2080	2861	3355	5245	7045	11162	13490
Addition during the Year	781	392	1887	1652	4117	2328	4319
Dividend	179	196	310	412	649	758	1345
One Time Special Dividend	-	668	-	830	-	1144	-
Total Shareholders' Return	960	1256	2197	2894	4766	4230	5664
Total Shareholders' Return (% of Beginning Capital)	46.15	43.90	65.48	55.18	67.65	37.90	41.99

Average (Mean) = 51.18 Standard Deviation= 10.90 Coefficient of Variation= 21.29%

Source: Computed from Annual Reports of Infosys Technologies Ltd from 2002-03 to 2008-09.

The year-wise computation of TSR (Total Shareholders' Return) of Infosys Technologies Limited depicts an increasing trend except for the year 2007-08. The Total Shareholders' Return during the year 2002-03 was Rs. 960 crore which increased to Rs. 4766 crore in 2006-07 but slightly declined to Rs.4230 crore next year (2007-08). Thereafter it again shot up to Rs 5664 crore during the year 2006-07. The total shareholders' return as a percentage of beginning capital employed showed fluctuating trend and fluctuated between 37.9% (in 2007-08) and 67.65% (in 2006-07). The seven years average percentage return on beginning capital value was 51.18% during the study period. It was very encouraging and carries a very good message to the shareholders towards satisfaction of their expectation. The standard deviation of 10.90 and co-efficient of variation of 21.29% transpires a more or less stable position and performance of the company in respect of Total Shareholders' Value (TSR).

Brand Value

The brand value is a composite attribute of several internal and external factors of a final product due to which customers get attached to the product. It is much more than a trademark or a logo. A brand is a trust mark, a promise of quality and authenticity that clients can rely on. Brand value is the value addition provided to a product or a company by its brand name. It is the financial premium that a buyer is willing to pay for the brand over a generic or less worthy brand. Brand equity is not created overnight. It is the result of relentless pursuit of quality in manufacturing, selling, service, advertising and marketing. It is integral to the quality of client experiences in dealing with the company and its services over a period.

The task of measuring brand value is a complex one. Several models are available for accomplishing this. The most widely used is the brand-earnings-multiple model. There are several variants of this model. Infosys Technologies Ltd has adapted the generic brand-earnings-multiple model to value its corporate brand, "Infosys". Table IV shows the brand value of Infosys Technologies Limited during the study period from 2002-03 to 2008-09.

Table-IV: Brand Value of Infosys Technologies Ltd

(Rs. in Crores)

Particulars	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
Weighted Average Profits	969.19	1133.42	1603.81	2175	3033	3760	5731
Remuneration of Capital	123.52	156.24	216.55	309	457	626	801
Brand Related Profit	845.67	977.18	1387.26	1866	2576	3134	4930
Tax	310.78	350.56	507.63	628	867	1065	1676
Brand Earnings	534.88	626.62	879.63	1238	1709	2069	3254
Brand Multiple	14.00	13.06	16.09	18.51	18.50	15.40	9.94
Brand Value	7488	8185	14153	22915	31617	31863	32345
Average (Mean) = 21224	Standard Deviation= 10395.27		Coefficient of Variation= 48.98%				

Source: Computed from Annual Reports of Infosys Technologies Ltd from 2002-03 to 2008-09.

Table IV shows that there was consistent increase in brand value of Infosys Technologies Ltd during the period from 2002-03 to 2008-09. It was Rs. 7488 crores in 2002-03 which increased to Rs. 32345 crores in 2008-09 with an average of 21224 during the study period. The standard deviation of 10395 and co-efficient variation of 48.98% shows a high degree of variation.

Conclusion

In the era of professional management it is felt that all functions and activities of a corporate house revolve round the shareholders' value creation. It requires total commitment from all business processes. It can be referred to as a value management and the intangible parameters such as Economic Value Added (EVA), Market Value Added (MVA), Total Shareholders Return (TSR) and Brand Value indicate its degree and quality towards this achievement. In India, the practice of measuring and disclosing intangible values in the Annual published accounts is not uniform among the corporate. Of late, some eminent companies are showing some interest and using such intangible parameters internally as a performance gauge for refining efficiency and improving disclosure practices. The companies in India would join their hands in this type of endeavour in the years to come bearing in mind to learn that shareholders' value creation is not only the responsibility but the identity of a corporate in the present era.

Infosys Technologies Ltd possesses a very good image in the capital market and as such its shares are quoted in the Stock Exchange at a very high price. The investors are willing to pay more for its shares due to its positive growth in Economic Value Added (EVA), Market Value Added (MVA), Total Shareholders Return (TSR) and Brand Value over the years. The EVA showed an increase of 785% during the study period. It signified that Infosys Technologies Ltd had been performing well in terms of generating wealth in excess of what was expected by the shareholders and earning an adequate return to compensate shareholders' for the risk taken. The Market Value Added (MVA) signified that Infosys Technologies Ltd had performed well during the first five years of the study period, while in the last two years it failed to do so. The Total Shareholders Return (TSR) was very encouraging and carried very good message to the shareholders towards satisfaction of their expectation. The Brand Value showed an increase of 432% during the study period. Its Brand earning in the market is very attractive and the Company has acquired a good quantum of Brand value. All these factors have contributed to the corporate image and goodwill of the company. The practice of the company in the disclosure of these intangible accounting parameters in the Annual published accounts of the company has definitely attracted public interest and acts as a confidence building measure in the corporate world. But the company should undertake a detailed analysis to identify the causes of the decreasing trend of MVA and TSR in the last two years of the study period and formulate its strategy to combat the situation and to add to its value creation activities.

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Dr Aruna Saini is Assistant Professor, Department of Accounting & Finance, NRDD College of Management, Jhunjhunu.

Dr Ramdhan Saini is Senior Lecturer, Department of Accountancy & Business Statistics, Seth Motilal (PG) College, Jhunjhunu.