

A Study on the Consumer Perception for Branded Fuels with Special Reference to Xtrapremium Petrol of Indian Oil Corporation Limited in Coimbatore City

V. Kannan

Research Scholar & Professor
Jansons School of Business
Karumathampatti
Coimbatore – 641 659

Dr. V. Chinniah

Professor
Department of Management
Studies
Madurai Kamaraj University
Madurai – 625 021

Abstract

Indian Oil's Xtrapremium Petrol is India's leading branded petrol boosted with new generation multifunctional additives known as friction busters that prevent deposition in the combustion chamber. Xtrapremium is custom designed to deliver higher mileage, more power, better pick-up, faster acceleration, enhanced engine cleanliness and lower emissions. In this study we have tried to assess the consumer awareness and usage pattern of Xtrapremium petrol and identify the best media of advertising for Xtrapremium petrol. We have given some suggestions to remove some myths from consumer mindset for a better product penetration and to thwart competition in the long run.

Introduction

India's flagship national oil company and downstream petroleum major Indian Oil Corporation Limited (IOC) is the 18th largest petroleum company in the world. It is currently India's largest company by sales with a turn over of Rs.2,85,337 crore and a profit of Rs.2,950 crore for the fiscal year 2008-2009. It is also the highest ranked Indian company in the prestigious Fortune 'Global 500' listing having moved up 11 places to the 105th position in 2009. Indian Oil and its subsidiaries account for approximately 48% petroleum products market share, 34% national refining capacity and 71% downstream sector pipelines capacity in India. With India's energy needs projected to grow by 40% in the next five years, the future is indeed full of promise for Indian Oil – a future the 31,700 strong Indian Oil team shall build as they fuel the dreams of over a billion of their countrymen. Indian Oil's products include Indane gas, auto gas, natural gas, petrol / gasoline, diesel, jet fuel, lubricants and greases, marine fuels and lubricants, kerosene, industrial fuels, bitumen, crude oil, and linear alkyl benzene besides special products like benzene, mineral turpentine oil, paraffin wax, raw petroleum coke, sulphur and toluene. Automotive petrol / gasoline is used in internal combustion spark ignition engines. Gasoline is a complex mixture of relatively volatile hydrocarbons and is derived from fractional distillation of crude petroleum with a further treatment mainly in terms of improvement of its octane rating. In view of the auto fuel policy issued by the Government of India, more and more stringent specifications (equivalent to EuroII, EuroIII & Euro IV) are being made applicable for the gasoline's being marketed in India. This has led to a reduction of the environmentally polluting factors in gasoline.

Xtrapremium Petrol

Indian Oil's Xtrapremium Petrol is India's leading branded petrol boosted with new generation multifunctional additives known as friction busters that prevent

Keywords

*Xtrapremium Petrol,
consumer awareness,
consumer perception,
usage pattern*

deposition in the combustion chamber. Xtrapremium is custom designed to deliver higher mileage, more power, better pick-up, faster acceleration, enhanced engine cleanliness and lower emissions. Xtrapremium is a most sought after fuel among discerning motorists and owners of new generation high performance cars have endorsed its unmatched performance. In terms of fuel system cleanliness, Xtrapremium is superior to any other alternative fuel in this segment. The friction modifier in this fuel drastically reduces friction in the non-lubricated engine area, thereby contributing to fuel economy. With the above advantages of Xtrapremium petrol, the potential for this product is huge but it needs more research on the consumer perception with respect to the price, awareness level of the advantages, usage method / pattern, satisfaction level and other factors that influence using the product regularly so that suitable strategies can be framed to position the product and hence this paper.

Objectives of the study

The following are the objectives of the study

- i. To assess the consumer awareness of xtrapremium petrol.
- ii. To assess the usage pattern of consumers for xtrapremium petrol.
- iii. To identify the best media of advertising for xtrapremium petrol.

- iv. To identify the most preferred factor that influences using xtrapremium petrol regularly and
- v. To assess the satisfaction level of regular users of xtrapremium petrol.

Research design

Descriptive research design is one that is concerned with describing the characteristics of a particular individual or a group of consumers who use the products. The descriptive study is typically concerned with determining the frequency with which something occurs.

Methodology and Data Collection

The present study is based on both primary and secondary data. Primary data was collected through personal interviews and field work using a structured questionnaire. Secondary data was collected from various journals, books and websites.

Sampling Process and Data Analysis

The researcher used Non-probability judgment sampling for selecting the sample respondents like professionals, business people and employees. The study consisted of 115 two wheeler and four wheeler users in Coimbatore city and was conducted in May 2011. Data obtained through questionnaire was compiled and tabulated. Percentages, weighted arithmetic mean and one way Anova were used to analyse the data.

Data Analysis and Interpretation

Data Analysis and interpretations are presented below:

Table 1: Preference of the respondents for fuels from different Companies

| Sl. No | Companies | No. of Respondents | Percentage |
|--------|--------------------------------------|--------------------|------------|
| 1. | Indian Oil Corporation (IOC) | 62 | 53.92 |
| 2. | Bharath Petroleum Corporation(BPC) | 38 | 33.04 |
| 3. | Hindustan Petroleum Corporation(HPC) | 15 | 13.04 |
| | Total | 115 | 100 |

It is inferred from the above table that 53.92% of the respondents prefer IOC, 33.04% prefer BPC and 13.04% prefer HPC.

Chart 1

Preference of the respondents for fuels from different Companies

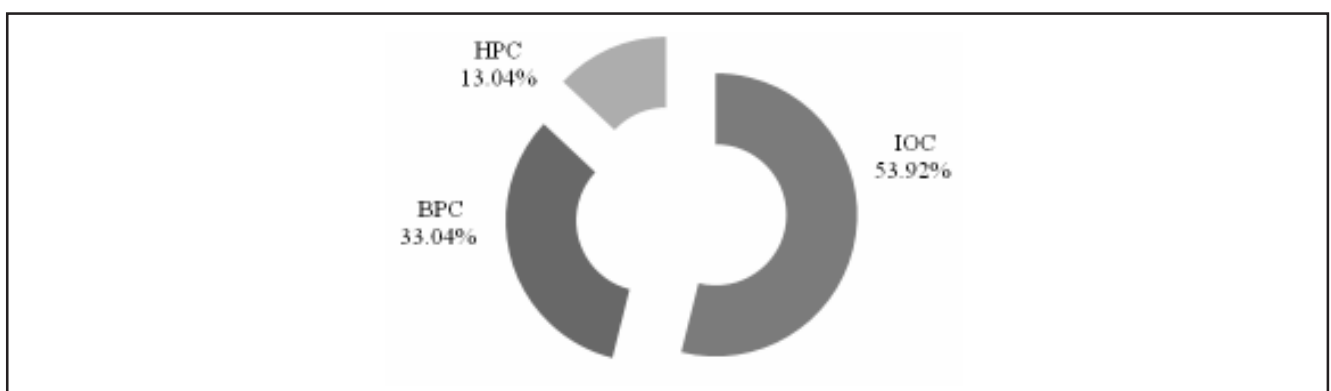


Table 2
Type of Petrol used by Non-IOC Customers

| Sl. No | Type of Petrol | No. of Respondents | Percentage |
|--------|-----------------|--------------------|------------|
| 1. | Ordinary petrol | 41 | 77.36 |
| 2. | Branded petrol | 12 | 22.64 |
| | Total | 53 | 100 |

It is found from the above table that 77.36% of non – IOC customers prefer ordinary petrol and 22.64% prefer branded petrol.

Chart 2
Type of petrol used by non-IOC customers

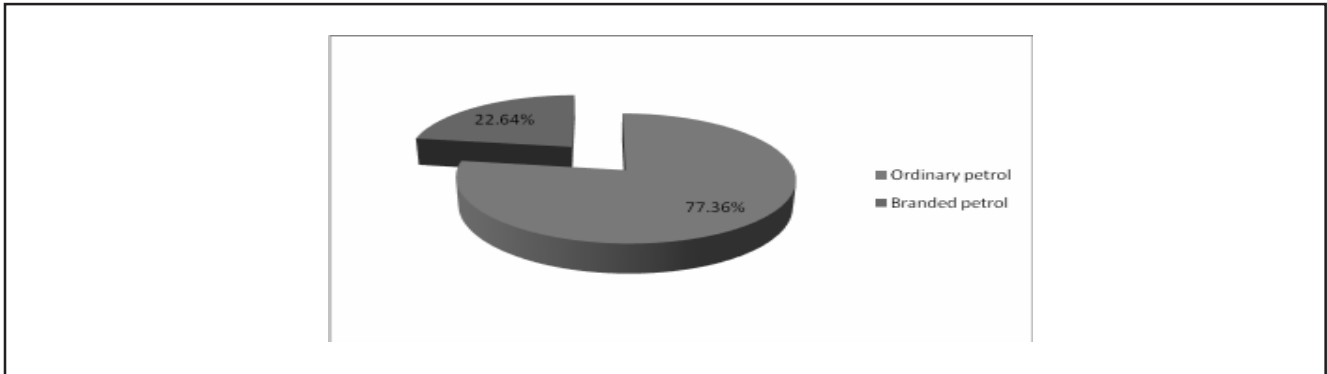


Table 3
General awareness of Xtrapremium Petrol

| Sl. No | AWARENESS | No. of Respondents | Percentage |
|--------|-----------|--------------------|------------|
| 1. | Aware | 104 | 90.43 |
| 2. | Not Aware | 11 | 9.57 |
| | Total | 115 | 100 |

It is inferred from the above table that 90.43% of the respondents are aware of xtrapremium petrol and 9.57% are not aware.

Chart 3
General awareness of Xtrapremium petrol

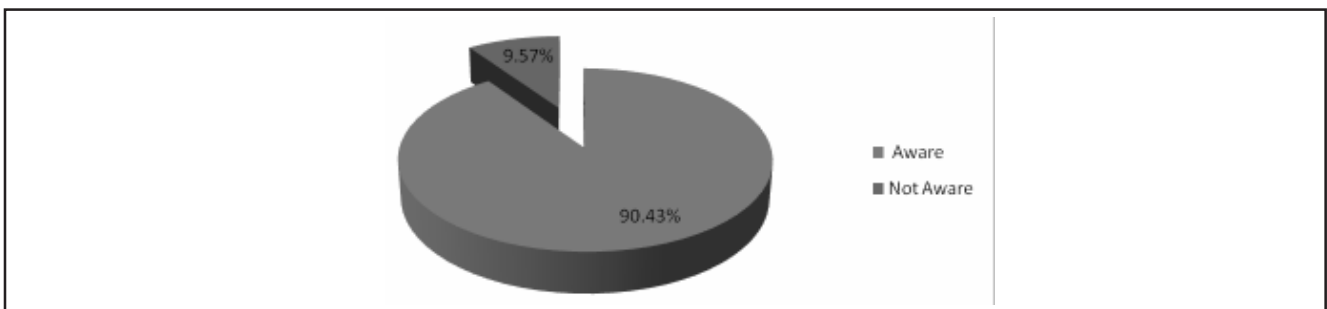


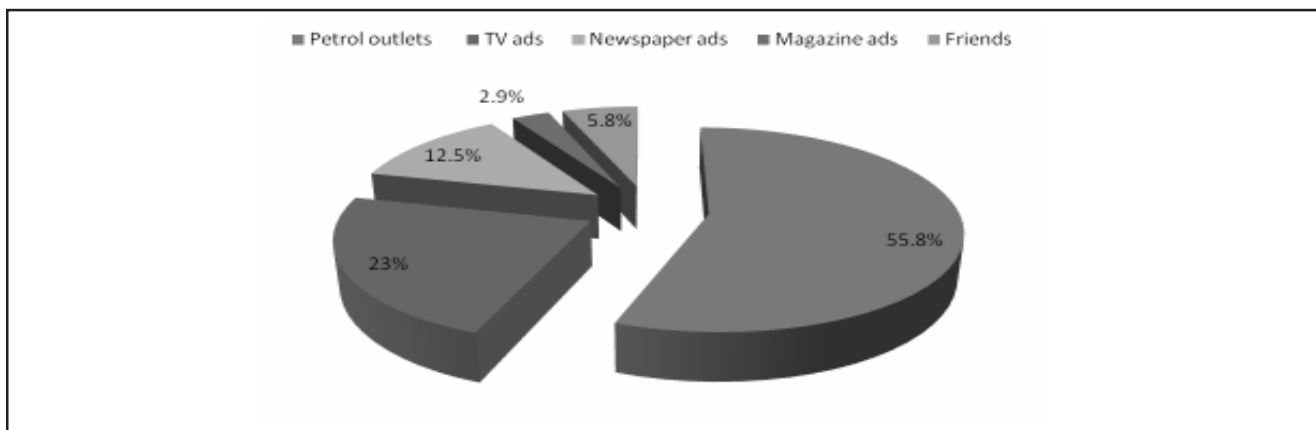
Table 4
Mode of awareness of Xtrapremium Petrol

| Sl. No | Mode of Awareness | No. of Respondents | Percentage |
|--------|-------------------|--------------------|------------|
| 1. | Petrol outlets | 58 | 55.80 |
| 2. | TV ads | 24 | 23.00 |
| 3. | Newspaper ads | 13 | 12.50 |
| 4. | Magazine ads | 3 | 2.90 |
| 5. | Friends | 6 | 5.80 |
| | Total | 104 | 100 |

It is inferred from the above table that 55.8% of the respondents became aware of xtrapremium petrol through

petrol outlets, 23% through TV ads, 12.5% through newspaper ads, 2.9% through magazine ads and 5.8% through friends.

**Chart -4
Mode of Awareness of Xtrapremium Petrol**



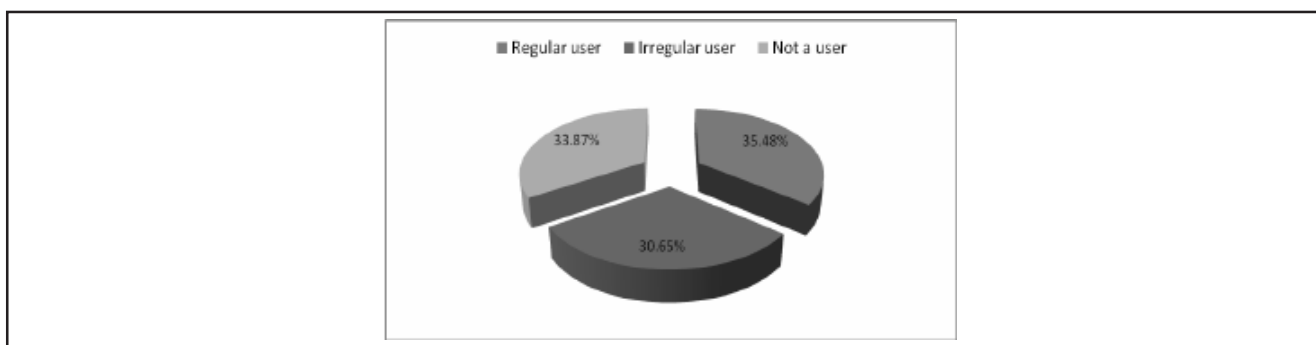
**Table 5
Usage Pattern of Xtrapremium Petrol**

| Sl. No | Usage Pattern | No. of Respondents | Percentage |
|--------|----------------|--------------------|------------|
| 1. | Regular user | 22 | 35.48 |
| 2. | Irregular user | 19 | 30.65 |
| 3. | Not a user | 21 | 33.87 |
| | Total | 62 | 100 |

It is found from the above table that 35.48% of IOC customers are regular users of xtrapremium petrol,

30.65% are irregular users and 33.87% are non-users.

**Chart 5
Usage Pattern of Xtrapremium Petrol**



**Table 6
Type of vehicle on which Xtrapremium Petrol is used**

| Sl. No | Type of Vehicle | No. of Respondents | Percentage |
|--------|------------------------|--------------------|------------|
| 1. | Only for 2 wheeler | 11 | 50.00 |
| 2. | Only for 4 wheeler | 4 | 18.19 |
| 3. | Both for 2 & 4 wheeler | 7 | 31.81 |
| | Total | 22 | 100 |

It is inferred from the above table that 50% of regular users of xtrapremium petrol use it only for 2 wheelers,

18.19% only for 4 wheelers and 31.81% for both 2 & 4 wheelers.

Chart 6

Type of vehicle on which Xtrapremium Petrol is used

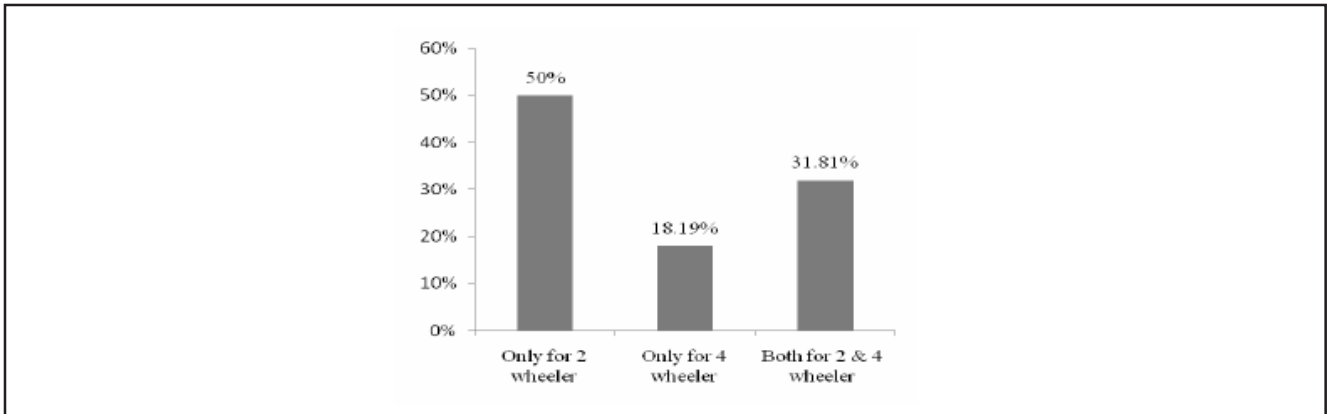


Table 7

Period of usage of Xtrapremium Petrol

| Sl. No | Period of Usage | No. of Respondents | Percentage |
|--------|-------------------|--------------------|------------|
| 1. | Less than 1 month | 1 | 4.50 |
| 2. | 1-3 months | 1 | 4.50 |
| 3. | 3-6 months | 5 | 22.70 |
| 4. | 6 months – 1 year | 6 | 27.30 |
| 5. | More than 1 year | 9 | 41.00 |
| | Total | 22 | 100 |

It is concluded from the above table that 4.5% each of regular users of xtrapremium petrol have used it for less than a month and for 1-3months respectively, 22.7% have

used it for 3-6 months, 27.3% for 6 months to one year and 41% have used it for more than a year.

Chart 7

Period of usage of Xtrapremium Petrol

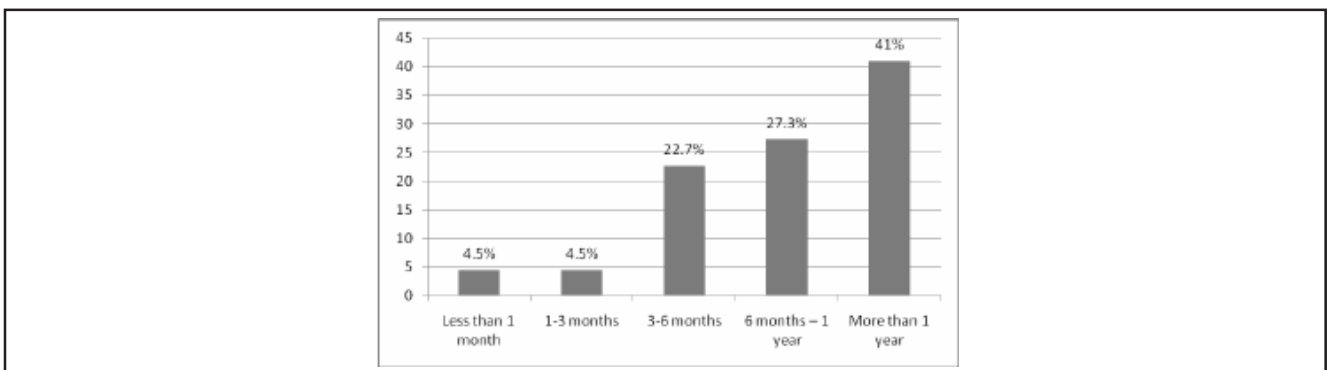


Table 8

Level of Satisfaction of regular users of Xtrapremium Petrol

| Factors | Total Sum | Average Mean | Rank |
|-----------------------|-----------|--------------|------|
| Price | 87 | 3.95 | 2 |
| Offers | 61 | 2.77 | 4 |
| Availability | 71 | 3.23 | 3 |
| Mileage / Performance | 94 | 4.27 | 1 |

It is clear from the above table that regular users of xtrapremium petrol are highly satisfied with its mileage /

performance, are satisfied with its price and availability and are neither satisfied nor dissatisfied with the offers given by IOC to promote it.

Chart 8

Level of Satisfaction of regular users of Xtrapremium Petrol



Table 9

Recommendation of regular users of Xtrapremium Petrol to others

| Sl. No | Recommendations | No. of Respondents | Percentage |
|--------|-----------------|--------------------|------------|
| 1. | Definitely Yes | 6 | 27.30 |
| 2. | Yes | 12 | 54.50 |
| 3. | No Comments | 4 | 18.20 |
| 4. | No | 0(0.00) | 0(0.00) |
| 5. | Definitely No | 0(0.00) | 0(0.00) |
| | Total | 22 | 100 |

It is concluded from the above table that 27.3% of regular users of xtrapremium petrol would definitely recommend

it to others, 54.5% would recommend it to others and 18.2% have no comments to offer.

Chart 9

Recommendation of regular users of Xtrapremium Petrol to others

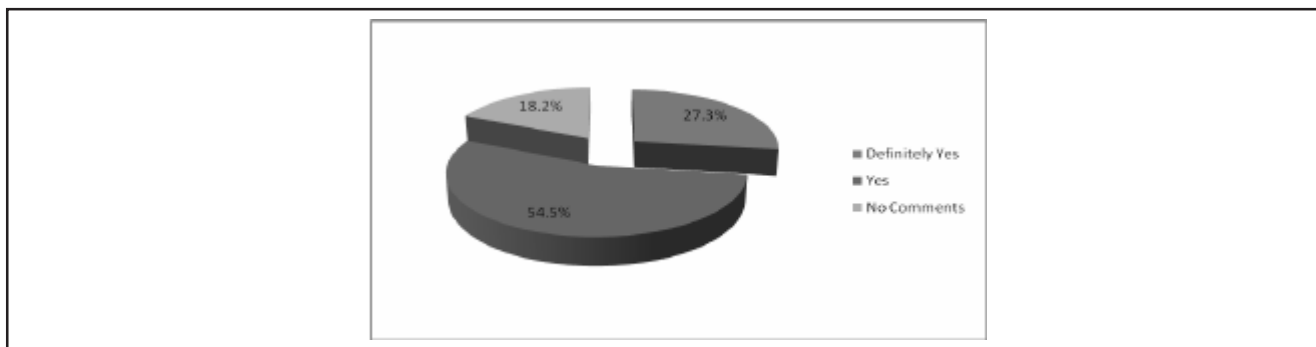


Table 10

Period of usage of Xtrapremium Petrol

| Sl. No | Period of Usage | No. of Respondents | Percentage |
|--------|-------------------|--------------------|------------|
| 1. | Less than 1 month | 3 | 15.79 |
| 2. | 1-3 months | 8 | 42.10 |
| 3. | 3-6 months | 4 | 21.05 |
| 4. | 6 months-1 year | 2 | 10.53 |
| 5. | More than 1 year | 2 | 10.53 |
| | Total | 19 | 100 |

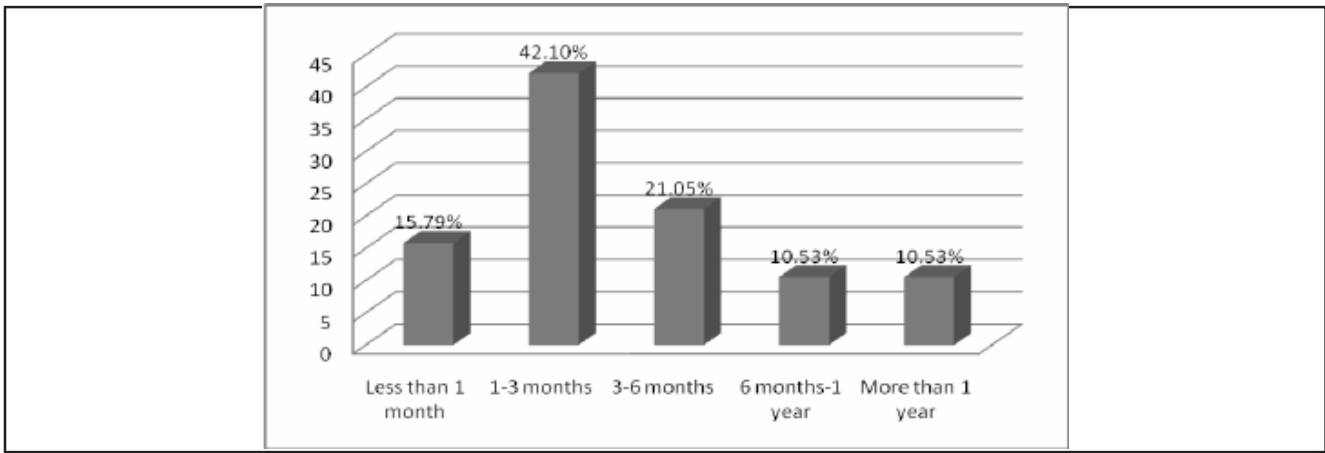


Table 11
Reasons for irregular usage of Xtrapremium Petrol

| Sl. No | Reasons | No. of Respondents | Percentage |
|--------|------------------------|--------------------|------------|
| 1. | Higher Price | 8 | 42.11 |
| 2. | Irregular Availability | 7 | 36.84 |
| 3. | Poor quality | 4 | 21.05 |
| | Total | 19 | 100 |

It is concluded from the above table that 42.11% of irregular users of xtrapremium petrol state price as the

reason for not using xtrapremium petrol regularly, 36.84% state irregular availability as the reason and 21.05% state poor quality as the reason for irregular usage.

Chart 11
Reasons for irregular usage of Xtrapremium Petrol

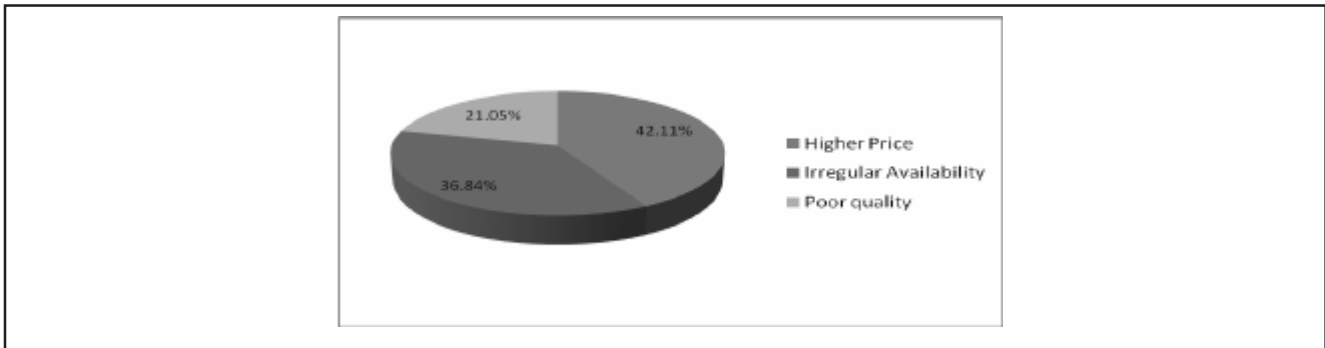


Table 12
Nature of quality problem with Xtrapremium Petrol

| Sl. No | Quality problem | No. of Respondents | Percentage |
|--------|-------------------------------|--------------------|------------|
| 1. | No improvement in mileage | 3 | 75.00 |
| 2. | No change in Maintenance cost | 1 | 25.00 |
| 3. | No change in engine power | 0 | 0.00 |
| 4. | No change in emissions | 0 | 0.00 |
| | Total | 4 | 100 |

It is clear from the above table that 75% of irregular users of xtrapremium petrol who cite quality as the reason for

irregular usage state that there is no improvement in mileage and 25% state that there is no change in maintenance cost.

Chart 12
Nature of quality problem with Xtrapremium Petrol

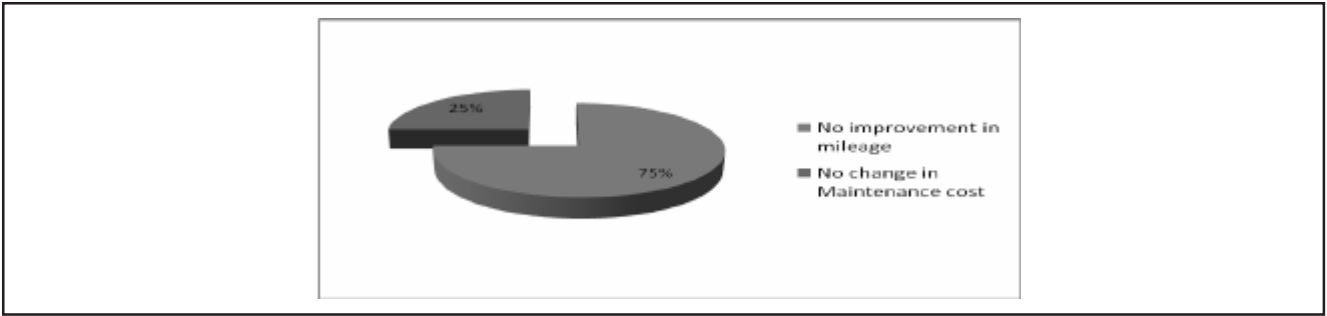


Table 13
Awareness level of repeated use of Xtrapremium Petrol to reap the benefits

| Sl. No | Awareness | No. of Respondents | Percentage |
|--------|-----------|--------------------|------------|
| 1. | Aware | 9 | 47.37 |
| 2. | Not Aware | 10 | 52.63 |
| | Total | 19 | 100 |

It is concluded from the above table that 47.37% of irregular users of xtrapremium petrol are aware of the repeated use of xtrapremium petrol to reap the benefits while 52.63% are not aware.

Chart 13
Awareness level of repeated use of Xtrapremium Petrol to reap the benefits

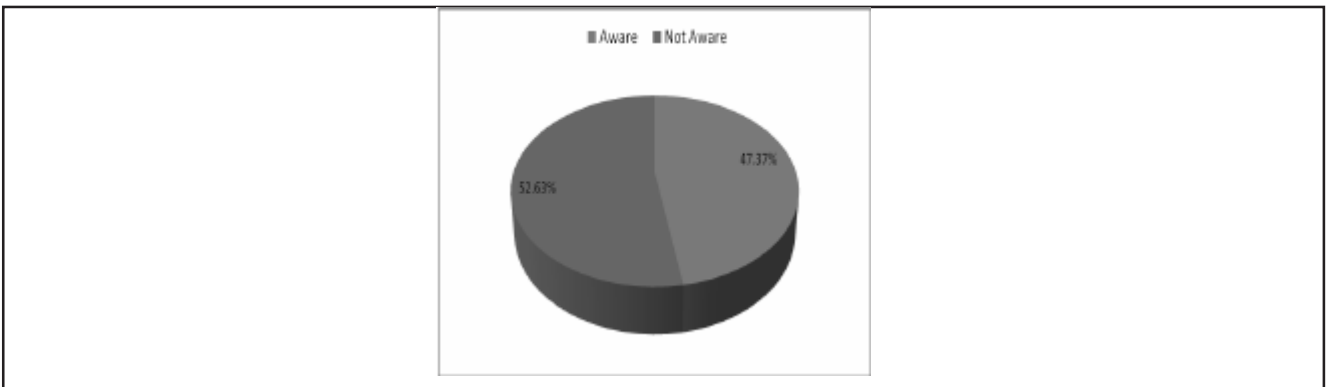


Table 14
Awareness level on advantages of using Xtrapremium Petrol

| Sl. No | Advantages | No. of Respondents | Percentage |
|--------|-------------------------------|--------------------|------------|
| 1. | Improved mileage | 29 | 39.19 |
| 2. | Lower maintenance cost | 6 | 8.11 |
| 3. | Better engine power | 14 | 18.92 |
| 4. | Reduced emissions | 10 | 13.51 |
| 5. | Smooth running | 10 | 13.51 |
| 6. | Improved life for the vehicle | 5 | 6.76 |
| | Total | 74 | 100 |

It is clear from the above table that 39.19% of the non-users of xtrapremium petrol are aware of the improved mileage advantage of using xtrapremium petrol, 8.11% are aware of the lower maintenance cost advantage, 18.92% are aware of the better engine power advantage, 13.51% each are aware of the reduced emissions advantage and smooth running advantage respectively and 6.76% are aware of the improved vehicle life advantage by using xtrapremium petrol.

Chart 14
Awareness level on advantages of using Xtrapremium Petrol

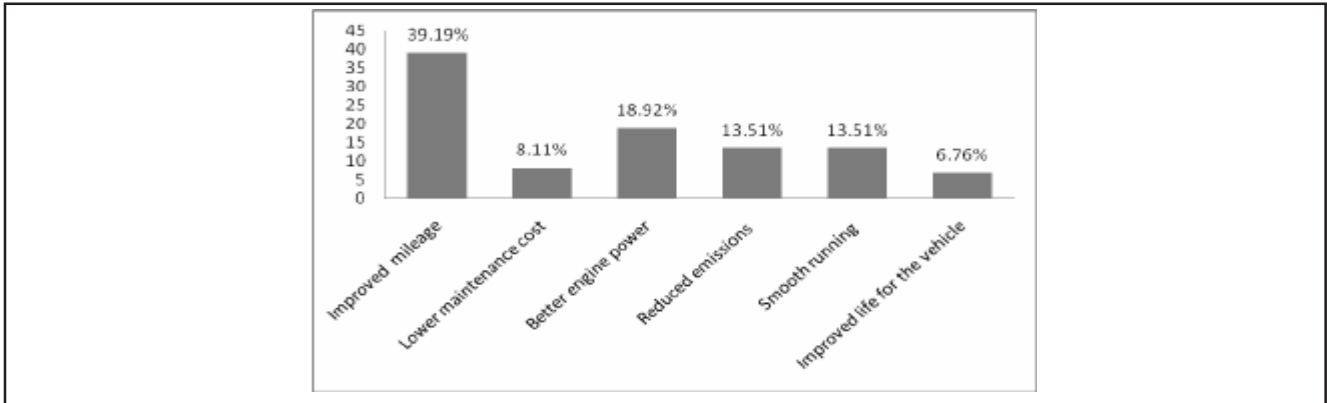


Table 15
Reasons for not buying Xtrapremium Petrol

| Sl. No | Reasons | No. of Respondents | Percentage |
|--------|---|--------------------|------------|
| 1. | Not aware of advantages of xtrapremium petrol | 38 | 51.35 |
| 2. | Price on the higher side | 22 | 29.73 |
| 3. | Non-availability at outlet regularly | 14 | 18.92 |
| | Total | 74 | 100.00 |

It is inferred from the above table that 51.35% of non-users of xtrapremium petrol state that non-awareness of the advantages of using xtrapremium petrol as the reason

for not using it, 29.73% state higher price as the reason and 18.92% state non-availability at outlet regularly as the reason for not using xtrapremium petrol.

Chart 15
Reasons for not buying Xtrapremium Petrol

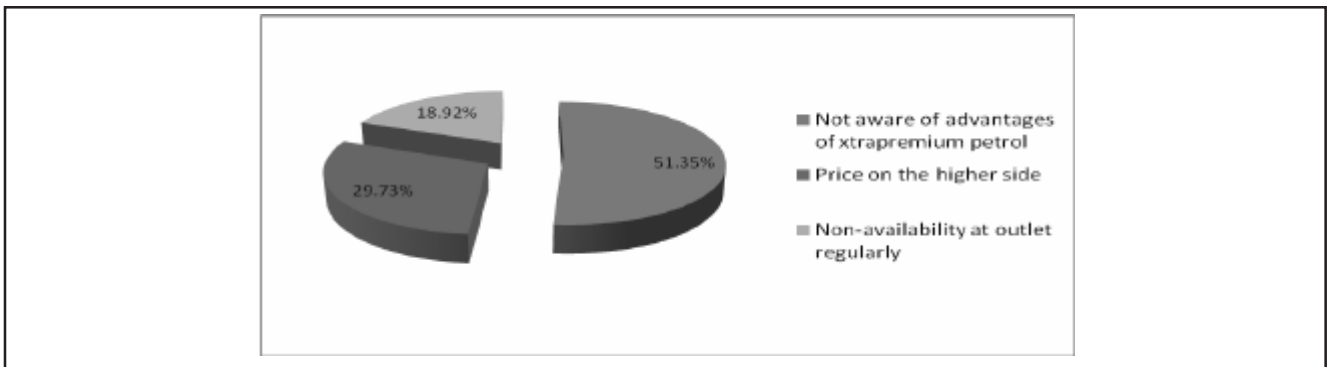


Table 16
Premium price per litre expected to buy Xtrapremium Petrol regularly

| Sl. No | Price | No. of Respondents | Percentage |
|--------|-----------------------|--------------------|------------|
| 1. | Not interested to buy | 13 | 11.30 |
| 2. | Rs. 1/- | 20 | 17.40 |
| 3. | Rs. 1.50 | 24 | 20.90 |
| 4. | Rs. 2/- | 25 | 21.70 |
| 5. | Rs. 2.50 | 25 | 21.70 |
| 6. | Rs. 3/- | 8 | 7.00 |
| | Total | 115 | 100 |

It is clear from the above table that 11.3% of the respondents are not interested to buy xtrapremium petrol, 17.4% are willing to offer a premium of Rs.1/- , 20.9%

are willing to offer Rs.1.50, 21.7% each are willing to offer Rs.2/- and Rs.2.50 respectively and 7% are willing to offer Rs.3/- as a premium price per litre for xtrapremium petrol.

Chart 16
Premium price per litre expected to buy Xtrapremium Petrol regularly



Table 17
Ranking of the various factors that influence using Xtrapremium Petrol regularly

| Sl. No | Factors | Total Sum | Average Mean | Rank |
|--------|------------------------|-----------|--------------|------|
| 1. | Price | 541 | 4.70 | 2 |
| 2. | Availability | 439 | 3.82 | 4 |
| 3. | Offers | 312 | 2.71 | 7 |
| 4. | Better mileage | 694 | 6.03 | 1 |
| 5. | Lower maintenance cost | 451 | 3.92 | 3 |
| 6. | Better power | 421 | 3.66 | 5 |
| 7. | Reduced emissions | 364 | 3.17 | 6 |

It can be inferred from the above table that the respondents rank better mileage as the main factor that influences using xtrapremium petrol regularly, followed by

price, lower maintenance cost, availability, better power, reduced emissions and offers.

Chart 17
Average Mean of the various factors that influence using Xtrapremium Petrol regularly

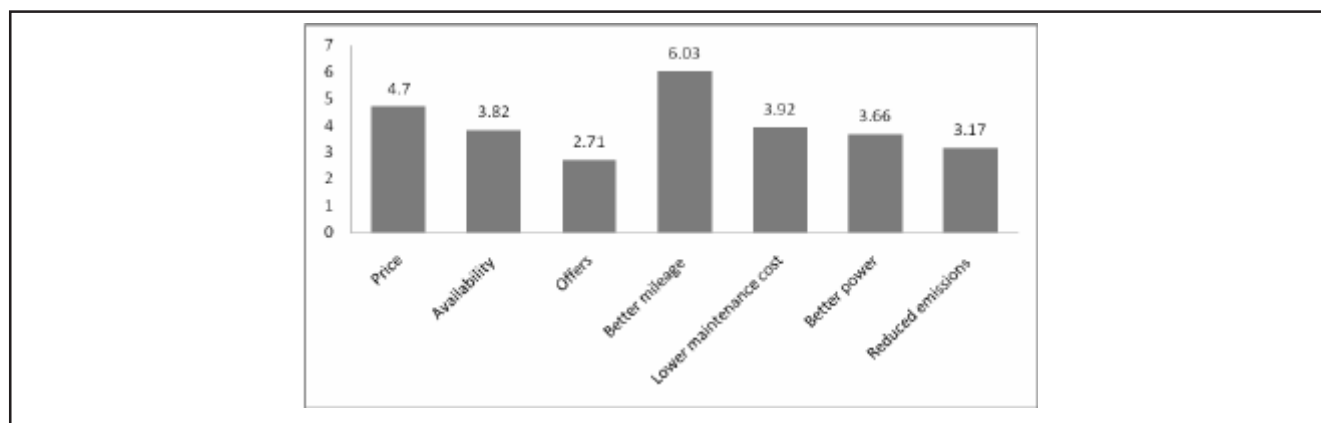


Table 18
Type of vehicle and period of usage for regular and irregular users of Xtrapremium Petrol

| Type of User | Type of Vehicle | | | |
|-----------------|-----------------|---------------|---------------|--------------|
| | 2 Wheeler | 4 Wheeler | 2 & 4 Wheeler | Total |
| Regular Users | 11 (50%) | 4 (18.19%) | 7 (31.80%) | 22 (100%) |
| Irregular Users | 10 (52.63%) | 6 (31.58%) | 3 (15.79%) | 19 (100%) |

| Type of User | Period of usage | | | | | |
|-----------------|-----------------|---------------|---------------|---------------|---------------|--------------|
| | < 1 month | 1-3 months | 3-6 months | 6-12 months | >1 year | Total |
| Regular Users | 1 (4.50%) | 1 (4.50%) | 5 (22.70%) | 6 (27.30%) | 9 (41.00%) | 22 (100%) |
| Irregular Users | 3 (15.79%) | 8 (42.10%) | 4 (21.05%) | 2 (10.53%) | 2 (10.53%) | 19 (100%) |

It is clear from the above table that 50% of the two wheeler users are regular users of xtrapremium petrol

and only 18.19% of the four wheeler users are the regular users of xtrapremium petrol.

Chart 18
Type of vehicle and period of usage for regular and irregular users of Xtrapremium Petrol

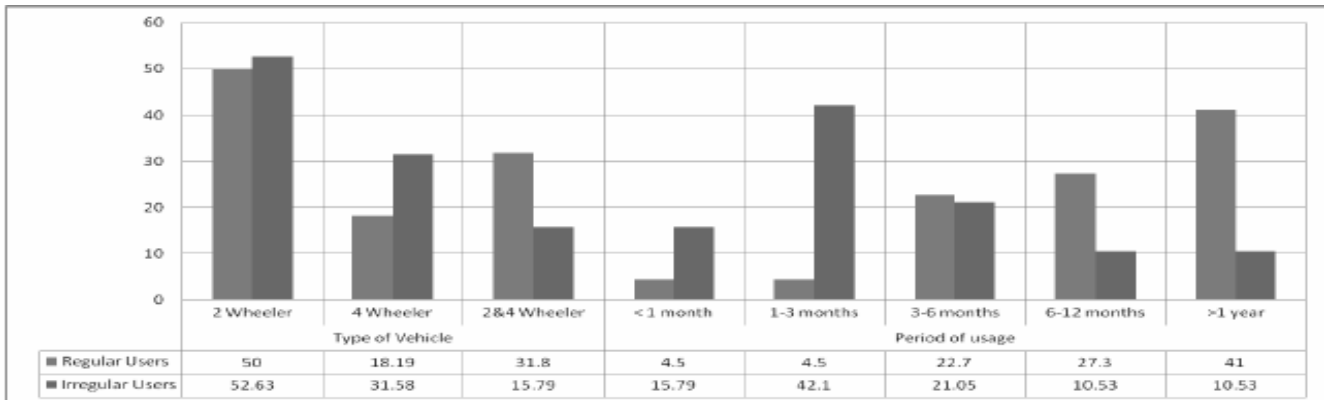


Table 19

Awareness level on repeated use to reap the benefits among irregular and non-users of Xtrapremium Petrol

| Users | Aware | Unaware | Total |
|-----------------|------------|------------|----------|
| Irregular Users | 9(47.37%) | 10(52.63%) | 19(100%) |
| Non-Users | 26(35.13%) | 48(64.87%) | 74(100%) |

It can be inferred from the above table that a majority of both irregular and non-users are unaware of the benefits

of repeated use of xtrapremium petrol to reap the benefits.

Chart 19
Awareness level on repeated use to reap the benefits among irregular/non-users of Xtrapremium Petrol

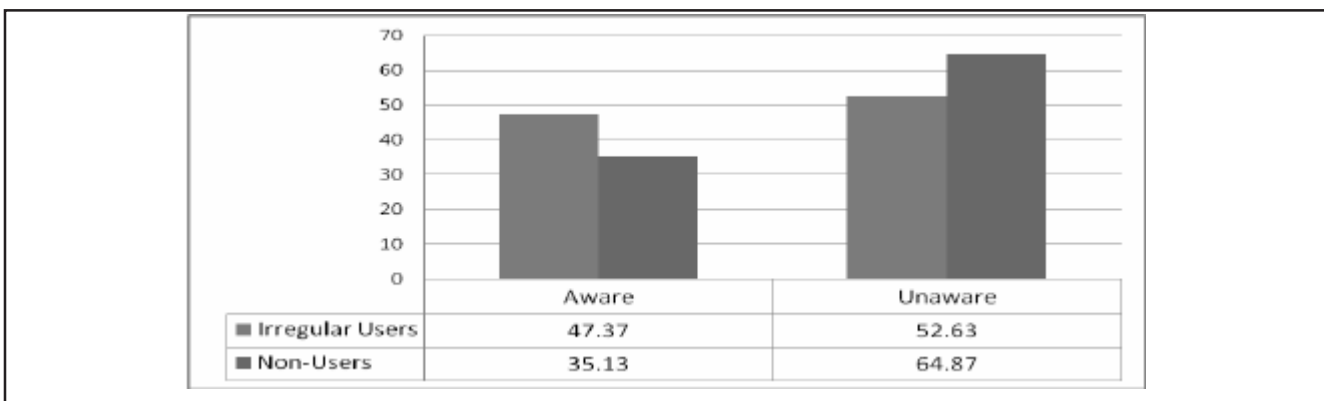


Table 20
Results of one way ANOVA test

Null Hypothesis: There exists no association between the type of vehicle, period of usage, future loyalty and

the level of satisfaction of regular users of xtrapremium petrol.

| Factors | Type of Vehicle | | | Period of Usage | | | Future Loyalty | | |
|-----------------------|-----------------|-------|--------|-----------------|-------|--------|----------------|-------|--------|
| | F value | Sig | Remark | F value | Sig | Remark | F value | Sig | Remark |
| Price | 2.429 | 0.116 | NS | 0.185 | 0.905 | NS | 0.351 | 0.70 | NS |
| Offers | 1.192 | 0.326 | NS | 2.826 | 0.070 | NS | 4.567 | 0.052 | NS |
| Availability | 0.424 | 0.661 | NS | 5.453 | 0.08 | NS | 0.155 | 0.85 | NS |
| Mileage / Performance | 3.405 | 0.056 | NS | 1.410 | 0.274 | NS | 7.874 | 0.053 | NS |

Level of Significance: 5 per cent

Results of one way anova test implies that the calculated F values are greater than its probability values at 5 percent level of significance. Thus, the hypothesis framed stands rejected and it is concluded that there exists significant association between the type of vehicle, period of usage, future loyalty and the level of satisfaction of regular users of xtrapremium petrol.

Suggestions

The following are the suggestions suggested by the researchers based on the findings of the study:

1. IOC has to improve the awareness level of xtrapremium petrol among the public on the following aspects by promoting the product mainly through petrol outlets and television advertisements:
 - a. All the advantages of using xtrapremium petrol.
 - b. Repeated use for 4 or 5 times to reap the benefits.
 - c. Using the product on four wheelers without any apprehension that it would damage the engine or other parts.
 - d. Reduced environmental pollution thus leading to a better healthier life for the mankind.
2. Regular users of xtrapremium petrol are satisfied with the mileage / performance and price and are willing to recommend it to others. IOC has to capitalise on this by identifying regular users through retail outlets and preparing a list of satisfied customers and popularising the same so that others also would be convinced and start using the product.
3. IOC has to instruct all their retail outlets to ensure sufficient stock of xtrapremium petrol so that availability is not a problem to any customer willing to purchase the product.

4. Periodic offers / incentives have to be offered to customers to encourage them to buy and use xtrapremium petrol. These offers / incentive schemes have to be given wide publicity to reach customers even in remote locations.
5. IOC has to ensure that xtrapremium petrol is priced at the preferred premium band of Rs.1/= to Rs.2.50 per litre for customers to regularly purchase the product.
6. Respondents have ranked better mileage when compared to price as the major factor that influences the purchase of xtrapremium petrol. Hence, if customers get a better mileage along with other advantages by using xtrapremium petrol, they are willing to buy the product regularly.
7. IOC has to consider taking the following steps to prevent contamination / adulteration of xtrapremium petrol so that the customer is ensured of fully getting the benefits for the extra price paid:
 - a. Differentiating the product from ordinary petrol by having a different colour for xtrapremium petrol so that the customer can easily identify it (similar to differentiating domestic LPG from commercial LPG through odour for domestic LPG).
 - b. Having exclusive outlets that trade only in xtrapremium petrol and not in ordinary petrol.

Conclusion

Xtrapremium petrol is no doubt a premium product from the IOC stable and regular users of the product endorse this view. However, there are certain myths in the mind set of consumers which have to be overcome for a better market share for the product. It is obvious from the above discussions that adopting the above strategies will definitely help IOC to clear the mindset of consumers for a better product penetration and to thwart competition in the long run.

References:

- Hawkins Dell – Consumer Behaviour: Building Marketing Strategy (New Delhi: Tata McGraw Hill, 2002).
- Kotler.P, Marketing Management (Singapore, Pearson, 2003).
- Lovelock.C, Services Marketing (Singapore, Pearson, 2003).
- Leon.G.Shiffman, Lesile Lazar Kanuk, Consumer Behaviour, Pearson Education, 8th edition, 2004.
- Naresh.K.Malhotra, Marketing Research- An applied orientation, Pearson Education, 3rd edition, 2002.
- Rajendra Nargundkar, Marketing Research- Text and Cases- New Delhi: Tata McGraw Hill, 2nd edition - 2003.
- Srivastav.K.K, Consumer Behaviour in Indian Context (New Delhi, Gulgotia, 2003).
- Saxena Rajan, Marketing Management, 4th edition (New Delhi: Tata McGraw Hill, 2009).
- Website www.iocl.com

Annexure –A

Socio -Economic Profile of the Respondents

| Variables | | IOC Customers' | Other company Customers' | Total |
|----------------|-------------------------|------------------|--------------------------|-----------------|
| Gender | Male | 43(37.40) | 34(29.60) | 77(67.00) |
| | Female | 19(16.50) | 19(16.50) | 38(33.00) |
| | Total | 62(53.90) | 53(46.10) | 115(100) |
| Age | Up to 20 years | 0(0.00) | 2(1.70) | 2(1.70) |
| | 20-30 years | 18(15.70) | 14(12.20) | 32(27.90) |
| | 30-40 years | 20(17.40) | 17(14.80) | 37(32.20) |
| | 40-50 years | 15(13) | 17(14.80) | 32(27.8) |
| | More than 50 years | 9(7.80) | 3(2.60) | 12(10.40) |
| | Total | 62(53.90) | 53(46.10) | 115(100) |
| Education | Illiterate | 0(0.00) | 0(0.00) | 0(0.00) |
| | Up to SSLC | 1(0.90) | 1(0.90) | 2(1.80) |
| | HSC | 2(1.70) | 1(0.90) | 3(2.60) |
| | UG Degree | 7(6.10) | 12(10.40) | 19(16.50) |
| | PG Degree | 23(20.00) | 12(10.40) | 35(30.40) |
| | M.Phil | 21(18.30) | 16(13.90) | 37(32.20) |
| | Ph.D. | 8(7.00) | 11(9.60) | 19(16.50) |
| | Total | 62(53.90) | 53(46.10) | 115(100) |
| Monthly Income | Less than Rs. 5000 | 0(0.00) | 0(0.00) | 0(0.00) |
| | Rs. 5000-Rs.10000 | 6(5.20) | 7(6.10) | 13(11.30) |
| | Rs. 10000-Rs.20000 | 25(21.70) | 13(11.30) | 38(33.00) |
| | Rs. 20000-Rs.30000 | 11(9.60) | 16(13.90) | 27(23.50) |
| | Rs. 30000-Rs.40000 | 5(4.30) | 3(2.60) | 8(7.00) |
| | Rs. 40000-Rs.50000 | 4(3.50) | 3(2.60) | 7(6.10) |
| | More than Rs. 50000 | 11(9.60) | 11(9.60) | 22(19.10) |
| | Total | 62(53.90) | 53(46.10) | 115(100) |
| Occupation | Business | 7(6.10) | 8(7.00) | 15(13.00) |
| | Government Employee | 4(3.50) | 3(2.60) | 7(6.10) |
| | Public Sector Employee | 0(0.00) | 3(2.60) | 3(2.60) |
| | Private Sector Employee | 36(31.30) | 28(24.30) | 64(55.70) |
| | Professional | 13(11.30) | 11(9.60) | 24(20.90) |
| | Others | 2(1.70) | 0(0.00) | 2(1.70) |
| | Total | 62(53.90) | 53(46.10) | 115(100) |

Annexure –B

Nature of Vehicle Ownership and Petrol Consumption Profile of the Respondents

| Variables | | IOC Customers' | Other company Customers' | Total |
|------------------------------|----------------------|-----------------------|---------------------------------|-----------------|
| Type of Vehicle | 2 wheeler | 21(18.30) | 24(20.90) | 45(39.10) |
| | 4 wheeler | 17(14.80) | 7(6.10) | 24(20.90) |
| | Both 2 and 4 wheeler | 24(20.90) | 22(19.10) | 46(40.00) |
| | Total | 62(53.90) | 53(46.10) | 115(100) |
| Age of Two wheeler | < 1 year | 2(2.20) | 3(3.20) | 5(5.40) |
| | 1-3 years | 11(11.80) | 12(12.90) | 23(24.70) |
| | 3-5 years | 17(18.30) | 9(9.70) | 26(28.00) |
| | >5 years | 17(18.30) | 22(23.70) | 39(41.90) |
| | Total | 47(50.50) | 46(49.50) | 93(100) |
| Age of Four wheeler | < 1 year | 2(2.90) | 1(1.50) | 3(4.40) |
| | 1-3 years | 15(22.10) | 11(16.20) | 26(38.20) |
| | 3-5 years | 7(10.30) | 5(7.40) | 12(17.60) |
| | >5 years | 15(22.10) | 12(17.60) | 27(39.70) |
| | Total | 39(57.40) | 29(42.60) | 68(100) |
| Petrol Consumption in litres | Less than 5 litres | 1(0.90) | 1(0.90) | 2(1.70) |
| | 5-10 litres | 10(8.70) | 11(9.60) | 21(18.30) |
| | 10-20 litres | 20(17.40) | 11(9.60) | 31(27.00) |
| | 20-30 litres | 7(6.10) | 8(7.00) | 15(13.00) |
| | 30-40 litres | 13(11.30) | 6(5.20) | 19(16.50) |
| | 40-50 litres | 7(6.10) | 5(4.30) | 12(10.40) |
| | More than 50 litres | 4(3.50) | 11(9.60) | 15(13.00) |
| | Total | 62(53.90) | 53(46.10) | 115(100) |

Risk Management: The Relevance of Markowitz theory in Portfolio Management

Dr. M. Jayasree

Assistant Professor
Hyderabad Business School
GITAM University
Hyderabad

K.Bhavana Raj

Senior Research Fellow
School of Management Studies
Jawaharlal Nehru Technological
University Hyderabad, Kukatpally
Hyderabad-500085

Dr. Sindhu

Associate Professor
School of Management Studies
Jawaharlal Nehru Technological
University Hyderabad, Kukatpally
Hyderabad-500085

Abstract

A portfolio is a group of financial assets such as stocks, bonds and cash equivalents, as well as their mutual, exchange-traded and closed-fund counterparts. Portfolios are held directly by investors and/or managed by financial professionals. Portfolio management is the art and science of making decisions about investment mix and policy, matching investments to objectives, asset allocation for individuals and institutions, and balancing risk against performance. The present study attempts to identify optimal portfolio which promises maximum returns for given risk by applying the Markowitz model. The study considers securities of Pharmaceutical and automobile industry in India and attempts to understand by applying the model the selection of optimal portfolio.

Introduction

A portfolio is a group of financial assets such as stocks, bonds and cash equivalents, as well as their mutual, exchange-traded and closed-fund counterparts. Portfolios are held directly by investors and/or managed by financial professionals. Portfolio management is the art and science of making decisions about investment mix and policy, matching investments to objectives, asset allocation for individuals and institutions, and balancing risk against performance. Portfolio management is all about strengths, weaknesses, opportunities and threats in the choice of debt vs. equity, domestic vs. international, growth vs. safety, and many other tradeoffs encountered in the attempt to maximize return at a given level of risk.

Process of Portfolio Management

The Portfolio Management is a process which involves six stages. These stages include

1. Identification of goals and objectives of portfolio management.
2. Determination of optimal investment mix.
3. Customization of investment policy
4. Selection of investment
5. Monitoring of progress
6. Assessment of performance.

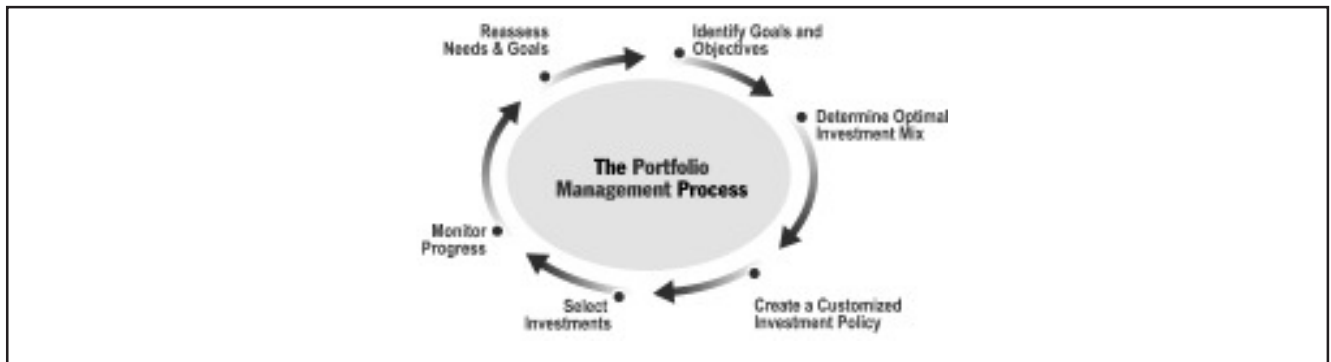
The first step in the process of portfolio management is identifying the goals and objectives of the portfolio. Each individual investor has his own goal which could be regular returns or capital appreciation. The portfolio mix also depends upon the objectives. The portfolio mix is based on the goals identified. The

Keywords

*Expected Return, Portfolio,
Markowitz theory, Risk
Management*

next process is customizing the policy to the needs of the investment plan. The selection of investment is then

done. Once the selection process is complete the progress is monitored and then the goals may be reassessed.



Objectives of the Study

1. To understand the optimal portfolio mix based on returns and risk factors.
2. To analyze returns of individual security and portfolio returns.
3. To analyze individual security risk and portfolio risk.

Research Methodology

The data for the purpose of the study was collected from Bombay stock exchange website. The companies taken in the sample includes four companies two from pharmaceutical namely Dr. Reddy's Laboratories and Sun Pharmaceuticals and other two from Automobiles which include Hindustan Motors and Hero Honda. The study covers five years from 2006 to 2010. The Markowitz model has been used for analyzing individual returns and portfolio returns. The model was also used to analyze individual risk and portfolio risk. The study attempts to understand how individual risk varies with portfolio risk. The study also makes an attempt to analyze how portfolio returns vary from individual returns.

Review of Literature

Zia Mohiuddin Ansari (2006) applied the theory of Markowitz and CAPM to study the efficient management of portfolio of ships and shipping securities. Marc A. Louargand (1992) Studied largest institutional portfolios on portfolio management practices relating to diversification strategies, risk measurement, and evaluation of investment returns with particular reference to pension funds and real estate portfolios. Chao Chen (2001) in his paper examines three important issues related to the relationship between stock returns and volatility. First, the relationship between individual stock returns and volatility is examined at the portfolio level. Second, the seasonality of the market returns volatility. Lastly, relationship between the size of portfolio returns and symmetrical reaction to the market volatility during business cycles is examined. It is found that the market volatility exhibits strong autocorrelation and small size portfolio returns exhibit seasonality. However, this phenomenon is not present in large size portfolios.

Carlos Castro (2010) in his article applied parametric portfolio policy approach to optimizing portfolios with large number of assets. The study attempts to test the importance of local factors in portfolio optimization. Holger Kraft (2007) works on the assumption that the investor and manager have homogenous expectations about the investment opportunity set.

Markowitz model

Markowitz provided a conceptual framework for selection of an optimal portfolio. The model shows how an investor can construct an optimal portfolio. The optimal portfolio is constructed based on returns and risk factors. The model is based on the following assumptions.

1. An investor is basically risk averse.
2. The risk of a portfolio is estimated on the basis of variability of expected returns of the portfolio.
3. The decision of the investor for selection of the portfolio is made on the basis of expected returns and risk.
4. An investor attempts to get maximum return from the investment with minimum risk.

The formula for risk that is standard deviation for two securities is as follows

$$\sigma_p = \sqrt{(X_1)^2(\sigma_1)^2 + (X_2)^2(\sigma_2)^2 + 2(X_1)(X_2)(r_{12})(\sigma_1)(\sigma_2)}$$

σ_p = Standard deviation of the portfolio return

X_1 = proportion of the portfolio invested in security 1

X_2 = proportion of the portfolio invested in security 2

σ_1 = standard deviation of the return on security 1

σ_2 = standard deviation of the return on security 2

r_{12} = coefficient of correlation between the returns on securities 1 and 2

Measuring the Expected Return

The expected return on a portfolio is the weighted average of the returns of individual assets, where each asset's weight is determined by its weight in the portfolio.

The formula is:

$$E(R_p) = [W_a \times E(R_a)] + [W_b \times E(R_b)]$$

Where

$E(R_p)$ = stands for expected Return on the portfolio

W_a = Weight of asset n where n may stand for asset a, b...etc.

R_a = Return on asset n where n may stand for asset a, b...etc

The data collected is analyzed by using these formulas and optimal portfolio is designed.

Data Analysis & Inferences

Calculation Of Average Return Of Companies

$$\text{Average return} = \sum R/N$$

Table-1: Dr. Reddy's Laboratories Ltd

| Year | Opening share price (P0) | Closing share price (P1) | (P1-P0) | (P1-P0)/ P0*100 |
|---|--------------------------|--------------------------|------------|-----------------|
| 2006 | 986 | 811.2 | -174.8 | -17.73 |
| 2007 | 814 | 735.35 | -78.65 | -9.66 |
| 2008 | 735 | 469.75 | -265.6 | -36.14 |
| 2009 | 475 | 1143.8 | 668.8 | 140.8 |
| 2010 | 1140 | 1662.55 | 522.55 | 45.84 |
| TOTAL RETURN | | | | 123.11 |
| AVERAGE RETURN ($\sum R/N$) | | | 123.11 / 5 | 24.61 |

Dr. Reddy's witnessed negative returns for the first three years from 2006 to 2008. The negative returns were highest for 2008 which was -36.14. The year 2009 has

registered highest returns which was 140.8%. In 2010 however the returns were 45.84%. The average returns of the company were 24.62%.

Table-2: Sun Pharmaceutical Industries Ltd

| Year | Opening share price (P0) | Closing share price (P1) | (P1-P0) | (P1-P0)/ P0*100 |
|---|--------------------------|--------------------------|-----------|-----------------|
| 2006 | 672 | 979 | 307 | 45.68 |
| 2007 | 985 | 1222.05 | 237.05 | 24.01 |
| 2008 | 1217.9 | 1064.95 | -152.95 | -12.56 |
| 2009 | 1070 | 1507.10 | 437.10 | 40.85 |
| 2010 | 1538 | 484.65 | -1053.35 | -68.49 |
| TOTAL RETURN | | | | 29.49 |
| AVERAGE RETURN ($\sum R/N$) | | | 29.49 / 5 | 5.90 |

In the year 2006 the returns of the company was 45.68% this has come down to 24.01% in 2007. The company registered a negative return in 2008. In 2009 the returns

were 40.85%. However in 2010 the returns turned negative. The average returns of the company were 5.9%.

Table-3: Hindustan Motors Ltd

| Year | Opening share price (P0) | Closing share price (P1) | (P1-P0) | (P1-P0)/ P0*100 |
|---|--------------------------|--------------------------|-----------|-----------------|
| 2006 | 30.50 | 34.00 | 3.50 | 11.48 |
| 2007 | 34.45 | 61.05 | 26.60 | 77.21 |
| 2008 | 61.30 | 13.08 | -48.22 | -78.66 |
| 2009 | 13.15 | 23.65 | 10.5 | 79.84 |
| 2010 | 24.00 | 24.40 | 0.40 | 1.67 |
| TOTAL RETURN | | | | |
| AVERAGE RETURN ($\sum R/N$) | | | 91.54 / 5 | 18.31 |

The company registered negative returns only for the year 2008. For all the years the returns were positive. The year 2007 witnessed highest returns. The average returns were 18.31%.

Table-4: Hero Honda Motors Ltd

The company had negative returns for 2006 and 2007. From 2008 onwards the company had positive returns. The highest returns were witnessed for the year 2009. The average returns of the company were 24.91%.

**Measurement of Risk:
Calculation of Standard deviation**

$$\text{Standard Deviation} = \sqrt{\text{Variance}}$$

$$\text{Variance} = \frac{1}{n-1} (\sum d^2)$$

Table-5 Dr. Reddy's Laboratories Ltd

| Year | Return (R) | Avg. Return (R^-) | d=(R- R^-) | D ² |
|--------------|------------|-----------------------|---------------|--------------------|
| 2006 | -17.73 | 24.61 | -42.35 | 1793.52 |
| 2007 | -9.66 | 24.61 | -34.28 | 1175.12 |
| 2008 | -36.14 | 24.61 | -60.76 | 3691.78 |
| 2009 | 140.8 | 24.61 | 116.18 | 13497.79 |
| 2010 | 45.84 | 24.61 | 21.22 | 450.29 |
| TOTAL | | | | $\sum d^2=20608.5$ |

$$\text{Variance} = \frac{1}{n-1} (\sum d^2) = \frac{1}{5-1} (20608.5) = 5152.13$$

$$\text{Standard Deviation} = \sqrt{\text{Variance}} = \sqrt{5152.13} = 71.78$$

The standard deviation of the company is 71.78. This shows the company has highest risk factor.

Table-6: Sun Pharmaceutical Industries Ltd

Variance = $1/n-1 (\sum d^2) = 1/5-1 (9006.56) = 2251.64$

Standard Deviation = $\sqrt{\text{Variance}} = \sqrt{2251.64} = 47.45$

The standard deviation is 47.45 and variance is 2251.64. The risk is lower when compared to Dr. Reddy's laboratories.

Table-7: Hindustan Motors Ltd

| Year | Return (R) | Avg. Return (R ⁻) | D = (R-R ⁻) | D ² |
|--------------|------------|-------------------------------|-------------------------|---------------------------------|
| 2006 | 11.48 | 18.31 | -6.83 | 46.65 |
| 2007 | 77.21 | 18.31 | 58.9 | 3469.21 |
| 2008 | -78.66 | 18.31 | -96.97 | 9403.18 |
| 2009 | 79.84 | 18.31 | 61.53 | 3785.94 |
| 2010 | 1.67 | 18.31 | -16.64 | 276.89 |
| TOTAL | | | | Σ d²=16981.87 |

| Year | Return (R) | Avg. Return (R ⁻) | d = (R-R ⁻) | D ² |
|--------------|------------|-------------------------------|-------------------------|--------------------------------|
| 2006 | 45.68 | 16.98 | 28.7 | 823.69 |
| 2007 | 24.04 | 16.98 | 7.06 | 49.84 |
| 2008 | -12.56 | 5.90 | -18.46 | 340.77 |
| 2009 | 40.85 | 5.90 | 34.95 | 1221.50 |
| 2010 | -68.49 | 5.90 | -74.39 | 5533.87 |
| TOTAL | | | | Σ d²=9006.56 |

Table-8: Hero Honda Motors Ltd

| Year | Return (R) | Avg. Return (R ⁻) | d = (R-R ⁻) | D ² |
|--------------|------------|-------------------------------|-------------------------|---------------------------------|
| 2006 | -11.35 | 24.91 | -36.26 | 1314.79 |
| 2007 | -8.20 | 24.91 | -33.11 | 1096.27 |
| 2008 | 15.34 | 24.91 | -9.57 | 91.58 |
| 2009 | 114.56 | 24.91 | 89.65 | 8037.12 |
| 2010 | 14.21 | 24.91 | -10.7 | 114.19 |
| TOTAL | | | | Σ d²=10653.95 |

Variance = $1/n-1 (\sum d^2) = 1/5-1 (10653.95) = 2663.49$

Standard Deviation = $\sqrt{\text{Variance}} = \sqrt{2663.49} = 51.61$
 The standard deviation is 51.61 and variance is 2663.49. The risk is lower when compared to Hindustan Motors Ltd.

Calculation of Correlation between two Companies

Covariance (COVab) = $1/(n-1) (\sum dx.dy)$
 Correlation of coefficient = $\text{COVab} / \sigma_x * \sigma_y$

Table-9: **Dr. Reddy's Laboratories Ltd & Sun Pharmaceutical Industries Ltd**

$$\text{COVab} = 1/(5-1)(1298.08) = 324.52$$

$$\text{Correlation of coefficient} = 324.52/71.78 \times 47.45 = .01$$

The coefficient of correlation is .01. Indicating that, there is minimum correlation between the two.

Table-10 **Hindustan Motors Ltd & Hero Honda Motors Ltd**

| YEAR | Dev. Of Hindustan Motors Ltd (dx) | Dev. Of Hero Honda Motors Ltd (dy) | Product of dev. (dx)(dy) |
|--------------|-----------------------------------|------------------------------------|--------------------------|
| 2006 | -6.83 | -36.26 | 247.66 |
| 2007 | 58.9 | -33.11 | -1950.18 |
| 2008 | -96.97 | -9.57 | 928.01 |
| 2009 | 61.53 | 89.65 | 5516.16 |
| 2010 | -16.64 | -10.7 | 178.05 |
| TOTAL | | | $\sum dx. dy = 4919.7$ |

$$\text{COVab} = 1/(5-1)(4919.7) = 1229.93$$

$$\text{Correlation of coefficient} = 1229.93/65.16 \times 51.61 = 0.36$$

The correlation of Hindustan Motors Ltd & Hero Honda Motors Ltd is 0.36.

Calculation of Portfolio Weights

Deriving the minimum risk portfolio, the following formula is used:

$$W_A = \frac{(\sigma_b)^2 - r_{ab} (\sigma_a) (\sigma_b)}{(\sigma_a)^2 + (\sigma_b)^2 - 2r_{ab} (\sigma_a) (\sigma_b)}$$

Where,

X_a is the proportion of security A

X_b is the proportion of security B

σ_a = standard deviation of security A

σ_b = standard deviation of security B

r_{ab} = correlation co-efficient between A&B

Dr. Reddy's Laboratories Ltd & Sun Pharmaceutical Industries Ltd

$$X_a = \frac{(47.45)^2 - (0.01) (71.78) (47.45)}{(71.78)^2 + (47.45)^2 - 2 (0.10) (71.78) (47.45)}$$

$$= 0.30$$

$$X_b = 1 - X_a$$

$$= 1 - 0.30$$

$$= 0.70$$

Calculation of Portfolio Weights

Hindustan Motors Ltd & Hero Honda Motors Ltd

Deriving the minimum risk portfolio, the following formula is used:

$$W_A = \frac{(\sigma_b)^2 - r_{ab} (\sigma_a) (\sigma_b)}{(\sigma_a)^2 + (\sigma_b)^2 - 2r_{ab} (\sigma_a) (\sigma_b)}$$

Where,

X_a is the proportion of security A

X_b is the proportion of security B

σ_a = standard deviation of security A

σ_b = standard deviation of security B

r_{ab} = correlation co-efficient between A&B

$$X_a = \frac{(51.61)^2 - (0.036) (65.16) (51.61)}{(65.16)^2 + (51.61)^2 - 2 (0.36) (65.16) (51.61)}$$

$$= 0.32$$

$$X_b = 1 - X_a$$

$$= 1 - 0.32$$

$$= .68$$

Calculation of Portfolio Return

$$R_p = W_1 R_1 + W_2 R_2 \text{ (for two securities)}$$

Where,

W1, W2 are the weights of the securities

R1, R2 are the Expected returns

Dr. Reddy's Laboratories Ltd & Sun Pharmaceutical Industries Ltd

$$R_p = (0.30) (24.61) + (0.70) (5.9)$$

$$= 11.51$$

Hindustan Motors Ltd & Hero Honda Motors Ltd

$$R_p = (0.32) (18.31) + (0.68) (24.91)$$

$$= 22.8$$

The combination of Hindustan Motors Ltd & Hero Honda Motors Ltd is more when compared to Dr. Reddy's Laboratories Ltd & Sun Pharmaceutical Industries Ltd. However decision cannot be taken only by returns the portfolio risk also should be analyzed.

Portfolio Standard Deviation:

Calculation of Portfolio Risk

For two securities

$$\sigma_p = \sqrt{\sigma_a^2 (X_a)^2 + \sigma_b^2 (X_b)^2 + 2r_{ab} \sigma_a \sigma_b X_a X_b}$$

Where,

σ_p = portfolio risk

X_a = proportion of investment in security A

X_b = proportion of investment in security B

R_{12} = correlation co-efficient between security 1 & 2

σ_a = standard deviation of security 1

σ_b = standard deviation of security 2

The portfolio standard deviation of Dr. Reddy's Laboratories Ltd & Sun Pharmaceutical Industries Ltd is

$$\begin{aligned} \sigma_p &= \sqrt{(71.78)^2 (0.30)^2 + (47.45)^2 (0.70)^2 + 2(0.01) (71.78) (47.45) (0.30) (0.70)} \\ &= \sqrt{2997.45} \\ &= 54.75 \end{aligned}$$

The combined risk is 54.75 and return of the portfolio is 11.51%.

Calculation of portfolio risk for Hindustan Motors Ltd & Hero Honda Motors Ltd

$$\begin{aligned} \sigma_p &= \sqrt{(65.16)^2 (0.32)^2 + (51.61)^2 (0.68)^2 + 2(0.36) (65.16) (51.61) (0.32) (0.68)} \\ &= \sqrt{2193.28} \\ &= 46.83 \end{aligned}$$

The combined risk of Hindustan Motors Ltd & Hero Honda Motors Ltd is 46.83 and combined returns are 22.8. Therefore this is optimal portfolio as per Markowitz theory.

Conclusion:

The study revealed that portfolio risk can be minimized and returns can be maximized by proper selection of portfolio. The Markowitz theory helps in selecting a portfolio with maximum returns and minimum risk. The theory helps in management of risk through proper selection of portfolio. The standard deviation of Dr. Reddy's is 71.78 and for Sun Pharmaceuticals is 47.45. The combined standard deviation is 54.75. The individual returns of Dr. Reddy's and Sun Pharmaceuticals are 24.61 and 5.9 respectively. The portfolio returns of the same are 11.51. This portfolio does not promise returns as per the risk involved therefore cannot be taken as ideal portfolio. The standard deviation of Hindustan Motors is 65.16 and for Hero Honda is 51.61. The combined standard deviation is 46.83. The individual returns of Hindustan Motors and Hero Honda are 18.31 and 24.91 respectively. The portfolio returns are 22.8. This is an ideal portfolio as it promises more returns and risk is less when compared with the portfolio of Dr. Reddy's and Sun Pharmaceuticals. The study therefore proves that Markowitz model helps in management of risk and selection of ideal portfolio.

References

- Ansari Mohiuddin Zia, Portfolio Risk Management in Shipping real assets and shipping security assets, Erasmus University Rotterdam, 2006.
- Caster Carlos, "Portfolio Choice Under Local Industry and Country Factors" Swiss Society for financial markets 12th October 2010.
- Chow G., Jacquier E., Kritzman M., and K. Lowry (1999) "Optimal Portfolios in Good Times and Bad Times" *Financial Analysts Journal*, vol. 55, no.3, (March/June): 65-73.
- Donald E. Fischer, Ronald J. Jordan, SAPM, 1999, Sixth Edition, *Portfolio Analysis*, page no: 559-588.
- Dybvig, P., Farnsworth, H.K., Carpenter, J.N. "Portfolio performance and agency" Working Paper, Washington University in Saint Louis (2001)
- Kraft Holger, Continuous – Time delegated portfolio management with homogenous expectations: can an agency conflict be avoided, Swiss Society for financial markets, 2007.
- Louargand A. Marc, A survey of pension fund real estate portfolio risk management practices, Centre for real estate, Massachusetts Institute of technology, Cambridge, July 1992.

Punithavathy Pandian, *Security Analysis & Portfolio Management*, 2007, Portfolio Markowitz Model, page no: 329-349.

Prasanna Chandra, *Investment Analysis & Portfolio Management*, 2006, Second edition, Portfolio Return & Risk, page no: 244-251.

Rustagi R. P., *Investment Management*, Sultan Chand & Sons, New Delhi, 2005

Zhou Guo Zhong, Chen Chao, *Portfolio returns, Market volatility and seasonality* Kluwar Academic Publishers, Netherlands, 2001.

A study on Effectiveness of Emotional Literacy for a quality life

Lincy Joykutty

Lecturer
New Horizon College
Marthally, Panthur Post
Outer Ring Road
Bangalore-560087

James Thomas

HoD
New Horizon College
Marthally, Panthur Post
Outer Ring Road
Bangalore-560087

Abstract

The aim of this study was to examine the effectiveness of emotional literacy towards quality of life. An interdisciplinary review of literature revealed that this aim could be met by framing a structured questionnaire and administering to various respondents to analyse their views and opinions towards various situations, events, part of life, etc which helps to draw the solution to the problem. The raw data was tabulated and analysed with various statistical tools such as correlation, regression analysis, bar graphs, pie chart, etc to arrive at accurate solution and to suggest various measures to enhance the quality of life.

Keywords

Emotional Literacy, Quality of life, Relationships, Emotions

Introduction

Emotional Literacy is the ability to read one's own emotions and act accordingly so that one's own behaviour is controlled. Persons can read their own emotions only when they are able to make self analysis through the process of communication with other person or a thing or a situation. It is a positive preventive tool, which if properly understood, can assist society in solving many of its ills. An emotional literacy is important from the life cycle of infant to death which has to be realised by an infant to understand itself more precisely with respect to various situations. Parents play a vital role in controlling the emotions of their child. They should only guide the child in various situations neither pressurising the child. If a child is able to control its own emotions it would be able to lead a quality life and overcome the various situations. Once parents are able to guide to identify their child's emotions, simultaneously the emotions of parents are also controlled. So that the parent as well as the child can lead a healthy life. Emotional abuse is any sort of behaviour that is designed to control and subjugate another human being emotions through the use of fear, humiliation, intimidation, guilt, coercion, manipulation, etc. Emotional abuse victims can become so convinced that they are worthless that they believe they have nowhere else to go. Their ultimate fear is being all alone.

Emotional Literacy Education is the teaching of basic language elements. These elements are the Emotional Literacy Vocabulary. When these words are learned, they are used to interpret the emotional content of any situation. With Emotional Literacy Education, students are taught the skill of understanding the meaning of words in the Emotional Literacy Language. They are also taught how these words are connected together. By connecting the

words together, they form a larger emotional picture. They help the student understand why they are experiencing emotions.

Emotional literacy involves factors such as people understanding their own and others' emotional states; learning to manage their emotions and to empathize with others. It also includes the recognition that emotional literacy is both an individual development and a collective activity and is both about self-development and the building of community so that one's own sense of emotional well-being grows along with that of others, and not at their expense. Emotional literacy involves connections between people and working with their differences and similarities while being able to handle ambiguity and contradiction. It is a dynamic process through which the individual develops emotionally and involves culture and empowerment. For example, it includes understanding how the nature of social class, 'race' and gender (sexism and homophobia) impinge on peoples' emotional states to lead to an understanding of how society could change. Hence it incorporates an understanding of power exchanges between people and a challenging of power differentials. On this view emotional literacy is developed to help people understand themselves, others and the power connections between them. Matthews links emotional literacy to equality and social justice. Emotional literacy is not just to be 'nice', but also to know when to stand up for viewpoints and fight for a case. It is not about more control over people, but less. As McIntosh and Style argue schools are always involved in social, emotional and power relations, yet 'power relations are a taboo subject in K-12 schooling and in the majority culture of the United States. Power relations are therefore little understood systemically. Students, however, learn about power by watching, by imitating, by avoidance of what they fear'.

Emotional Literacy is a profound and beautiful language available to everyone. It can be implemented rapidly, safely, and with lasting effect. Learning how to become emotionally literate is one of the best investments that human beings can make for themselves, their children, and the future.

Emotional Literacy Resources

According to Daniel Goleman, Emotional literacy is the ability to recognize and label emotions. Researchers have found evidence that emotional intelligence, along with the ability to empathize with others, is almost as important as cognitive abilities in determining success in life. The early evidence for this was so compelling that by the mid-1990s many school systems began integrating social and emotional learning into the curriculum. Businesses have also encouraged emotional literacy within their organizations. Individuals who possess emotional literacy generally have higher self-esteem, a better ability to control and manage emotions, and are better able to handle conflict resolution.

Emotional literacy is a prerequisite for building a peace culture in which the management of conflict through non-

violent means is the norm and violent conflict becomes the exception. This involves giving equal importance to meaning making through intuitive understanding and cultural narratives on the one hand and to the rational systemic analysis of biological evolution and the structural organization of societies on the other. Cultural narratives draw on mythos and imagination and rational analyses draw on logos and argumentation. Political movements are in danger of misusing mythos to justify *realpolitik* solutions on the one hand and of misusing rational argumentation to justify emotionally laden value judgements on the other.

Emotional literacy therefore requires that we first distinguish between and then endeavour to integrate four ways of knowing: subjective knowing through personal experience; collective knowledge generation through shared inquiry and interpretation; objective study of biological determinants of individual development and functioning; and objective research and theory building regarding the ecological context and the wider determinants of our social, economic and political organization.

Types of Emotional abuse:

1. Emotional Blackmailing:
 - a. The other person plays on your fear, guilt, compassion, values, etc to get what they deserve.
 - b. This could include threats to end the relationship, totally reject you by using other fear tactics to control you.
2. Unpredictable responses:
 - a. Drastic mood changes or sudden emotional outbursts. Whenever someone in your life reacts very differently at different times to the same behaviour from you, tells you one thing one day and the opposite the next, or likes something you do one day and hates it the next day, you are being abused with unpredictable responses.
 - b. This behaviour is damaging because it puts you always on edge. You can never know what's expected from you. You must remain hypervigilant, waiting for the other person's next outburst or change of mood.
3. Constant Chaos:
 - a. The other person may deliberately start arguments and be in constant conflict with others.
 - b. The person may be addicted to drama. Since, it creates excitement.
4. Denying:
 - a. It can be particularly damaging. In addition to lowering self-esteem and creating conflict, the invalidation of reality, feelings and experiences can eventually lead you to a question and mistrust your own perceptions and emotional experience.

- b. Denying a person's emotional needs, especially when they feel that they need the most, and done with the intent of hurting, punishing or humiliating the human race.

Lack of Emotional Literacy

❖ Teen Suicide:

The characteristics of suicidal teens are as follows:

1. **Afraid:** Afraid of their parents, teachers, police, mental health professionals and peers.
2. **Intelligent:** They question things. They want real answers. Too many times, though, they do not get answers which satisfy them.
3. **Sensitive:** They care about others. They take on the pain from others.
4. **Responsible for other's feelings:** They feel guilty for things which are not actually their fault.
5. **Full of thoughts:** They are full of fears. They feel trapped in their thoughts and fears. They lay awake at night trying to figure things out.
6. **Emotional Support:** They need more caring, understanding, emotional support and acceptance, but their parents give them less.
7. **Forgiveness:** Their parents are not forgiving so they are not self-forgiving either. Even when others forgive them, they can't forgive themselves.

Teens tend to commit suicide when they have learned that it is dangerous to tell the truth to anyone in their own cities, towns and villages. They have learned not to trust adults. Finally they commit suicide because they could not express their emotions.

S. Hein, "Teenagers around the world are killing themselves to put an end to their intense emotional pain."

Society as a whole does not place much value on emotions. Through emotional literacy, a new society has to be created which would place much value on emotions where suicidal teens could be reduced.

Relationships have no value:

Emotional Literacy can contribute to health, to positive relationships, to success, and to quality of life. It is universally relevant. For adults, emotional literacy is fundamentally different than the education of children in emotional literacy. Because during their own emotional development as children, they have constructed automatic behaviors in response to their needs; and in relationship to acquiring those needs through others. Parents have cultivated a habit out of their negative emotions. And it's extremely difficult to change these habits. It's much easier to teach children before their habits have formed, but once their emotional habits have taken up, it's very hard to change those emotions, though

it is possible. It is possible through the process of education. It is possible for them as adults to modify their own behaviors, and to modify the way they feel, and to change their perception.

Peter Sharp states "That the most important aspect of Emotional Literacy is that it nurtures the development of our relationships."

Relationships are incomparable with money. They are not in the same category. Relationships are not priceless, because it implies to put a value on them, a monetary value. And there is no monetary value that can be placed on relationships. So Western culture has been barking up the wrong tree, has been walking down the wrong alley, and has found itself pursuing the object that ultimately becomes the cause of its own misery. Because when value of money is placed over relationships, people become property, commodities, Sell/buy/Trade.

A recent poll by USA Today showed that, when asked what they most wanted to change in their children's schools, a full 75% of all parents asked for emotional literacy - though not by name. Parents' most frequent request (36%) was the desire for more school counselors - a need alleviated by Emotional Literacy education. The second greatest request (33%) was the desire for emotional diagnosis of our kids before it was 'too late.' The third most prolific desire was to insure our kids are taught not to hate (18%). Emotional Literacy will never become a part of the lives of children, until it becomes a part of the lives of adults. Parents must find a way to nurture Emotional Literacy in one another as adults.

Corrupt the language of feelings:

a) **Same word:** A human uses the same word for different context where it has to be differentiated. Consider the word "love." We love to have chat, ice-cream, pizza and our mothers. Doesn't it seem there should be a different word for the way we feel about our parents as opposed to food?

b) **Low usage of feelings/Lack of clarity in expression:** Humans minimize their feelings especially when they are worried, depressed or upset. Such people typically are either too proud, too stubborn, too scared or feel too unworthy to share their feelings. They desperately need to be connected with others, but they will not allow others to get close to them. They effectively push people away by withholding their true feelings.

Example: I am fine or I am ok or there is nothing wrong

c) **Masking True Feelings:** Human being is not able to express his/her true feeling because of fear of the outcome/reaction of other which differs from his/her expectations. So they try to mask their true feeling by just plain lie about them, for example when someone says he/she is fine, though he/she is obviously is irritated, worried, or stressed.

Basic Needs in Relationships

If you have been involved in emotionally abusive relationships, you may not have a clear idea of what a healthy relationship is like.

- The need for good will from the others.
- The need for emotional support.
- The need to be heard by the other and to be responded to with respect and acceptance
- The need to have your own view, even if others have a different view.
- The need to have your feelings and experience acknowledged as real.
- The need to receive a sincere apology for any jokes or actions you find offensive.
- The need for clear, honest and informative answers to questions about what affects you.
- The need to for freedom from accusation, interrogation and blame.
- The need to live free from criticism and judgment.
- The need to have your work and your interests respected.
- The need for encouragement.
- The need for freedom from emotional and physical threat.
- The need for freedom from angry outburst and rage.
- The need for freedom from labels which devalue you.
- The need to be respectfully asked rather than ordered.
- The need to have your final decisions accepted.
- The need for privacy at times.

Promotion of Emotional Literacy:

The Emotional Literacy Campaign is a not-for-profit initiative driven by a group of parents and their organizations committed to rising a healthy new generation. The initiative is under the auspices of a 501(c) 3 charitable nonprofit called "Six Seconds EQ Network" an all donations are tax deductible.

The Emotional Literacy Campaign was initiated by Ayman Sawaf, a father, businessman and author. Mr Sawaf began promoting emotional literacy in 1993 by creating the Foundation for Education and Emotional Literacy (FEEL). The co-chair of the project is Joshua Freedman, a father and a leading expert on emotional intelligence training and development.

The Emotional Literacy Campaign will gather one million signatures from across the social spectrum of parents, celebrities, business leaders, teachers, therapists, judges, and concerned individuals — all of whom are committed to bringing Emotional Literacy to the next generation.

A compiled petition with individual comments will be presented to representatives in the US Government, the United Nations, and in all nations with over 1000 signatories requesting funding and support for emotional literacy and education.

In addition to the million signature drive, the Emotional Literacy Campaign will raise public awareness through extensive media outreach, and lobby for political action.

Research Design

Research is "a careful investigation or inquiry especially through search for new facts in any branch of knowledge." In this case questionnaire was prepared and respondent views are collected. These tabulated data is used for testing the hypothesis with the help of statistical tool.

Statement of Problem

This problem is chosen to understand the importance of emotional literacy in a human life. It help him to identify various emotions and to manage it. It helps to balance the personal and work life. The modern era ensures to comprehend the emotional literacy of every member of a family. Emotional literacy has to be started from home and it has to be added as a courseware at schools. The study helps to overcome academic, emotional, behavioral and social problems.

The **objectives** of study are as follows:

1. To identify the key elements of emotional literacy.
2. To understand the awareness level of emotional literacy.
3. To analyse the various roles played by various personalities.
4. To establish the capacity to transform each person and their relationships.
5. To suggest the measures to prevent failure than to tackle the crisis.

The **scope** of study is stated as:

1. It will be fruitful to manage their own emotions.
2. By implementing the suggestions, a human being could lead a quality life.
3. It can be used for further research works.
4. This study would be fruitful for upcoming generation.

Hypothesis:

H0: There is no relationship between emotional literacy and quality life

H1: There is relationship between emotional literacy and quality life

Methodology of the Study

To study the effectiveness of emotional literacy for a quality life an analysis was done through a comparative study between the various journals. Various statistical techniques were used such as Karl Pearson's Correlation Coefficient, Spearman's Rank correlation, Standard deviation & coefficient of variation, Percentages, Bar graphs and Pie charts. Sample size 100 respondents. The type of Non probability sampling, convenience sampling is used in finding samples.

Primary data: The simple structured questionnaires were distributed among Students, Parents & professionals.

Secondary data: The data is collected from secondary sources such as book of Peter Sharp, Nurturing Emotional Literacy, journals and websites.

Literature Review

Emotional Literacy is a term that was used first by **Steiner (1997)** who says:

Emotional Literacy is made up of ‘the ability to understand your emotions, the ability to listen to others and empathise with their emotions, and the ability to express emotions productively. To be emotionally literate is to be able to handle emotions in a way that improves your personal power and improves the quality of life around you. According to **Matthews**, emotional literacy is a social process that takes place in a social setting, is something that is never really achieved, and has to be seen in conjunction with others. This indicates that key components of emotional literacy, which is a continual process, that includes dialogue, acceptance of ambiguity and the ability to reflect.

Matthews classifies emotional literacy into 5 parts:

1. Knowing your feelings.
2. Having a sense of empathy.
3. Learning to manage our emotions.
4. Repairing emotional damage.
5. Putting it all together: emotional interactivity.

The organization Antidote defined emotional literacy as:

“The practice of interacting with others in ways that build understanding of our own and others’ emotions, then using this understanding to inform our actions.”

Boler researched four of the emotional programs in America. She pointed out that the programs tended to view pupils as individuals who are in need of development through enabling them to control their impulses. This can mean that pupils are to become responsible for their own control and that other social factors can be ignored. It is possible that these programs can open the way for greater control of pupils with even their emotions being assessed. On the one hand the development of emotional literacy programs can be seen as progressive, but on the other the focus seems quite inward, as there is little reference leading to any broader concept of social and political reform. Emotion play a crucial role in one’s life which has to be expressed and clearly stated, so that others can understand them. An emotion has to be communicated to others. To communicate it, a person should be able to identify and express the feelings like Joy, Love, Jealous, Anger, Fear, Tension and Freedom. It is to convey the emphasis of the feeling of human race. If a human race either over emphasize or shrug off the feeling, the result would be affected during communication with other. Human life are comprises of Parents, Teachers, Elders, Peer Groups, Friends, Society, etc. Where these groups have to be satisfied and our emotions are affected. Habitually, it is socially offensive to express certain emotions instantly. A person tend to hide his/her true feelings inner and he is not able to be successful rightly.

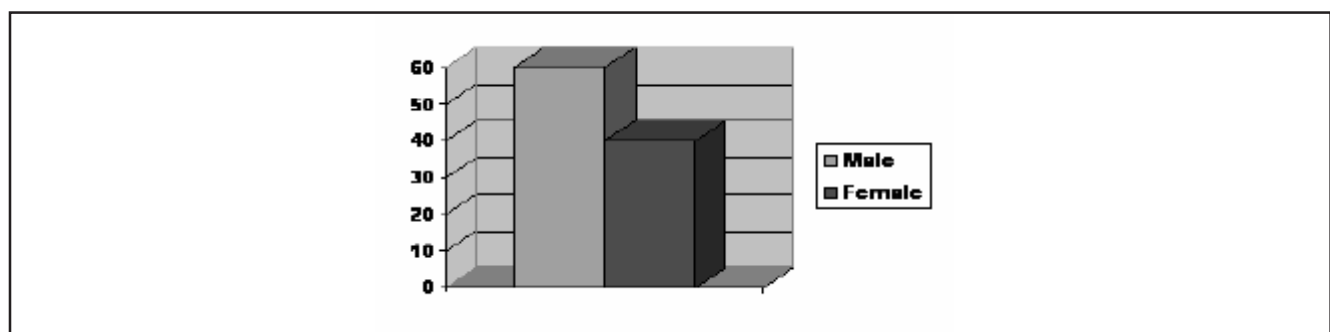
Limitations of the study:

- ♦ The study is restricted to only 100 respondents.
- ♦ The study adopts convenience sampling.
- ♦ It is restricted to bangalore city.
- ♦ The information provided by respondents may be biased.
- ♦ While selecting a sample size, sample error would have occurred.

Analysis & Interpretation

Table showing Gender profile of respondents

| SI No | Sex | No of Respondents | Percentage |
|-------|--------|-------------------|------------|
| 1 | Male | 60 | 60 |
| 2 | Female | 40 | 40 |
| | Total | 100 | 100 |



Observation:

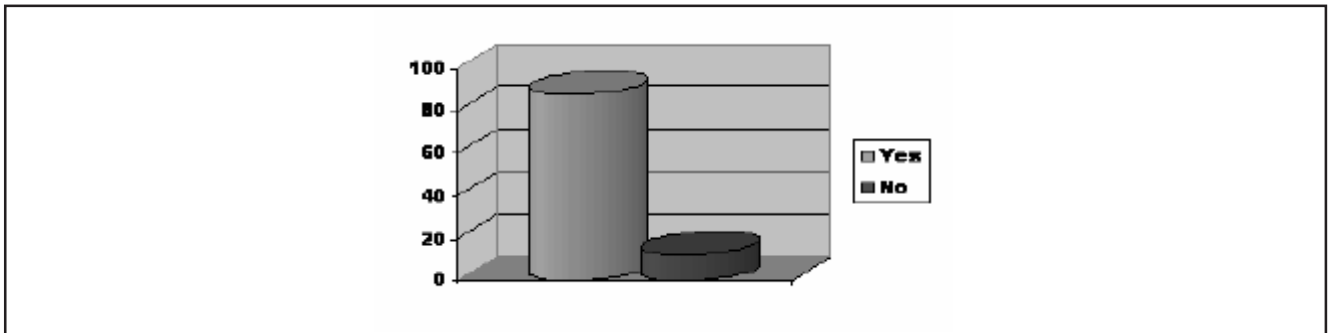
The above table & graph reveals that respondents considered for study are 60% of males & 70% of females.

To analyze the views towards emotional literacy both genders play vital role in providing accurate information.

Table showing Awareness of Emotional Literacy

| SI No | Awareness Level | No of Respondents | Percentage |
|-------|-----------------|-------------------|------------|
| 1 | Yes | 88 | 88 |
| 2 | No | 12 | 12 |
| | Total | 100 | 100 |

Source: Primary Data



Observation:

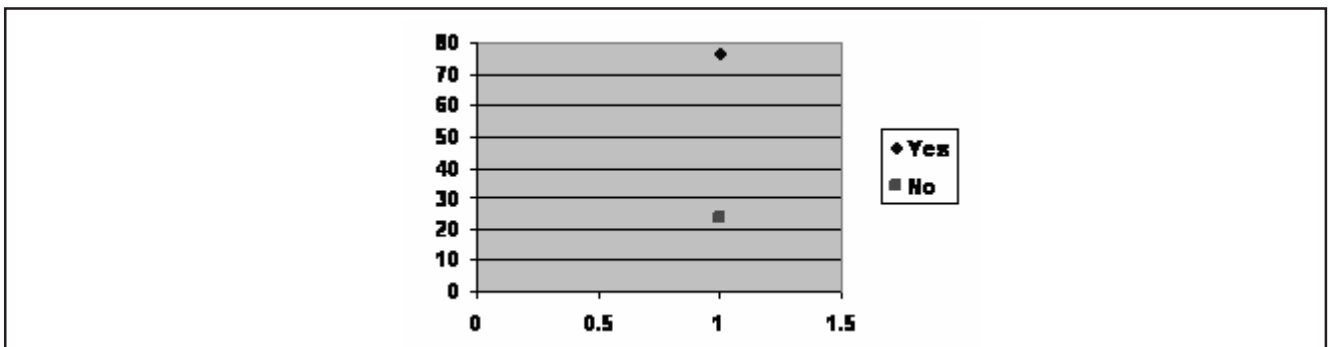
From the table & graph, it is clear that the respondents are aware of emotional literacy. 88% of respondents revealed that they are aware of emotional literacy & other

12% revealed that they are not aware of emotional literacy. This would help the study to draw the right conclusions.

Table showing Emotional Literacy as a Course Ware

| SI No | Response to Educational System | No of Respondents | Percentage |
|-------|--------------------------------|-------------------|------------|
| 1 | Yes | 76 | 76 |
| 2 | No | 24 | 24 |
| | Total | 100 | 100 |

Source: Primary Data



Observation:

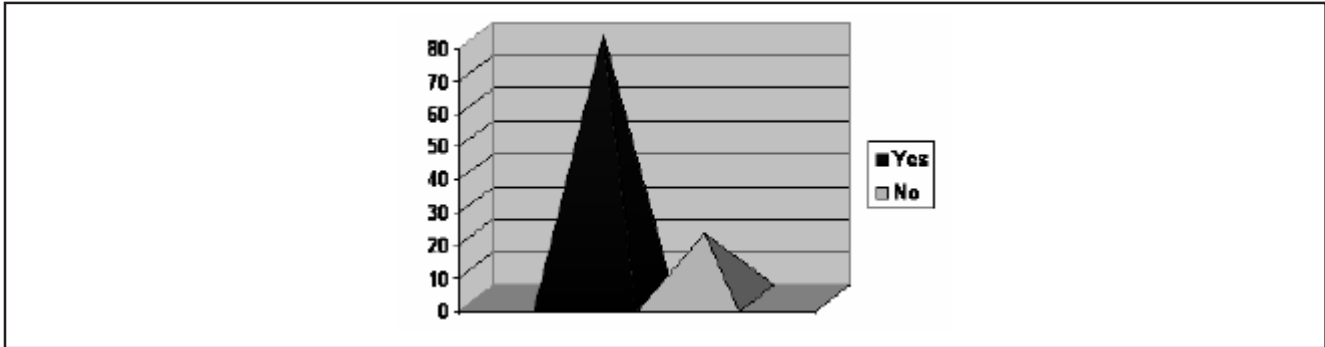
76% of respondents revealed that emotional literacy has to be added as a courseware & other 24% revealed that not necessary to add as a courseware.

Education plays a crucial role for the formation of emotions in a human life. From their personal experience and day to day interaction with various environments and groups influenced the respondents to add emotional literacy as a courseware so that the human being would be cautious and his / her response towards the emotions in the environment were they belong.

Table showing Response to various situations

| SI No | Options | No of Respondents | Percentage |
|-------|---------|-------------------|------------|
| 1 | Yes | 80 | 80 |
| 2 | No | 20 | 20 |
| | Total | 100 | 100 |

Source: Primary Data



OBSERVATION:

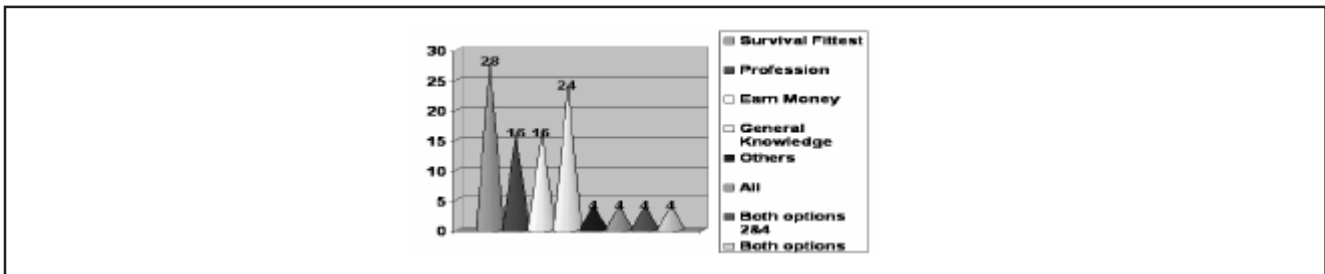
80% of respondents revealed that they could respond rightly to the various situations. Other 20% revealed that response to situation is not possible. This is because of the environment, society; culture, etc are the factors affecting to express their emotions rightly. He/she creates

such a kind of environment were they cannot respond to the situation and not satisfied with the task which is done by them and quality of life of these persons are negative in nature.

Table showing Priority of Education

| SI No | Elements | No of Respondents | Percentage |
|-------|---------------------|-------------------|------------|
| 1 | Survival of Fittest | 28 | 28 |
| 2 | Profession | 16 | 16 |
| 3 | Earn Money | 16 | 16 |
| 4 | General Knowledge | 24 | 24 |
| 5 | Others | 4 | 4 |
| 6 | All | 4 | 4 |
| 7 | Both options 2&4 | 4 | 4 |
| 8 | Both options 1&4 | 4 | 4 |
| | Total | 100 | 100 |

Source: Primary Data

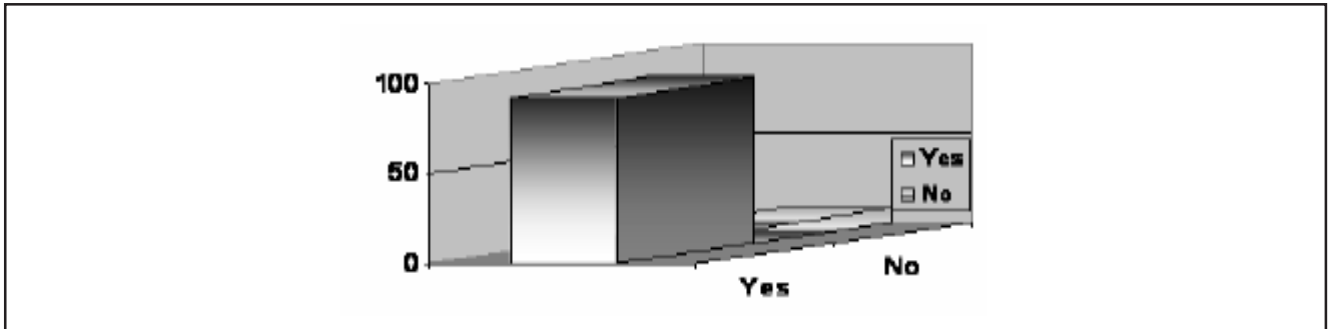


Observation:

This reveals that 28% of respondents stated that education is for survival, 24% of respondents revealed that the education is given priority to gain general knowledge. Other 16% of respondents revealed that education is for profession & other 16% of respondents revealed that education is to earn money. 4% of respondents revealed that education is given priority for survival, to earn money, for profession & to gain general knowledge. 4% of respondents revealed that it is only for profession & general knowledge. Finally 4% of respondents revealed that education is only to gain general knowledge & for survival of fittest. 4% of respondents revealed that education is for social status, unhealthy competition, etc.

Table showing Opportunity to choose education

Source: Primary Data



Observation:

Role of education is highly important because, it helps a person to form emotions. From his school, he/forms a group and sharpens or strengthens his/her behaviors. This helps him to develop his attitude towards an object or a situation or an environment. Some of the persons do not have option to choose their education due to the inducement of their parents &

society.92% revealed that, there was option to choose their education whereas other 8% revealed that there is no option to choose education. This would provide a platform for a person to develop enmity, fear, stress, frustrations, etc. They would try to create a negative environment. Therefore, a person should be provided an opportunity to choose their own education.

Table showing Sources for Formation of Emotions & Solution to problems through emotional literacy

| SI No | Sources(x) | Solution to problems(y) | No of Respondents(x) | No of Respondents (y) | Rank (X) | Rank (Y) | D = X-Y | (d) 2 |
|-------|--------------------------------------|--------------------------------|----------------------|-----------------------|----------|----------|---------|-------|
| 1 | Parents Behavior | Violence | 12 | 12 | 8 | 8 | 0 | 0 |
| 2 | Entertainment | Illness | 0 | 0 | 1 | 1 | 0 | 0 |
| 3 | Educational Institution / Work Place | Drug Abuse | 16 | 4 | 10 | 2 | 8 | 64 |
| 4 | Friends/Peer Group | Dysfunctional relationship | 8 | 8 | 6 | 6 | 0 | 0 |
| 5 | Others | Global Conflicts | 4 | 12 | 3 | 8 | -5 | 25 |
| 6 | All | Suicidal Attempts | 16 | 16 | 10 | 11 | -1 | 1 |
| 7 | Both options 1& 3 | Combination of options 1,4,5&6 | 4 | 16 | 3 | 11 | -8 | 64 |
| 8 | Both options 2& 4 | Both options 1&6 | 8 | 8 | 6 | 6 | 0 | 0 |
| 9 | Both options 1& 4 | Both options 1&2 | 12 | 4 | 8 | 2 | 6 | 36 |
| 10 | Both options 3& 4 | Combination of options 1,2,3&6 | 4 | 12 | 3 | 8 | -5 | 25 |
| 11 | Combination of 1,3&4 | Combination of options 3,4&6 | 16 | 4 | 10 | 2 | 8 | 64 |
| 12 | Combination of 1, 2 & 4 | Combination of options 1,,2,&4 | 0 | 4 | 1 | 2 | -1 | 1 |
| | Total | | 100 | 100 | | | 2 | 280 |

Source: Primary Data

OBSERVATION:

With the help of spearman’s rank correlation, the value is **0.021**. This reveals there is a positive correlation between the sources of formation of emotions and solution to problems through emotional literacy.

Table showing Benefits of emotional literacy

Source: Primary Data

OBSERVATION:

Standard Deviation obtained is **14.95** & Coefficient of variation is **104.69**.

Table showing Age profile of respondents & Elements influencing Emotional Literacy

| SI No | Age Group (X) | Elements (Y) | No of Respondents (X) | No of Respondents (Y) | (XY) 2 | (X)2 | (Y)2 |
|-------|--------------------|--|-----------------------|-----------------------|--------|------|------|
| 1 | Less than 20 years | People understanding their own & others' emotional state | 20 | 20 | 400 | 400 | 400 |
| 2 | 20 years-25 years | Learning to manage the emotions & to empathize with others | 36 | 40 | 1440 | 1296 | 1600 |
| 1 | 25 years-30 years | Self Development | 44 | 28 | 224 | 64 | 784 |
| 2 | 30 years-35 years | Building Community | 0 | 4 | 64 | 256 | 16 |
| 3 | 35 years-40 years | Both self development and building community | 20 | 8 | 160 | 400 | 64 |
| 4 | Above 35 years | Total | 4 | 4 | 2288 | 2416 | |
| 5 | Total | Total | 100 | 100 | | | |

Source: Primary Data

Observation:

As per Karl Pearson’s correlation coefficient the value obtained is **0.48**. The value shown reveals a good amount of positive correlation between age group elements influenced emotional literacy.

Summary Of Findings

- ♦ Expressing the intensity of feelings, Indirect communication, miscommunication of feelings, predictions are done instead of expressing the feelings, resistance to reporting abuse, self harms and society and leading to decisions early are the elements of emotional literacy which has to be clearly identified by a human race.
- ♦ To analyze the views towards emotional literacy both genders play vital role in providing accurate information.
- ♦ 88% of respondents revealed that they are aware of emotional literacy.
- ♦ 76% of respondents revealed that emotional literacy has to be added as a courseware.
- ♦ 80% of respondents revealed that they could respond rightly to the various situations.
- ♦ 28% of respondents stated that education is for survival of fittest & other 24% of respondents revealed that the education is given priority to gain general knowledge.92% revealed that, there was option to choose their education. The

correlation between the sources of formation of emotions and solution to problems through emotional literacy is **0.021**.

- ♦ Standard Deviation obtained for benefits of emotional literacy is **14.95** & coefficient of variation is **104.69**.
- ♦ The correlation value obtained between age group elements influenced emotional literacy is **0.48**.

Suggestions

- ♦ Parents must find a way to nurture emotional literacy in their life.
- ♦ Emotional literacy should be added as a courseware to identify their emotions rightly and to form right emotions as a base.
- ♦ Various awareness programs with reference to emotions should be introduced so that, it would help for self development and to interact with one another and the society. This could be accurately attained by implementing programs rightly to the society by government.
- ♦ Right from birth, if the child is aware about the importance of emotions in his/her life would help to communicate the things rightly to persons and in the right situations. This helps to reduce the suicidal attempts and also helps to develop a positive relationship among others. It enhances for a quality life.

Conclusion

This study helped to understand each and every element of emotional literacy and to suggest the right measures to express their emotions rightly which would help enhance the quality of life. It also helps to establish a good relation between various elements influencing emotional literacy and his/her behaviors.

The study accepted Hypothesis (H1) i.e., there is a relationship between emotional literacy and quality life and rejected null hypothesis (H0).

Therefore study reveals there is a positive relationship between emotional literacy and quality life of a human being.

References

Claude Steiner with Paul Perry Achieving **emotional literacy** (2001). Bloomsbury Publishing Plc.

Emotional Intelligence as Zeitgeist, as Personality, and as a Mental Ability, p. 109, Mayer, Salovey and Caruso, Chapter in Handbook of Emotional Intelligence, Bar-On, Parker (Eds.) 2000.

Evans, Patricia. The Verbally Abusive Relationship: How to Recognize It and How to respond. Holbrook, Massachusetts: Bob Adams, Inc., 1992.

Goleman, D. (1994) Emotional Intelligence.

Hilde Rapp, 13 Feb 2006 Psychotherapy & Political International.

Matthews, B. (2006) Engaging Education. Developing Emotional Literacy, Equity and Co-education. Buckingham: McGraw-Hill/Open University Press.

Rebecca Novick, YAEC Journal "Learning to Read the Heart: Nurturing Emotional Literacy", October 25 2004.

Sharp, P. (2001) Nurturing Emotional Literacy. London: David Fulton.

<http://www.kidseq.com/aboutEL.htm>

<http://feel.org>

<http://www.teachingexpertise.com/articles/the-childrens-plan-raising-emotional-literacy-3146>

<http://emolit.org>

QUESTIONNAIRE

1. Are you aware about emotional literacy?
 - a. Yes ()
 - b. No ()
2. According to you, what are the elements to be considered to control your emotions?
 - a. People understanding their own and others' emotional states ()
 - b. Learning to manage their emotions and to empathize with others ()
 - c. Self Development ()
 - d. Building Community ()
 - e. Both self development and building community ()
 - f. Others, specify.....
3. Do you agree that emotional literacy should be added as a course ware?
 - a. Yes ()
 - b. No ()
4. Are you able to express your emotions rightly in various situations? If No, Why?
 - a. Yes ()
 - b. No ().....
5. Are you able to solve your own behavioral, emotional, academic and social problems?
 - a. Yes ()
 - b. No ()
6. Education is important for:
 - a. Survival of the fittest
 - b. Profession
 - c. Earn Money
 - d. General Knowledge
 - e. Others.....
7. Do you have option to choose your education?
 - a. Yes ()
 - b. No ()
8. If you agree emotional literacy helps to solve below problems, please tick the relevant option.
 - a. Violence ()
 - b. Illness ()
 - c. Drug Abuse ()
 - d. Dysfunctional relationships ()
 - e. Global Conflicts()
 - f. Suicidal Attempts ()

9. How does emotional literacy benefit you?

- a. Good Health ()
- b. Positive relationships()
- c. Quality Life()
- d. Others, Specify.....

10. Sources for formation of your emotions. Please tick the relevant.

- a. Parents Behavior ()
- b. Entertainment ()
- c. Educational Institution/Work Place ()
- d. Friends/Peer Group ()
- e. Others, Specify.....

Financing Pattern & Utilization of Fixed Assets in Large Scale Sugar Industries in Tiruchirappalli District in Tamil Nadu – A Study

Dr.M.Velavan

Director
J.J.School of Business
Management
Trichy – Dindigul Road
Trichirappalli – 620 009
Tamil Nadu

Abstract

This article looks into the adequacy of internal fund availability for financing fixed assets in sugar industry of Tiruchirappalli district vis-à-vis efficiency of fixed asset utilization and the relationship between investment in fixed assets and capacity.

Keywords

*Internal Funds, Fixed Assets
and Capacity*

Introduction

One of the important problems confronting the top management of a business enterprise is to determine whether the firm should invest funds in fixed assets that are of permanent in nature having a life expectancy of more than one year and are used by a firm in its normal operations. Fixed assets are the assets of a relatively permanent nature used in the operation of a business and which cannot intended for sale.¹ They are necessary for manufacturing firms, since production would be impossible without them. They can also quite often be referred as earning assets and generally provide the basis for the firm's earning power and value. The level of fixed assets depends on the nature of the firm's production process.

Fixed assets represent tangible as well as intangible assets.² While the former represent assets like land and building, plant and machinery, furniture and fixtures, the latter group consists of copyrights, patents and goodwill. The amount invested in these assets not realized at once from the total sales during an accounting year.³ The cost of fixed assets will recover in the form of depreciation, which usually charged as an expense against the revenues generated using these assets in production process. These assets realized gradually from every unit of sale made during the serviceable life of the assets. A great deal of attention must be given to the top management of fixed assets since they represent sizable outlay, live longer than a year, and involve the long-term financial commitment. A systematic blending of current and fixed assets into a profitable combination is a challenging task for the financial management.⁴ The analysis of fixed assets is very important from the investors' point of view, because they are more concerned with long- term assets.

(Footnotes)

- ¹ Fin nay, H.A. and Miller, H.E. "Principles of Accounting", New Delhi: Prentice– Hall of India, 1968, p.163.
- ² Paton & Paton, "Corporation Accounts and Statements", New York: Macmillan Company, 1964, P.362.
- ³ Kulshrestha, N.K., "Analysis of Financial Statements of Indian Paper Industry", Aligarh: Nar man Publishing House, 1972, P-133.
- ⁴ Kulshrestha, N. K., op.cit. P.134

Need of The Analysis

Some research studies have been undertaken on Indian Sugar industry in general. A few specific research studies have also undertaken, like financial performance of co-operative sugar mills in Tamil Nadu and financial performance of sugar mills in Villupuram. However, research studies on the financing and utilizations of fixed assets in general in Tiruchirappalli district are scanty. Keeping in view of this a modest attempt has made to measure and evaluate the financing pattern and utilization of fixed assets in large-term sugar industry in Tiruchirappalli District.

Hypothesis of The Study

The study presupposes that there is no relation between fixed assets (net) and long-term funds during 1998-99 to 2007-08.

Objectives of The Study

The prime intention of this area is to analyze the financing pattern and utilization of fixed assets in large-scale sugar industry in Tiruchirappalli District. Precisely, the following are the main objectives set for the study:

- Evaluate the financing pattern of fixed assets
- Testing the efficiency of fixed assets utilization
- Assessing the impact of fixed assets on sales and operating profit, and
- Examining the adequacy of depreciation provision
- To give suggestion for the best financing method and efficient utilization of fixed assets

Scope of the Study

The study confines to issues relating to the financing pattern and utilization of fixed assets of the selected large scale sugar mills in Tiruchirappalli district Tamil Nadu. The study, therefore, excludes financial structure performance, working capital management, profitability analysis and non-financial areas such as production, marketing, personnel and R&D from its purview.

Period of the Study

The present needs a moderately lengthy period to arrive at meaningful and purposeful inferences. Therefore, a ten-years period years commencing from 1998-99 and ending with 2007-08 has been adopted.

Data Base

The data for the tables presented in the article has been compiled from the accounting records / annual reports of the selected units.

Tools of Analysis

The data have been analyzed with the help of ratio analysis, trend analysis, common size analysis, and co-

efficient of correlation to test the relation between fixed assets (net) and long-term funds.

Limitations of the Study

In order to facilitate uniformity in data, years have been readjusted and the data have been recast as on 31st March of every year. The data available in financial statement have been translated into a pre-designed structure format so that a meaningful interpretation could be made through inter - firm and intra - firm comparison. The format in which the data have been classified is selected after careful considerations of the operations of sugar mills.

Analysis of the Data

For knowing financing pattern and utilization of fixed assets of the selected sample industry the commonly used ratios are fixed assets to net worth, fixed assets to long-term funds, fixed assets turnover ratio, indices of fixed assets gross block, sales and operating profit margin and indices for gross block and depreciation.

Financing Pattern of Fixed Assets

The investment in fixed assets involves commitment of funds for longer period into the future and usually is difficult and costly to reverse often as they are in large increments⁵. As such, fixed assets represent permanent investment of funds and therefore, they have to finance primarily by the owner's funds. Usually, funds provided by the owners should be sufficient not only to finance the entire requirement of fixed assets but also some of the current assets, which are relatively permanent in nature. Further, fixed assets preferably financed through long-term debt. It implies that in any situation, an enterprise is fixed assets should not be financed by the short-term funds. In order to study the financing pattern of fixed assets in sample industry two relevant ratios viz. fixed assets to net worth and fixed assets to long-term funds have been computed.

Fixed Assets to Net Worth

This ratio explains the relationship between fixed assets and tangible net worth (preference share capital and equity share capital inclusive of reserves and surplus minus intangibles). The ratio of fixed assets to owner's funds indicates the relationship between net worth and investments in fixed assets (i.e.) gross block less depreciation).⁶ Bogan observes the ratio measures the proportion of contributed capital that has invested in fixed property⁷. It is calculated as follows

$$\text{Fixed assets to Net worth ratio} = \frac{\text{Fixed Assets}}{\text{Net worth}}$$

This ratio is an important tool for judging the margin of safety for long-term creditors. A greater ratio than unity would mean that a part of the fixed assets is financed through creditor's funds. However, the ratio less than unity reflect that the owner's funds are adequate to cover not

(Footnotes)

⁵ Hunt, W. and Donaldson, G., "Business Finance-Text and Cases", Illinois, Richard D. Irwin. 1965 Pp.114-115

⁶ Roy Chowdhary, A.B. "Analysis and Interpretation of Financial Statements", New Delhi: Orient Longmans, 1970, p-24.

⁷ Bogen, J. J., "Financial Hand Book", New Delhi: The Ronald Press, 1957, P. 253

only fixed assets but also a part of current assets. The higher the ratio, the less would be the protection available to creditors and it is a sign of weakness from the point of view of a firm's long term solvency. The yardstick for this measure is 0.65 times for industrial concerns⁸. It indicates that fixed assets should not exceed 65 percent of the owner's funds. Owner's funds should be sufficient

for acquiring fully the fixed assets and that of 35 percent of these funds must be available for financing current Assets.

The fixed asset to net worth ratio of EID Parry Sugars Ltd. is calculated in the following table.

Table: 1
Fixed Assets to Networth of EID Parry Sugars Ltd

(Rs. In Crore)

| Year | Fixed assets | Net worth | Ratio (In Times) |
|----------------|---------------------|------------------|-------------------------|
| 1998-99 | 504.46 | 270.44 | 1.87 |
| 1999-00 | 452.25 | 291.32 | 1.55 |
| 2000-01 | 336.16 | 301.47 | 1.12 |
| 2001-02 | 383.46 | 311.68 | 1.23 |
| 2002-03 | 472.00 | 324.37 | 1.46 |
| 2003-04 | 566.26 | 398.64 | 1.42 |
| 2004-05 | 413.12 | 341.00 | 1.21 |
| 2005-06 | 430.17 | 419.44 | 1.03 |
| 2006-07 | 461.72 | 487.28 | 0.95 |
| 2007-08 | 606.02 | 536.69 | 1.13 |
| Average | | | 1.30 |

Source: Computed from Annual Reports of EID Parry Ltd., from 1998-99 to 2007-08

Table: 1 indicates that the fixed assets to net worth ratio of EID Parry sugars Ltd., was always in between 0.95 to 1.87 during the study period. From 2000-2001 to 2007-08, the fixed assets to net worth ratio was very low and from 1998-99 to 1999-00, the ratio was 1.87 and 1.55 which indicate the relationship between fixed assets and net worth was not satisfactory. The average mean of fixed

assets to net worth was 1.30 during the study period. The average ratio is also above the standard of 1:1 during the study period. The main analysis of this analysis is that there is no margin of safety for long-term creditors since funds provided by the owners are not sufficient to finance fixed assets as well as part of working capital requirements.

(Footnotes)

⁸ Weston. J.F. and Brigham, E.F., "Managerial Finance ", New York: Holt, Rinehart and Winston, Inc.1972. P. 88

The following table shows the fixed assets to net worth ratio of Kothari sugars Ltd.

TABLE: 2
FIXED ASSETS TO NETWORTH OF KOTHARI SUGARS LTD
(Rs. In Crore)

| Year | Fixed assets | Net worth | Ratio (In Times) |
|----------------|--------------|-----------|------------------|
| 1998-99 | 118.76 | -102.74 | -1.16 |
| 1999-00 | 117.76 | -108.32 | -1.09 |
| 2000-01 | 108.20 | -110.35 | -0.98 |
| 2001-02 | 135.06 | -116.48 | -1.16 |
| 2002-03 | 156.98 | -122.62 | -1.28 |
| 2003-04 | 135.84 | -147.50 | -0.92 |
| 2004-05 | 105.24 | -161.72 | -0.65 |
| 2005-06 | 93.94 | 47.87 | 1.96 |
| 2006-07 | 72.44 | 72.78 | 0.99 |
| 2007-08 | 212.93 | 90.46 | 2.35 |
| Average | | | -0.19 |

Source: Computed from Annual Reports of Kothari Sugars Ltd., from 1998-99 to 2007-08.

Table: 2, focused that the fixed assets to net worth ratio of Kothari Sugars Ltd., showed negative trend from 1998-99 to 2004-05. From 2005-06 to 2007-08 which was 0.99 to 2.35. It was highest during the year 2007-08. It indicates that the Kothari Sugars Ltd. utilized more borrowed funds to its investment the owner's equity up to 2004-05. After that, it was seen that there was an increase of owner's equity for its investment. The standard norms of this ratio are 1:1. The mean ratio of fixed assets to net worth of Kothari Sugars Ltd., was -0.19. The main implication of the above analysis is that there is no margin of safety and protection to long-term creditors of the Kothari Sugars Ltd.

FIXED ASSETS TO LONG -TERM FUNDS

Fixed assets to long-term funds is yet another ratio to study to financing pattern of fixed assets. It is related to net fixed assets with long-term funds. The long-term funds for this purpose include owner's funds, as represented by tangible net worth, plus long-term borrowed funds. Normally, funds provided by the owners should be sufficient to cover the fixed assets. However, if it is necessary to finance fixed assets under certain conditions by borrowed funds, only long-term funds should be preferred. The total long-term funds should sufficient to finance fixed assets and leave a part of these to finance to cover current assets. Otherwise, it would result in financial embarrassment.

The ratio indicates whether the long-term funds are sufficient to finance company's fixed assets or the extent of fixed assets financed by the current debt due to inadequacy of long-term funds. Ideally, this ratio should not exceed unity. If it is less than the unity, it means

that the long-term funds are more than the fixed assets and they are used for the purpose of other than the long-term assets, i.e., for financing working capital. The ratio, therefore, is closely connected to the concept of net working capital.

It may not be out of context to state how this ratio is related to the concept of net working capital. More commonly, the working capital is known as excess of current assets over current liabilities. If current assets exceed current liabilities, the implication is that the excess of current assets is being financed through the long-term funds. Hence, the long-term funds must cover some current assets requirements too and then only presence of working capital is to be considered as the excess of current assets over current liabilities. Insufficiency of long-term funds to cover the entire fixed assets will result in working capital deficit. In such a situation, the company may land itself in financial crisis to fill the gap of working capital.

The ratio is calculated as follows:

$$\text{Fixed assets to long-term funds ratio} = \frac{\text{Fixed Assets}}{\text{Long-term funds}}$$

If the ratio is less than one, it implies that long-term funds are enough to fixed assets as well as a part of its working capital requirements. Conversely, if the ratio is more than one, it is an indication that the long-term funds are inadequate to finance the entire fixed assets and short-term creditors finance the remaining fixed assets. Generally, the ratio of 0.65:1 is ideal.

The fixed asset to long-term fund ratio of EID Parry Sugars Ltd. is calculated in the following table.

TABLE: 3
FIXED ASSETS TO LONG -TERM FUNDS RATIO OF EID PARRY SUGARS LTD.

(Rs. In Crore)

| Year | Fixed assets | Long-term funds | Ratio (In times) |
|----------------|--------------|-----------------|------------------|
| 1998-99 | 504.46 | 560.48 | 0.90 |
| 1999-00 | 452.25 | 545.33 | 0.83 |
| 2000-01 | 336.16 | 572.63 | 0.59 |
| 2001-02 | 383.46 | 604.53 | 0.63 |
| 2002-03 | 472.00 | 621.72 | 0.76 |
| 2003-04 | 566.20 | 733.15 | 0.77 |
| 2004-05 | 413.12 | 558.46 | 0.74 |
| 2005-06 | 430.17 | 599.32 | 0.72 |
| 2006-07 | 461.72 | 734.94 | 0.63 |
| 2007-08 | 606.02 | 888.88 | 0.68 |
| Average | | | 0.73 |

Source: Computed from Annual Reports of EID Parry sugars Ltd., from 1998-99 to 2007-08.

Table: 3 indicates that the proportion of long-term funds deployed in fixed assets. The higher ratio indicates the safer the funds available in case of liquidation. It also indicates the proportion of long-term funds that invested in working capital. This ratio varied from 0.59 to 0.90. The highest ratio was in the year 1998-99 and the lowest

ratio was in the years 2001-02 and 2006-07. The mean ratio of fixed assets to long-term funds was 0.73 during the study period. The main implication of the above study is the long-term funds have been adequate to finance the fixed assets requirements of the concern.

The data regarding fixed assets to long-term fund of Kothari sugars Limited presented in the following table.

TABLE: 4
FIXED ASSETS TO LONG -TERM FUNDS OF KOTHARI SUGARS LTD

(Rs. In Crore)

| Year | Fixed assets | Long-term funds | Ratio (In Times) |
|----------------|--------------|-----------------|------------------|
| 1998-99 | 118.76 | 110.06 | 1.08 |
| 1999-00 | 117.76 | 54.00 | 2.18 |
| 2000-01 | 108.20 | 99.09 | 1.09 |
| 2001-02 | 135.06 | 105.95 | 1.28 |
| 2002-03 | 156.98 | 152.70 | 1.03 |
| 2003-04 | 138.54 | 134.98 | 1.03 |
| 2004-05 | 105.24 | 113.83 | 0.93 |
| 2005-06 | 93.94 | 121.26 | 0.77 |
| 2006-07 | 72.44 | 145.79 | 0.50 |
| 2007-08 | 212.93 | 269.47 | 0.79 |
| Average | | | 1.07 |

Source: Computed from Annual Reports of Kothari Sugars Ltd., from 1998-99 to 2007-08

Table: 4 indicates that the proportion of long-term funds deployed in fixed assets. The higher ratio indicates the safer the funds available in case of liquidation. It also indicates the proportion of long-term funds that invested in working capital. This ratio varied from 0.50 to 2.18 during the study period. From 1998-99 to 2003-04, the ratio was above the standard norms of 0.65:1. from the year 2004-05 onwards, it has decreased reasonably. The mean ratio was 1.07 during the study period. The main implication of this ratio is the long-term funds is more adequate to finance the fixed assets requirements of the concern and the excess of long-term funds over fixed

assets investments used for the working capital requirements.

Testing The Significance Of Correlation Co-efficient

Based on the above analysis the researcher framed the following null hypothesis.

Null Hypothesis (Ho)

Ho (1): There is **no significant** relationship between fixed assets (net) and long-term-funds during 1998 - 99 to 2007 - 08.

The testing of significance co-efficient of fixed assets to long-term funds of EID Parry Sugars Ltd. and Kothari Sugars Ltd. shows in following table.

Table: 5

**Fixed Assets To Long - Term Funds Ratios of EID AND KOTHARI SUGARS LTD
(In Times)**

| Year | EID parry | Kothari |
|---|--------------|--------------|
| 1998-99 | 0.90 | 1.08 |
| 1999-00 | 0.83 | 2.18 |
| 2000-01 | 0.59 | 1.09 |
| 2001-02 | 0.63 | 1.28 |
| 2002-03 | 0.76 | 1.03 |
| 2003-04 | 0.77 | 1.03 |
| 2004-05 | 0.74 | 0.93 |
| 2005-06 | 0.72 | 0.77 |
| 2006-07 | 0.63 | 0.50 |
| 2007-08 | 0.68 | 0.79 |
| Average | 0.73 | 1.07 |
| Co-efficient of correlation between fixed assets (Net) and long-term funds | 0.739 | 0.704 |

Source: Computed from Annual Reports of EID Parry and Kothari Sugars Ltd., from 98-99 to 07-08.

Table: 5 depicts that the ratio of net fixed assets to long-term funds of the industries. The average ratios point out that the long-term funds were sufficient to finance fixed assets as the ratio worked out, on an average, at 0.73 times of EID Parry Sugars Ltd. and 1.07 times of Kothari Sugars Ltd... It also reflects that even after meeting the fixed assets requirements completely, both the industry was able to provide long-term funds to finance the net working capital.

An analysis of individual industry point of view, both the study industry have long-term funds quite sufficient to finance the fixed assets as well as part of current assets, as their average ratio worked out to be high unity. It is indicating, both the companies are leaving a little portion of long-term funds to meet the needs of current assets after meeting their fixed assets requirements.

The surplus long-term funds in EID Parry sugars Ltd. enabled the company to strengthen its working capital financing. However, at the same time a very narrow margin is left for long-term funds. Even then, there was no need for any anxiety as this ratio was within the unity. There was a high positive correlation relationship between fixed assets and long-term funds in the large-scale sugar industry and in the both study units. Therefore, the null hypothesis is rejected. To conclude, the financing pattern of fixed assets through long-term funds was appropriate in all the study units. Alternatively, there is significant relationship between fixed assets and long-term funds during 1998-99 to 2007-08.

Utilization of fixed assets

Normally, sales must justify the quantum of fixed assets employed in an enterprise. Efficiency of an enterprise in effective utilization of fixed assets is gauged by fixed assets turnover. One of the most potent tools employed to evaluate the effectiveness of the utilization of fixed assets is assets turnover.⁹The turnover of fixed assets denotes their contribution to sales. It is, therefore, an important ingredient of overall profitability. West wick also suggests the application of fixed assets turnover ratio to measure the utilization of fixed assets.¹⁰ Turnover means the number of times an assets flow through a firm's operations into sales. The turnover to fixed assets investment defined as the relationship between the volume of business done and the amount of capital tied-up in fixed property investments.¹¹ The ratio is calculated as follows:

$$\text{Fixed assets turnover Ratio} = \frac{\text{Sales}}{\text{Fixed assets}}$$

The ratio indicates the rate at which different assets viz. plant and machinery, land and building, furniture and fixtures, and vehicles turned over. A reasonable high fixed assets turnover ratio indicates the effective utilization of fixed assets in generating sales. However, the low ratio indicates idle capacity and inefficient utilization of fixed assets. The standard norm of this ratio is five times in manufacturing industry.¹² At the time of interpreting this ratio, one caution should be born in mind. When the fixed assets of the firm are old and substantially depreciated, the fixed assets turnover ratio tends to be high because the denominator of the ratio is very low.

(Footnotes)

⁹ Srivatsava, R. M, "Financial Management", Meerut India: Pragati Prakashan, 1979, p. 476

¹⁰ West wick, C. A. "Management: How to use Ratios". Epping Essex: Grower Press Ltd., 1973, p.5

¹¹ Bogen J.J., PP.751-752

¹² Mohsin, M., "Financial Planning and Control", James E. Wert., "An introduction of Financial Management", California: Addition - Wesley Publishing Company, 1994. P.122

The fixed assets turnover ratio of EID Parry Sugars Limited is as follows:

Table: 6
Fixed assets turnover ratio of EID PARRY SUGARS LTD
(Rs. In Crore)

| Year | Sales | Fixed Assets | Ratio (In Times) |
|----------------|---------|--------------|------------------|
| 1998-99 | 890.12 | 504.46 | 1.76 |
| 1999-00 | 1200.45 | 452.25 | 2.65 |
| 2000-01 | 971.32 | 336.16 | 2.88 |
| 2001-02 | 912.35 | 383.46 | 2.38 |
| 2002-03 | 1121.46 | 472.00 | 2.38 |
| 200-04 | 1345.93 | 566.20 | 2.38 |
| 2004-05 | 609.51 | 413.12 | 1.48 |
| 2005-06 | 766.42 | 430.17 | 1.78 |
| 2006-07 | 978.46 | 461.72 | 2.12 |
| 2007-08 | 583.23 | 606.02 | 0.96 |
| Average | | | 2.08 |

Source: Computed from Annual Reports of EID Parry sugars Ltd., from 1998-99 to 2007-08.

Table-6 indicates that the fixed assets turnover ratio of EID Parry sugars Ltd., was below the ideal standard of 4.5- five times. Ratio was always in between 0.96 to 2.88 during the study period, which actually shows a low trend. It was highest in the year 2000-2001, which was 2.88 and lowest in the year 2007-08, which was 0.96. The average mean of fixed assets turnover ratio was 2.08 during the study period. It reveals that there is a low fixed assets turnover ratio as against the standard norm of 5:1. The main implications of this analysis are:

- ♦ The efficiency of management of EID Parry Sugars Ltd. in the utilization of fixed assets is very poor.
- ♦ There is presence of idle capacity in the production of sugar i.e., the company has an excessive investment in fixed assets in comparison to the volume of sales.

Fixed assets turnover ratio of Kothari sugars Ltd. calculated in the following table. Fixed assets turnover ratio of Kothari sugars Ltd. calculated in the following table.

Table: 7
Fixed Assets Turnover Ratio of KOTHARI SUGARS LTD
(Rs. In Crore)

| Year | Sales | Fixed Assets | Ratio (In Times) |
|----------------|--------|--------------|------------------|
| 1998-99 | 100.12 | 118.76 | 0.84 |
| 1999-00 | 112.32 | 117.76 | 0.95 |
| 2000-01 | 114.56 | 108.20 | 1.06 |
| 2001-02 | 118.36 | 135.06 | 0.88 |
| 2002-03 | 121.30 | 156.98 | 0.77 |
| 2003-04 | 139.28 | 138.54 | 1.01 |
| 2004-05 | 147.66 | 105.24 | 1.40 |
| 2005-06 | 151.17 | 93.94 | 1.60 |
| 2006-07 | 231.46 | 72.44 | 3.19 |
| 2007-08 | 240.78 | 212.93 | 1.13 |
| Average | | | 1.28 |

Source: Computed from Annual Reports of Kothari Sugars Ltd., from 1998-99 to 2007-08.

As per table: 7 the fixed assets turnover ratio of Kothari Sugars Ltd., was below the ideal standard of 4.5 to 5 times. Ratio was always in between from 0.77 to 3.19 during the study period, which actually shows a low trend. It was highest in the year 2006-07, which was 3.19 and lowest in the year 2001-02, which was 0.88. The mean ratio was 1.28 during the study period. It reveals that

there is a low fixed assets turnover ratio as against the standard norm of 5:1. The main implications of this analysis are:

- ♦ The efficiency of management of Kothari Sugars Ltd. in the utilization of fixed assets is also very poor.
- ♦ There is presence of idle capacity in the production of sugar i.e., the company has an excessive investment in fixed assets in comparison to the volume of sales.

Generally, the sugar industries are supplying sugar directly to the government at lower rate. Therefore, the researcher concludes that the efficient capacity utilization of the fixed assets measure through sales is not a worthy parameter.

Impact Of Fa (Gb) On Sales And Operating Profits

The evaluate of the impact of fixed assets (gross) on sales and operating profits is yet another way of measuring the utility of fixed assets. Normally, the upward sales trend justifies the expansion of gross block. The expanding gross block too should have its impact upon sales as well as operating profits. If the trends of gross block and sales are increasing, it can be said that expansion of gross block is due to increase in sales, or sales has justified the need for expansion of fixed assets (gross). If the rate of growth in gross block is higher than that of the sales, it reflects excessive investment in gross block as well as its underutilization.

On the other hand, if the sales growth rate is higher than that the rate of growth of gross block, it can be said that there is better utilization of gross block expansion. The increasing trend in operating profit along with the increase in gross block and sales indicates better operating efficiency and stats that are more profitable. If the operating profits shows stagnant or a declining trend, the expansion of gross block may not be profitable though there is increase in volume of sales.

In order to study the trends in gross block and sales, indices for these variables have computed considering 1998-99 as the base year.

Table 8 shows the indices of fixed assets gross block, sales and operating profit margin of the EID Parry Sugars Limited and Kothari Sugars Limited during the study period.

Table: 8
Indices of Fixed Assets Gross Block, Sales And Operating Profit Margin of EID PARRY and KOTHARI SUGARS LIMITED
[BASE YEAR 1998-99 = 100]

(In percentage)

| Year | EID parry sugars Ltd. | | | Kothari sugars Ltd. | | |
|---------|-----------------------|-------|-------------|---------------------|-------|-------------|
| | G.B | Sales | O.P. Margin | G.B | Sales | O.P. Margin |
| 1998-99 | 100 | 100 | 6.15 | 100 | 100 | 3.56 |
| 1999-00 | 132 | 135 | 6.32 | 117 | 112 | 4.01 |
| 2000-01 | 113 | 109 | 6.96 | 115 | 114 | 4.23 |
| 2001-02 | 117 | 102 | 7.15 | 117 | 118 | 4.56 |
| 2002-03 | 124 | 126 | 6.65 | 115 | 121 | 4.79 |
| 2003-04 | 149 | 151 | 6.85 | 116 | 139 | 4.83 |
| 2004-05 | 102 | 68 | 10.53 | 118 | 148 | 11.79 |
| 2005-06 | 109 | 86 | 14.80 | 103 | 151 | 8.05 |
| 2006-07 | 104 | 110 | 13.84 | 71 | 231 | 7.24 |
| 2007-08 | 140 | 65 | 8.27 | 60 | 241 | 6.88 |

Source: Computed from Annual Reports of EID Parry and Kothari Sugars Ltd. from 98-99 to 07-08.

O.P = Operating Profit & G.B = Gross Block

In order to study the trends in gross block and sales, indices for these variables have computed considering 1998-99 as the base year. Table depicts these trends along with operating profit margin for the study period. It may observed that the rate of growth in gross block is more / less than that of sales growth in combined position for all the years with the expecting of 2006-07 and 2007-08. However, the gross block had enjoyed in decreasing trend and sales had also fluctuating trend up to 2006-07, thereafter, it was 100, the rate of growth in sales was comparatively more than the rate of growth in gross block. It is, therefore, evident that the expansion in gross block failed to have significant impact on sales in sample units. In addition, the impact of expanded gross blocks and improved sales on operating profit was inconsistent. The

operating profit had shown wide fluctuations, but it had increased year by year during the study period. It suggests that the usage of gross block and expansion in sales is as profitable but not utilized efficiently. This is due to escalating cost of raw materials and other basis inputs, spiraling wage bill, increase in interest rates, recession in demand, labour unrest, breakdown of machinery and power cuts and interruptions coupled with the management inability to control and keep down the operating cost.

An observation of individual units reveals the favorable as well as unfavorable impact of gross block on sales. Out of the two units, EID Parry sugars Ltd. revealed the downward trend of gross block, sales and rising trend in operating profits. The pace of usage in gross block on sales was impressive in most of the years in EID Parry sugars Ltd. Hence, it may be increased that the gross

block had a positive impact on sales. It implies that better utilization of expanded gross block.

In Kothari Sugars Ltd's trend, resemble with the combined positions of sample units. Kothari Sugars Ltd recorded higher rate of growth in sales as compared to gross block. It implies that the proper use of fixed assets has triggered more sales. The operating profit margin registered inconsistently, but shown increasing trend in both the units over the study period.

In spite of expanding investment in fixed assets (gross) and consequent improvement in sales, the profit performance of the sample units was poor and unstable. The reasons were improper monitoring and lack of adequate control on operating costs besides the external reason explained earlier.

Analysis of Depreciation Policy

Depreciation policy, in fact, is of considerable importance to the financial manager because of its impact on profitability, its size in relation to total cost of operation, its effect on rate of return on investment and finally its relationship to replacement policy. Depreciation is a permanent, continuing and gradual shrinkage in the book value of fixed assets at a given rate as compared with its value at previous data. Depreciation is the systematic allocation of the cost of capital equipment to the revenues.¹³ Depreciation is a fraction of the cost of the fixed assets properly chargeable as an expense in each of the accounting periods in which the company uses the asset. The accounting process for this gradual conversion of fixed assets to expense called as depreciation.¹⁴ It denotes the extent of realization of the money sunk in the fixed assets of the current year's revenues. In other words, depreciation represents the extent of services received from fixed assets.

Most of the physical assets may have productive uses for many years, but eventually they will wear or become absolute and have little value. As depreciation charged against revenues, it denotes revenues consumed. It is sometimes contended that it provides fund for replacement at the expiry of the productive life of an asset. Usually depreciation calculated based on either written-down value method or straight-line method. The choice of the method of depreciation has important consequences for financial management.

In India, business enterprises calculated depreciation as per the provisions of the Indian companies Act, 1956.

The amount of depreciation calculated on historical cost of the asset. Business firms provides depreciation on written-down value method as per section 205 (2) (a) or straight-line method in accordance with section 205 (2) (b) of the Indian companies Act, 1956. The depreciation rates (revised) for different assets are prescribed in schedule XIV of the Indian Companies Act, 1956.

The sample units have employed both the methods for computation of depreciation. Among the sample units, EID Parry sugars Ltd., depreciation has provided on straight-line method for plant and machinery according to the provisions of the Companies Act, 1956, but other fixed assets have charged under written- down value method.¹⁵ Kothari Sugars Ltd. provides depreciation on straight-line method for fixed assets; research and development assets have depreciated fully in the year of acquisition and land no depreciated.¹⁶ Regarding rate of depreciation, both the sample units have charged depreciation, not exceeding the rates prescribed by the income tax department. Therefore, the depreciation provided by the sugar industries may not be sufficient to replace the fixed assets whose costs have subsequently increased. In spite of this known fact, an attempt has made here to analyze the adequacy of depreciation provided in sugar industries.

Adequacy Of Depreciation (On Historical Cost Basis)

The adequacy of deprecation examined on historical cost basis. For this purpose, the trend of the depreciation compared with the trend of gross block. As such, index numbers compared for the gross block and deprecation provision by taking 1998-99 as the base year. If both these trends move in the same direction, it inferred that sufficient depreciation has provided. If the pace of increase in the indices of depreciation exceeds that of the gross block, it is sign of liberal provision for depreciation. If the gross block shows an increasing trend while depreciation reports a decreasing trend, it indicates insufficient provision of deprecation.¹⁷ An Enterprise, which expects to continue in business, must provide deprecation obviously to replace its plant and equipment as they wear out.

(Footnotes)

¹³ Antony, R.N. and Reece, J.S., *Op.cit.* p.198

¹⁴ Henderson G, V. Gurry J. R Trennep oh, James E. Wert, " *An Introduction to Financial Management*" California: Addition-Wesley Publishing Company, 1948, P.122

¹⁵ EID Parry, *Annual Report, 1999-2000*, P.45

¹⁶ Kothari Sugar Ltd., *Annual Report, 2000-01*. P.25

¹⁷ Kennedy, R. D., and Mc Mullen, S. Y . *Financial Statements: Forms Analysis and Interpretation*", Illinois: Richard D. Irwin Inc.1964. p.404

Table 9 shows the indices of fixed assets gross block, sales and operating profit margin of the EID Parry Sugars Limited and Kothari Sugars Limited during the study period.

TABLE: 9

**INDICES OF GROSS BLOCK AND DEPRECIATION OF EID PARRY SUGARS LTD & KOTHARI SUGARS LTD
[BASE YEAR 1998-99 = 100]**

Source: Computed from Annual Reports of EID Parry and Kothari Sugars Ltd. from 98-99 to 07-08

A glance at table: 9, it shows the overall trend of indices of depreciation and gross block. In the combined position, it reveals that the indices of gross block are playing with upward and downward trend and depreciation is in upward direction. However, the pace of increase in the indices of depreciation was higher than the pace of increase on gross block (except 2006-07), it points out that depreciation provided sufficiently in the sugar industry.

An analysis of individual industry shows that both the industry resembles the combined position of the industry.

Findings of the Study

- ♦ The average mean of fixed assets to net worth was 1.30 during the study period. The average ratio is also above the standard of 1:1 during the study period. The main analysis of this analysis is that there is no margin of safety for long-term creditors since funds provided by the owners are not sufficient to finance fixed assets as well as part of working capital requirements.
- ♦ The mean ratio of fixed assets to long-term funds was 0.73 during the study period. The main implication of the above study is the long-term funds have been adequate to finance the fixed assets requirements of the concern.
- ♦ The efficiency of management of EID Parry Sugars Ltd. in the utilization of fixed assets is very poor.
- ♦ There is presence of idle capacity in the production of sugar i.e., the company has an excessive investment in fixed assets in comparison to the volume of sales.
- ♦ The impact of expanded gross blocks and improved sales on operating profit was inconsistent. The operating profit had shown wide fluctuations, but it had increased year by year during the study period.
- ♦ The indices of gross block are playing with upward and downward trend and depreciation is in upward direction. However, the pace of increase in the indices of depreciation was higher than the pace of increase on gross block (except 2006-07), it points out that depreciation was provided sufficiently in the sugar industry.
- ♦ The standard norms of this ratio are 1:1. The mean ratio of fixed assets to net worth of Kothari Sugars Ltd., was -0.19. The main implication of the above analysis is that there is no margin of safety and protection to long-term creditors of the Kothari Sugars Ltd.
- ♦ The mean ratio of fixed assets to net worth of Kothari Sugars Ltd. was -0.19. It indicates that the Kothari Sugars Ltd. utilized more borrowed funds to its investment the owner's equity up to 2004-05. After that, it was seen that there was an increase of owner's equity for its investment.
- ♦ The mean ratio was 1.07 during the study period. The main implication of this ratio is the long-term funds is more adequate to finance the fixed assets requirements of the concern and the excess of long-term funds over fixed assets investments used for the working capital requirements.
- ♦ The efficiency of management of Kothari Sugars Ltd. in the utilization of fixed assets is also very poor.
- ♦ There is presence of idle capacity in the production of sugar i.e., the company has an excessive investment in fixed assets in comparison to the volume of sales.
- ♦ Kothari Sugars Ltd. recorded higher rate of growth in sales as compared to gross block. It implies that the proper use of fixed assets has triggered more sales.

- ♦ The indices of gross block are playing with upward and downward trend and depreciation is in upward direction. However, the pace of increase in the indices of depreciation was higher than the pace of increase on gross block (except 2006-07), it points out that depreciation provided sufficiently in the sugar industry

Suggestions

- ♦ The sample mills should finance modernization and expansion programs through internal funds, as far as possible. The industry shall not undertake expansion of installed capacity until and unless the existing capacity fully utilized.
- ♦ Profitability of the any business enterprise depends on the effective utilization of fixed assets. Fixed assets turnover needs to maintain at a healthy level in the sample mills. For this, they have to take necessary steps to ensure that the existing gross block (fixed assets) put to the maximum possible use.
- ♦ Modernization of the mills with the latest techniques is necessary to achieve high performance and to maintain high standard of output. Mills have to create replacement funds to finance these types of programme. Modernization programme is possible with the proper planning, active support of financial institution and the Government and with the ingenuity of the managements. Government, on its part, has to extent necessary support by way of allowing imports capital equipment at concessional duty rates so that selected mills can update their production along the lines followed elsewhere in the world. Production of qualitative sugar at low cost is possible only with modernization of plant with latest technology.

References

Books

- Agrawal R.N., "Sugar Industry in India", My Recollections, Bombay, 1952
- Amin, Shahid, "Sugarcane and Sugar in Gorakhpur – An Industry into peasant production for capitalist enterprises in colonial India", Oxford University Press, Delhi, 1984
- Archer S.H., ET all, "*Business finance – Theory and Management*" New York; the Macmillan Company, 1972
- Arora and S.Arora, "*Statistical Methods*" Second edition, S. Chand & Co New Delhi-2008
- Anthony, Robert N., "*Management Accounting Principles*" (Richard D.Irwin, Inc, Homewood, Illinois), Ed.1972
- Bhalla V.K., "*Financial Management and Policy*", Third Revised and Enlarged Edition, New Delhi, Anmol Publications Pvt. Ltd., 2002.
- Bhalla G.S., "*Financial Administration of Nationalized Industrial in the United Kingdom and India*", Meerut, 1968
- Chandra P., "*Financial Management – Theory and practice*", 2nd Ed., New Delhi, Tata McGraw – Hill publishing company Ltd. -1989
- Childs, John F., "*Long-term financing*" (Prentice –Hall, Inc, Englewood cliffs, N.J) Ed.1961
- Chakravarthy S.K., "*Financial Management and Control*", Mac Millen, New Delhi- 1981
- Chandra Prasanna., "*Financial Management, Theory and Practice*," Tata McGraw Hill publication Company Ltd., New Delhi- 2005
- Dewett K.K J.K. Varma and M.L. Sharma., "*Indian Economy*", Chand and Company, New Delhi-1994
- Dutta & Sundaram, "Indian Economy", S.Chand and Company, Ltd., New Delhi, 1996
- Dhingra I.C., "*Indian Economy*," Sultan Chand and Sons, New Delhi, 1996
- Elhance D., "*Fundamentals of Statistics*", New Delhi, Chand & Co- 1978
- Ezra Solomon, ET. al., "*an introduction to Financial Management*" California: Goodyear publishing company, Inc, 1977
- Gitman L.J., "*Principles of Managerial Finance*", Harper and Row New York, 1997
- Guttman H.G., "*Corporation Finance-Principles and Problems*" (Chatanya Publishing House, Allahabad), eighth Edition
- Guptha C.B., "*An Introduction to statistical Methods*", New Delhi, Vikas Publishing House Pvt., Ltd., - 1973
- Guptha S.P., "*Statistical Methods*" Sultan Chand and Sons, New Delhi – 2001
- Harry G.Guttman, ET. al., - "*Corporate Financial policy*" Edition, N.J. Prentice – Hall, Inc – 1969
- Hampton, John J., "*Financial Decision Marketing – concepts, Problems and cases*" (Reston Publishing Company, Inc, Reston, Virginia) Ed. - 1976
- Gupta L.C., "*The Changing Structure of Industry Finance in India*", Oxford, London – 1996
- Joel, Dean, "*Managerial Economics*", Prentice Hall of India private Ltd, New Delhi – 1979.
- J.H. Galloway," the Sugarcane Industry", Cambridge University Press, 1989.
- James C.Van Horne., "*Fundamentals of Financial Management*" Ninth Edition. New Delhi, Prentice – Hall of India Private Limited – 1996

- Joseph's Putty's "*The Cultural Setting of Management in India and United State*", the National Publishing Company, and Madras – 1998
- Kuchal S.C., "*Corporation Finance Principles and Problems*", (Chatanya Publishing House, Allahabad) Ed.1970
- Khan Y.P.K. Jain, "*Financial Management*", Third Edition, Tata McGraw-Hill Publishing Company Ltd., New Delhi 2005
- Kuchal S.C., "*Corporation Finance Principles and Problems*", (Chatanya Publishing House, Allahabad) Ed. 2006
- Kulshrestha N.K., "*Management Accounting Concepts and Cases*", Tata McGraw Hill Publishing Company – New Delhi 1997
- Kohler. Eric L.A., "*Dictionary for Accountants*", Prentice-Hall of India Pvt. Ltd, New Delhi, Ed 1972
- Khan M.Y and P.K Jain, "*Finance Management*", Tata McGraw- Hill, New Delhi – 2005
- Kishore, Ravi, "*Capital Structure in Financial Management*," Taxman Allied Services (p) Ltd, New Delhi, August 2001.
- Kulkarni P.V and B.G.Sathyaprasad., "*Capital Structure Financial Management*", Himalaya Publishing House, New Delhi
- Mac Menamin, Jim "*Financial Management*", Oxford University Press, New Delhi-2000
- Maheshwari S.N., "*Principles of Management Accounting*", Sultan Chand and Sons, Educational Publication, New Delhi, 2002
- Ommen T.T., "*Sugar Factory Operation and Management*", Ommen and Associates publication, Trivandrum, 1989
- Prasanna Chandra, "*Fundamentals of Financial Management*"; Third Edition, New Delhi, Tata McGraw – Hill Publishing Company Limited, 1999
- Pandey I.M., "*Financial Management*", Eighth Edition, New Delhi, Vikas publishing Private Limited -2009
- Pandey I.M., "*Capital Structure Planning*", Financial Management, Vikas publication House, New Delhi, 1984
- Pandey A.P., Financing of Small Scale Industries in Eastern Uttar Pradesh, An unpublished Major Research Project
- Pruthi S., History of Sugar Industry in India, Reliance Publishing House, New Delhi, 1995, pp.1-29.
- Ramamurthy V.E., "*Working capital Management*", Institute for Financial Management and Research, Madras, April-1978.
- Rai, Prem Shankar, Uttar Pradesh Mein Chini Udyog Ki Punjee Sunrachana-2001 (An unpublished Ph.D. thesis of Dept. of Economics, B.H.U., Varanasi)
- Ray G. Jones J.R., "*Essential of Finance*", New Jersey; Prentice-Hall, Inc 1978
- Rustagi R.P., "*Financial Management*", Galgotia Publishing Company, New Delhi, Second Revised Edition, 2005.
- Sharma R.K. and K.Shakshi Gupta, "*Financial Management*", Kalyani Publishers, Ludhiana, New Delhi – 2006
- Solomon E., "*Theory of Financial Management*", (Columbia University Press, New York) Ed.1999
- Sexena V.K & C.D Vashist, "*Management Accounting*", Sultan Chand Sons Publishers, New Delhi.-1993
- Sinha Ram Vichar, "*Sugar Industry in India*", Deep and Deep publication, New Delhi-1986
- Solomon E, "*The theory of Financial Management*", New Columbia University Press, Colombia – 1963
- Van Horne J.C., "*Financial Management and Policy*", (Prentice –Hall of India Pvt., Ltd, - New Delhi-2002
- Wilson R.M.S., "*Financial Control – A System Approach*", (Tata McGraw– Hill Book Company U.K. Ltd.,) Ed-1974
- William, Raddin J., "*Managerial Effectiveness*", Tata McGraw Hill – Kogakusha Ltd, Tokyo-1999
- Weston J.F and Brigham B.F., "*Essentials of Management Finance*", (Holt, Rinehart and Winston, Inc., New York) Fourth Edition
- Walker E.W., "*Essentials of Financial Management*", (Prentice – Hall of India Pvt. Ltd., New Delhi, Ed.1947

Journals

- Boothalingam M., "*Diversification and Increased Efficiency in Sugar Co-operatives*," *Tamil Nadu Journal of Co-operatives*, TCU, Chennai, vol.28, No.6, Sep-1996.
- Deveraja T.S., "*Performance of Sugar Industry in Karnataka: An Evaluation of Financial Parameters*," *Indian Co-operative Review*, New Delhi, 2007.
- Dheenadhayalan V., "*Liquidity Management of SAIL: An Empirical Study*," *Southern Economist*, Vol.14.No.11, Oct-2008, pp 26-28.
- Dheenadhayalan V and Kandasamy S., "*Financial Performance of Steel Authority of India Limited*," *The Accounting World*, the ICAI University, Press, Feb-2009

- Gavade P.N and J.F Patil, "Problem and Prospects of Sugar Industry in 21st Century," *Indian Co-operative review*, NCU, New Delhi, Vol. xxxvii, No.4, April-2001
- Gehawat J.K., "Modernization of Sugar Industry," Arnold Publication, New Delhi, Bombay, Bangalore, Calcutta and Madras, 1990
- Ghuman B.S and Anil Mongia, "Performance of CO-operative Sugar Mills in Punjab," *Indian Co-operative Review*, NCU, New Delhi, Vol.xxv, No.1, July-1987.
- Gopalan M and K. Miniraj, "Financial Management of co-operative sugar mills in Dharmapuri District," *The Tamil Nadu Journal of Co-operation*, TCU, Chennai, vol.78, Apr-1987
- Herekar P.M., "Correlation Analysis of Financial and Operational Factors of Sugar Industry," *Indian co-operative review*, NCU, New Delhi, Vol. xxxiii, No.1, July-1995
- Maratha M.S., "Problem and Prospectus of Co-operative Sugar Industry in India Co-operative Sugar," *NFCSF*, New Delhi, March-2002
- Maratha M.S., "Financial Pattern of Co-operative Sugar Factories," *Co-operative Sugar*, *NFCSF*, New Delhi- Oct-1996, Vol.28, No.2
- Narassiah A and K.Jayachandran, "Cash Management in a Co-operative Sugar Factory – A Case Study," *Indian Co-operative Review*, NCU, New Delhi, Vol. xxiii, No.3, Jan-1996
- Narayanasamy N and S.Ramachandran, "Factors Affecting the Growth and Development of co-operative Sugar Factory-A Case Study," *Indian Co-operative Review*, NCU, New Delhi, Vol.xxv, No.3, Jan-1998
- Nikam G.A., "Financial Strength of Sugar Co-operatives – A Ratio Analysis Approach," *Indian Co-operative Review*, NCU, New Delhi, Vol. xxiii, No.3, Jan-1986
- Rajarathinam T.N. and S.Mahalingam, "Socio-Economic Consequences of the Co-operative Sugar Factory on the Farmers of Pala code Block," *Indian Co-operative review*, vol.xv, Jan-1978
- Rajendra Patil B., "Development of co-operative Sugar Factory and its Social Commitment," *Indian co-operative Review*, NCU, New Delhi, Vol. xxvi, No.1 July-1984
- Rao Dars V.S., "Variation of Supply – Price Efficiency in Vertically Integration Grower's Co-operative Vs. Regulated Market System of Sugarcane in Andhra Pradesh," *Indian Co-operative Review*, NCU, New Delhi, Vol. xxiv, No.4, Jan-1996.
- Rao Manohar P.J., "Development of Indian Sugar Industry Historical," *Indian Co-operative Review*, NCU, New Delhi, Vol. xxii, No.7, March-1996.
- Rao V.M., "Ganesh Pattern of Revising Stick co-operative sugar mills; A study," *Indian co-operative review*, NCU, New Delhi, vol-xxxv, No.4, April-1998
- Ravi D., "Development of Co-operative Sugar Industry in Policy Implication and Strategies," *Co-operative perspective*, *Journal of Co-operative Management (Special Journal)* Pune, Vol.30 and 31, No.4 and 1, Jan-Mar, April-June 1996
- Rayudu C.S., "Appraisal of Technical Performance of Sugar Industry – A case Study of sectoral analysis," *Indian co-operative Review*, New Delhi, Vol-xxxii, No.24, Oct-1985
- Saikumar G.V.S. and S.N.Raju, "Role of Co-operative Sector in Sugar Industry," *Indian Co-operative Review*, NCU, New Delhi, Vol.xxxiv, No.2, Oct-1996
- Sivachittppa K., "Co-operative Sugar Industry India," *Tamil Nadu Journal of Co-operation*, Chennai, Vol.2 No.1, Nov-2001
- Swami B.N., "Cost Benefit analysis of Indian only Beet Sugar Plant," *Journal of Management Accountant*, Vol.28 (4), 1990
- Sam Luther C.T., "Liquidity, Risk and Profitability Analysis – A Case Study of Madras Cements Ltd.," *The Management Accountant*, Oct-2007 Pp 784-789
- Sivachirppa K., "Co-operative Sugar Industry in India," *Tamil Nadu Journal of Co-operation*, Chennai, vol-2, No-1, Nov-2001
- Thyagarajan R.V., "Liberalization of Sugar Industry in Indian," *Kisan world*, Feb -1994
- Tupe S.D., "A Co-operative Sugar Factory as a 'Big Push' for Rural Development," *Indian co-operative Review*, NCU, New Delhi, Vol. xxii, No.2, Oct-1985
- Yadav R.A., "Working Capital Management – A Parametric Approach" *The Chartered Accountant*, Vol.xxxiv, No.11 May-1986

Reports and Thesis

- Annual Reports of the Selected Sugar Mills in Tiruchirappalli District
- Committee Reports, Committees and Commissions in India 1970
- Jain S.L. Editor, *Indian Sugar yearbook 1998-99 (Vol-1)* Indian Sugar Mills Association, New Delhi.
- Co-operative Sugar, *Directory and Year Book*, *NFCSF*, New Delhi, March 2006.
- Records from Directorate of Sugar (Performance Budgets), Chennai

| | |
|---|---|
| Survey of Indian Industry 2003 | Elangovan G, "Financial Management of South Indian Sugar Limited," M.Phil, Unpublished Thesis, Annamalai University-1987. |
| Survey of Indian Industry 2004 | |
| Survey of Indian Industry 2005 | C.Suresh Kumar, "A Study on the Efficacy of the Sugar Industry with Special Reference to Co-operative, Private and Government Sector in Tamil Nadu" Unpublished Ph.D. Thesis, Bharathidasan University. |
| Survey of Indian Industry 2006 | |
| Survey of Indian Industry 2007 | |
| Survey of Indian Agriculture 2002 | Websites |
| Survey of Indian Agriculture 2005 | www.google.com |
| Co-operative sugar Monthly, New Delhi | www.nse.com |
| Economic Survey Yearly, Govt. of India. | www.bse.com |
| Indian Sugar Monthly, New Delhi. | www.eurojournals.com |
| Reports of Indian Sugar Mills Association | |
| Indian Sugar Year Book, New Delhi. | |
| K.Desh, "Financial Performance of Co-operative Mills in Tamil Nadu," unpublished thesis, Annamalai University 2003 | |
| Ursula Irudhayamary, "Impact of sugar Industry on Rural Development – with Special reference to Thanjavur District," Unpublished Ph.D. Thesis, and Bharathidasan University | |

Managerial Competencies and the Mediating Role of Leadership Style for Improving Job Satisfaction

Sunil Misra

Ph.D
HoD - MBA
M.H. Gardi School of Management
Rajkot

Abstract

This paper makes an endeavor to examine the limit job satisfaction concomitance with certain managerial competencies. Managerial competencies like goal setting and team building are taken as independent variables, where as leadership style is mediating variable and job satisfaction as dependent measures. The data were collected from 307 executives of banking sector in West Bengal, India. The data were analyzed using Statistical Package for Social Sciences (SPSS) version 15.0. The analyses of the same were carried out using correlation and multiple regressions analysis techniques. The results revealed that these managerial competencies had significantly predicted job satisfaction indicating their positive association with satisfaction. It was also found that the appropriate leadership style had significantly mediated the relationship of managerial competencies and job satisfaction. The findings tried to establish that the management should adopt transformational style of leadership to facilitate better performance, where the managers can use these competencies to enhance performance and a higher level of job satisfaction.

Introduction

The concept of competence has a wide and non-specified meaning (Hall, 1980) and the term itself has an 'open' characteristic. According to Spencer and Spencer (1993) a competence is an underlying characteristic of an individual that is causally related to effective or superior performance in a job or situation as the case may be. It is also defined as the sum of experiences and knowledge, skills, values, and attitudes are acquired and required by us to perform effectively at the working place. It is the quality of these outputs and the reactions of individuals who receive them that lead to the results with consequences that may lead to positive, negative, or neutral for the organization and the people who work there. It can exist at different levels, such as organizational, team, and individual resulting in better performance at all these levels (Turner & Crawford, 1994).

There are many definitions of competency. It depends on how the concept is used. In fact, these definitions propose in a wide range of frameworks and in the literature of various fields. Since competence does not have an absolute meaning, authors include different things. It was earlier believed that clearly defined competencies would systematically insure effective job performance of managers. There are managers who might be labeled "competent" considered as "good". But what is required is the kind of ability that underlies excellent rather than adequate performance. It is this development of 'excellence' that a competency approach aims to indicate. Competence is like death. One cannot be slightly dead, reasonably dead or totally dead. One is either alive or dead. Similarly, competencies provide the common language and concepts, and draw attention to many of the critical business needs of the organization. Hence, there is a need for competence both for an individual and for an organization.

Keywords

Goal Setting, Team Building, Managerial Competencies, Job satisfaction

This study has examined the impact of certain managerial competencies on leadership style and job satisfaction. The managerial competencies include goal setting and team buildings which are considered to be more relevant and significant in today's business environment, as proper goal setting process may be very important for employees, as it helps them to identify their goals and working to achieve them. Similarly, team building is an important factor, as in today's working environment. Workings in teams are preferred over individual working and one has to have the competencies to work in a team effectively. Hence, an effective team can better achieve a goal by pooling, capitalizing and utilizing experience, expertise, and available resources. The details about these factors are given in the following paragraphs.

Goal Setting

Goal Setting involves setting specific, measurable, achievable, result oriented, and time targeted objectives. In an organizational context, it may be an effective tool for making progress by ensuring that employees are clearly aware of what is expected from them. At the individual level, goal setting allows people to specify their work to achieve the objectives. Thompson and Strickland (1999) defined goal setting as a way of creating performance targets while on the path to achieving the organization's vision.

Earlier studies clearly indicated that the setting up of specific, challenging, and obtainable goals tends to enhance performance (Latham & Baldes, 1975; Locke, Cartledge, & Knerr, 1970; Locke & Latham, 1984; 1990). The literature also acknowledges the validity and utility of goal-setting theory (Mento, Steel, & Karren, 1987; Tubbs, 1986). The goal-setting theory of Locke and Latham (1990) proposes that individuals should be encouraged to focus upon specific goals that are both challenging yet achievable. Locke, Shaw, Saari and Latham (1981) have reasoned that goals lead to higher performance because they direct attention, mobilize efforts and encourage persistence in a task. Numerous studies (Locke, 1968; Latham & Yukl, 1975; Matsui, Kakuyama & Onglatco, 1987; Tubbs, 1986, 1993) have developed concepts of effective goal setting and the positive impact and the effective goal setting has in enhancing employee performance. However, despite the quantum of research on goal setting, many questions still need to be addressed (Locke & Latham, 1990). Therefore, one central area of possible investigation can be the construct of leadership. In a study, Godwin, Neck, and Houghton (1999) found that Individuals with effective leadership achieve superior goal performance as leaders facilitate the goal setting.

Locke, Cartledge and Knerr (1970) noted that if goals are stated quantitatively, then it would be possible to measure the discrepancy between the level of performance intended and the level of performance attained. The closer the individual comes to achieving his desired performance goal on a task, the more satisfied the individual will be with his performance (Locke et al., 1970). The more successful employees have in

completing tasks that are highly valued by top management, the greater the degree of satisfaction experienced (Locke & Latham, 1990). Thus the goal setting increases job satisfaction.

Rodgers and Hunter (1993) found that goal setting predict improved job satisfaction done by the employees themselves. In another research, Arvey, Dewhirst, and Brown (1978) found that the goal setting behaviour were positively associated with intrinsic, extrinsic, and total job satisfaction. Further, Umstot, Mitchell, and Bell (1978) found that goal setting and job enrichment when combined together increases both performance and satisfaction.

Team Building

Team building has become a mainstream concept, and approaches to team building vary from organization to organization (Williams, 1999). Team consists of people who interact and work together toward a common goal/objective/mission (Salas, Dickinson, Converse, & Tannenbaum, 1992). The goal of the team is to pool the resources/skills to improve the productivity. As our jobs are becoming increasingly interdependent, it is no longer possible for an individual to work independently or in isolation. Rapidly changing business conditions demand constant interaction with others as the work of one person is integrated with that of many other people in the organization. As a result, traditional approaches for getting the job done are no longer viable. Therefore, the team approach to business recognizes this by maximizing the collective talent and energy of the people within an organization to accomplish the goals. It creates an exciting, people-oriented culture which encourages empowerment, natural ownership, and personal responsibility.

Today, teams are used for accomplishing job tasks in a variety of domains. One reason is that teams are able to tackle goals beyond the reach of individuals. Therefore, it is of great interest to investigate what factors are crucial to efficient teamwork/teambuilding and why certain teams are more successful than others. Yet, it is on the competency and effectiveness of teams that we depend. To be effective, the team as a whole needs to work collectively, as no one is expected to be equally competent in all the areas.

Swezey and Salas (1992) stated that the success of organizations depends on the ability of individuals to work together as a team. Team building is a way of encouraging individuals to participate together in activities. Team building strategies can help improve employees' satisfaction with, and commitment to, their organisations (Longnecker & Neubert, 2000). Team building efforts are made by the organization so that employee working in team is more productive and satisfied. Mosher (1982) noted that teamwork produces better decisions, better morale, greater self-actualization, greater efficiency and effectiveness, and better employee development.

Van Der Vegt, Emans, and Van De Vliert (2000), Batt and Applebaum (1995), Glisson and Durick (1988), found that several factors of team building were significantly

related to job satisfaction. Thus, it can be said that team working produces more job satisfaction. Scarpello and Campbell (1983) from their study concluded that the members of teams may be satisfied with the operations of their teams, but they may not be satisfied with their jobs - or vice versa. Whereas, Abbott, Boyd, and Miles (2006) indicated that consultative team members reported significantly greater levels of overall job satisfaction, satisfaction with team processes and activities, and team commitment, than did substantive team members.

Tornabeni (2001) stipulated that leaders should understand and respect others, while Reynolds, Bailey, Seden, and Dimmock (2003) valuing the unique contribution of all team members indicated that leaders should concentrate on team building processes and help to build effective teams, which will increase employee satisfaction and motivation. Many researchers argue that leadership is an influential factor for the improvement of team effectiveness (Kahai, Sosik & Avolio, 1997; Schminke & Wells, 1999; Parker, 1990). In a research review, Ozaralli (2003) found that transformational leadership had a high positive correlation with subordinates' perceived team effectiveness. Wang (2001) and Kuo (2004) found that transformational leadership had a positive and significant impact on team performance.

Leadership Style

Leadership has been widely researched and still remains an active area of inquiry (Goleman, Boyatzis & McKee, 2002; Kouzes & Posner, 2002, Yukl, 2002; Kotter, 1999; Bass, 1997; Bass, 1990; Bennis, 1989). "*Leadership is one of the most observed and least understood phenomena on earth*" (Burns, 1978, p. 2). Bryman (1986) defined leadership as a process of influence that guides members of the organization towards the shared goal of the business. Great organizations can only thrive on a framework of superior leadership (Robson, 1986).

Beginning with the leadership studies of Lewin and Lippitt in 1938, there have been numerous studies of leadership and numerous leadership theories developed, such as Trait Theory, Situational Theory, and Contingency Theory, Power and Influence Theory and Transactional and Transformational leadership Theory. The leadership theory propounded by Bass and Avolio (1994) which included transformational, transactional and laissez-faire leadership appears to be the most suited in understanding how leadership style interacts with other organization-related variables in predicting individual and organizational level outcomes. Bass and Avolio (1994) theory of transformational leadership indicate that transformational leaders help people to achieve better performance. The key distinction between transactional and transformational leadership is that transactional leadership tends to be focused on processes while transformational leadership focused on emotions and values and the effect the leader has on the followers (Podsakoff, MacKenzie & Bommer, 1996; Yukl, 1999).

Job Satisfaction

Job Satisfaction is defined as 'a pleasurable or positive emotional state resulting from the appraisal of one's job or job experience' (Locke, 1976). Job satisfaction is generally viewed as the attitude of the worker toward the job (Roberts, 2001; Tobias, 1999; Evans, 1999; Spector, 1997; Lawler, 1994; & McKee, 1991). Wanous and Lawler (1972) examined different facets of Job Satisfaction to understand this construct. Early leadership theories focused on the relationship between transactional leadership and job satisfaction. However, the recent concern is on the relationship between transformational leadership and job satisfaction (Medley & Laroche, 1995). Research indicates that a leader is a source of reward for workers, which has its impact on satisfaction (Lawler, 1994).

Kennedy (1989) stated that job satisfaction and leadership style are recognized as fundamental elements influencing the overall effectiveness of an organization. Seltzer and Bass (1990), revealed that leaders presenting idealized influence more frequently advanced employees' satisfaction while laissez-faire style more frequently reduced employees' satisfaction. Further, Yammarino and Bass (1990) revealed that leadership style is strongly related with individual subordinate's effort, satisfaction, and perceived leader effectiveness. Bass, Daniel and Tucker (1992); and Stone (1992) found that transformational leadership has positive impact on organizational effectiveness, job satisfaction, and performance. Emery and Barker (2007) found that the transformational factors of charisma, intellectual stimulation, and individual consideration are highly correlated with job satisfaction and organizational commitment than the transactional factors of contingent reward and management-by-exception.

In a changing business environment, organizations need to compete and grow to be effective. The human resource and its skill level play an important role, as knowledge and competencies of people provide a competitive edge to the organization. In this context, it calls for an integrated approach to examine whether these competencies are related with performance. Further some of the variable like leadership style may mediate the relationship of competency and performance. Thus, the major objective of this study was to examine the strength of association between certain managerial competencies, and satisfaction of executives. Similarly, the role of leadership style was also examined that how it mediate the relationship between these managerial competencies and job satisfaction. Accordingly the following hypotheses were developed:

H₁: Managerial competencies will significantly predict the job satisfaction.

H₂: Leadership style will significantly predict the job satisfaction.

H₃: Managerial competencies and Leadership style will be significantly related to job satisfaction.

H₄: Leadership style will significantly predict managerial competencies.

H₅: Leadership style will mediate the relationship between managerial competencies and job satisfaction.

Method

Sample:

The Data were collected from 307 participants from banking organizations in West Bengal, India. Out of 307 participants, 55 were belonged to top management level, 122 to middle management level, and 130 to junior level management. Regarding educational qualification of the participants 52 percent were graduates, 38 percent post graduates, and 19 percent had professional or higher qualification. The average age of the participants was 38.7 years. The average duration of the service of the participants with present employer was 9.4 years, whereas the average duration in the current position was 12.6 years.

Measures:

The items from standardized questionnaires were taken to make up the survey instrument for the present study. The questionnaire administered in the survey consisted of 86 items (excluding the demographic items) grouped under different scales measuring variables incorporated in the study. Brief explanation and instruction was provided above each scale for the respondent's knowledge and convenience. The items were selected from standardized scales and few were slightly changed according to the conceptualization of the variables and the requirement of the study. The demographic data were collected using 8 questions in the survey instrument. The demographic details of the respondents include age; gender; marital status; qualification; type of industry (public or private); level of management; length of service with the present employer and with the present career. A five point Likert scale was used for uniformity. A brief description of these measures is given below.

Goal Setting: It was measured using 20-item scale developed by Robert E. Quinn (2003). Some of the items included, "The overall mission is clear to all" and "We work on forecasting future opportunities and threats". The Cronbach's alpha of the scale is .83.

Team Building: It was measured using 18-item scale developed by Whetten and Cameron (1995). Some of the items included, "I have knowledge about the different stages of team development" and "I help team members to establish a foundation of trust with each other". The Cronbach's alpha of the scale is .81.

Leadership Style: It was measured using 37-item scale developed by Bass and Avolio (1995). Some of the items in this scale included, "Instills pride in being associated with him/her" and "Talks enthusiastically about what needs to be accomplished". The Cronbach's alpha of the scale was .95.

Job Satisfaction: It was measured using 11-item scale developed by Schnake (1983). Some of the items included, "The fringe benefits you receive" and "The amount of freedom you have in your entire job". The Cronbach's alpha of the scale is .81.

Procedure:

The data were collected from banking sector in West Bengal. The choice of this sector was dictated by the fact that they had large number of employees with diverse backgrounds at multiple levels in both developed and emerging markets. In addition, the literacy rate is higher compared to other sectors. Human resource managers and in some instances, chief executive officers (CEO's) were contacted for getting the permission for data collection. The responses were obtained by questionnaires administered to the employees based on their availability, who completed them during working hours. The questionnaires and general purposes of the research were explained to all the managers by the author, a company employee, and the head of the functional area. In this process, out of 600 questionnaires 360 (60 percent) were collected from the participants across hierarchy and departments. Out of these questionnaires 53 had to be rejected because of high number of missing data or showed high response bias leaving an overall sample size of 307. The questionnaires were completed in approximately thirty minutes by employees who were assured anonymity and confidentiality.

Results

For the purpose of analysis of data, the Statistical Package for Social Science (SPSS) version 15.0 was used. The statistics used for data analysis included descriptive statistics, linear and multiple regressions, and correlations. After collection of survey data, an exploratory factor analysis was conducted to establish the construct validity of the instruments used. The number of dimensions extracted among the variables was determined by the Eigen value greater than one rule. A principal component analysis with a varimax rotation was used to choose significant factor loadings. The exploratory factor analysis resulted into: six factors for Goal Setting (*Goal Commitment: eigenvalue 2.4, variance accounted for 12 percent; Goal Specificity: eigenvalue 2.1, variance accounted for 11 percent; Self Perceived Ability: eigenvalue 2.0, variance accounted for 10 percent; Goal Difficulty: eigenvalue 1.8, variance accounted for 9 percent; Self efficacy: eigenvalue 1.7, variance accounted for 8 percent; Goal Acceptance: eigenvalue 1.4, variance accounted for 7 percent*). Four factors for Team Building (*Goal Clarity: eigenvalue 2.7, variance accounted for 15 percent; Role Clarity: eigenvalue 2.6, variance accounted for 14 percent; Goal Accomplishment: eigenvalue 1.7, variance accounted for 10 percent; Team Motivation: eigenvalue 1.6, variance accounted for 9 percent*). Three factors for Job Satisfaction (*Coworkers: eigenvalue 2.3, variance accounted for 21 percent; Job Security: eigenvalue 2.3, variance accounted for 21 percent; Compensation: eigenvalue 1.9, variance accounted for 18 percent*). Whereas, for Leadership style based on the reliability analysis 8 items out of 37 items were deleted from this scale, as these items indicated very poor correlation (< 0.30) with the total. Later, the selected 29 items were factor analyzed which resulted into five factors (*Management of Attention: eigenvalue 5.4, variance*

accounted for 18 percent; Task oriented: eigenvalue 4.9, variance accounted for 17 percent; Management of Trust: eigenvalue 3.1, variance accounted for 11 percent; People Oriented: eigenvalue 2.6, variance accounted for 9 percent; Management of Risk: eigenvalue 2.3, variance accounted for 8 percent).

The hypothesis H_1 was that managerial competencies would significantly predict the job satisfaction. To test this hypothesis, simple regression analysis was done. The results were found to be significant ($F = 30.657$, $p < .01$). The adjusted R square value was .17 which indicates that 17% of variance in job satisfaction was explained by the managerial competencies. Thus, the hypothesis that managerial competencies would significantly predict job satisfaction was accepted (see Table 1).

— Table 1 about here —

The hypothesis H_2 was that leadership style would significantly predict the job satisfaction. To test this hypothesis, simple regression analysis was done to investigate how well the leadership style predicts the job satisfaction. The results were found to be significant ($F = 32.306$, $p < .01$). The adjusted R square value was .10 which indicates that 10% of variance in job satisfaction was explained by the leadership style. Thus, the hypothesis that leadership style would predict significantly job satisfaction was accepted (see Table 2).

— Table 2 about here —

The hypothesis H_3 was that managerial competencies and leadership style would be significantly related to job satisfaction. To test this hypothesis, a correlation analysis was done. The relationship of managerial competencies (i.e. goal setting and team building) and leadership style was found to be significant with job satisfaction ($r = .286$ & $.373$; $r = .253$, $p < .01$). With this, the proposed hypothesis that managerial competencies and leadership style would be significantly related to job satisfaction is accepted (see Table 3).

— Table 3 about here —

The hypothesis H_4 was that leadership style would significantly predict managerial competencies. To test this hypothesis simple regression analysis was done. The results were found to be significant ($F = 14.799$, $p < .01$). Here, the adjusted R square value was .09, which indicates that 9% of variance in managerial competencies was explained by the leadership style. Thus, the hypothesis that leadership style would predict significantly managerial competencies is accepted (see Table 4).

— Table 4 about here —

The hypothesis H_5 was that leadership style would mediate the relationship of managerial competencies and job satisfaction. To test this hypothesis, multiple regression analysis was carried out. Here the R square value was .21 which indicates that 21% of variance in job satisfaction was explained by the combination of managerial competencies and leadership style in the

organization. Thus, one can see that the variance in job satisfaction is better explained by the combination of managerial competencies and leadership style than the variance explained individually. Thus, the hypothesis that leadership style would mediate the relationship of managerial competencies with job satisfaction was accepted (see Table 5).

— Table 5 about here —

Discussion

The aim of this study was to investigate the influence of certain managerial competencies and leadership style on job satisfaction. It was also proposed to see the mediating effect of leadership style on the relationship of managerial competencies and job satisfaction. The study shows that managerial competencies have a positive and significant relationship with job satisfaction as expected and is consistent with the findings of Godwin, Neck, and Houghton (1999); Donald, Taylor, Johnson, Cooper, Cartwright, and Robertson (2005); Abbott, Boyd, and Miles (2006).

Regarding the positive impact of leadership style on job satisfaction, the present study is in line with the results obtained by Everett (1987), Bass (1990), Stone (1992), Lawler (1994), Medley and Larochelle (1995), Emery and Barker (2007). Also leadership styles significantly predict managerial competencies are justified based on the previous researches by Locke & Latham (1984), Godwin, Neck, and Houghton (1999), Wang (2001), Ozaralli (2003), and Kuo (2004). The study also showed that leadership style mediated the relationship of managerial competencies with job satisfaction as expected.

Most of the studies cited in this paper had been conducted with the Western organizations. The present study proves validation of these theories in Indian organizational settings. There are certain limitations of this study. The first limitation that could potentially affect the results of the study is the population that was sampled. The population consisted of employees from different organizations, making claims of homogeneity of employees. Another limitation is that the data were self-reported. The participants may have completed the survey to the best of their ability and knowledge, but the responses may not have been completely accurate, and biased.

Research in banking organization is further needed, as the use of competencies is constantly increasing in today's fast changing environment in every aspect. The future research can explore the effect of these competencies on organizational effectiveness and technologies with respect to job satisfaction. Also the relationship of other managerial competencies with that of organizational structure could be an interesting area of study.

Finally, it can be concluded that there is a significant and positive correlation among certain managerial competencies, leadership style, and job satisfaction in various banking organizations across West Bengal, India. Also, the use of competencies is contributing a lot to the smooth functioning and overall effectiveness of

organizations. Transformational leadership style has played an important role in the functioning of managerial competencies. The findings also showed that managers were moderately satisfied with their jobs and areas of

dissatisfaction are signals for change. It was also believed that managers need a more in-depth understanding of the variables studied.

TABLE 1
SIMPLE REGRESSION FOR MANAGERIAL COMPETENCIES PREDICTING JOB SATISFACTION

| | | | | |
|------------------------|-------------------------|----------------|----------|---------|
| Independent Variable → | Managerial Competencies | | R Square | F |
| Dependent Variable ↓ | Goal Setting | Team Building | | |
| | Beta | | | |
| Job Satisfaction | 0.179 (3.223*) | 0.312 (5.607*) | 0.168 | 30.657* |

*p < .01, Beta = Standardized beta coefficient; Note: t – value is given in parenthesis

TABLE 2
SIMPLE REGRESSION FOR LEADERSHIP STYLE PREDICTING JOB SATISFACTION

| | | | | | |
|------------------------|------------------|-------|----------------|----------|---------|
| Independent Variable → | Leadership Style | | | R Square | F |
| Dependent Variable ↓ | β | SEB | Beta | | |
| Job Satisfaction | 0.905 | 0.159 | 0.309 (5.684*) | 0.096 | 32.306* |

*p < .01, β = Unstandardized beta coefficient, SEB = Standardized error of beta

Beta = Standardized beta coefficient, Note: t – value is given in parenthesis

TABLE 3
CORRELATION STATISTICS

| Variable | Goal Setting | Team Building | Leadership Style |
|------------------|--------------|---------------|------------------|
| Goal Setting | 1 | | |
| Team Building | 0.342* | 1 | |
| Leadership Style | 0.211* | 0.261* | 1 |
| Job Satisfaction | 0.286* | 0.373* | 0.253* |

* Correlation is significant at the 0.01 level.

TABLE 4
SIMPLE REGRESSION FOR LEADERSHIP STYLE PREDICTING MANAGERIAL COMPETENCIES

| | | | | |
|------------------------|-------------------------|----------------|----------|---------|
| Independent Variable → | Managerial Competencies | | R Square | F |
| Dependent Variable ↓ | Goal Setting | Team Building | | |
| | Beta | | | |
| Leadership Style | 0.119 (2.041*) | 0.236 (4.043*) | 0.089 | 14.799* |

*p < .01, Beta = Standardized beta coefficient; Note: t – value is given in parenthesis

TABLE 5

MULTIPLE REGRESSIONS FOR INDEPENDENT VARIABLES PREDICTING JOB SATISFACTION

| Independent Variable → | Managerial Competencies | | Leadership Style | | | R Squared | F |
|------------------------|-------------------------|------------------|------------------|------|------------------|-----------|---------|
| | Goal Setting | Team Building | β | SEB | Beta | | |
| Dependent Variable ↓ | Beta | | | | | | |
| Job Satisfaction | .155 (2.826*) | .264 (4.717*) | .070 | .018 | .206 (3.839*) | .206 | 26.274* |

*p < .01, β = Unstandardized beta coefficient, SEB = Standardized error of beta
Beta = Standardized beta coefficient. Note: t- value of Beta is given in parenthesis

References

Abbott, John B., Boyd, Nancy G., & Miles G. (2006). Does Type of Team Matter? An Investigation of the Relationships between Job Characteristics and Outcomes within a Team-Based Environment. *The Journal of Social Psychology*, 146 (4), 485–507.

Arvey, R.D., Dewhirst, H.D., and Brown, E.M. (1978). A longitudinal study of the impact of Changes in goal setting on employee Satisfaction. *Personnel Psychology*, 31.

Bass, B. M. & Avolio, B. J. (Eds.) (1994). *Improving organizational effectiveness through transformational leadership*. Thousand Oaks, CA: Sage Publications.

Bass, B. M. (1990). *Bass and Stogdill's handbook of leadership: Theory, research and managerial applications*. (3rd Ed.) New York: Free Press.

Bass, B. M. (1997). *Transformational leadership*. Mahwah, NJ: Lawrence Erlbaum Associates, Inc.

Bass, B., & Avolio, B. (1995). *MLQ: Multifactor Leadership Questionnaire*. Redwood City, CA: Mind Garden.

Batt, R. & Applebaum, E. (1995). Worker participation in diverse settings: Does the form affect the outcome, and if so, who benefits? *British Journal of Industrial Relations*, 33, 353–378.

Bennis, W. G. (1989). *Why leaders can't lead: The unconscious conspiracy continues*. San Francisco, CA: Jossey-Bass.

Campion, M. A., Medsker, G. J., and Higgs, A. C. (1993). Relations between work group characteristics and effectiveness: Implications for designing effective work groups. *Personnel Psychology*, 46, 823–850.

Cohen, S. G., and Ledford, G. E., Jr. (1994). The effectiveness of self-managed teams: A quasi-experiment. *Human Relations*, 47, 13-43.

Donald, I., Taylor, P., Johnson, S., Cooper, G., Cartwright, S. & Robertson, S. (2005). Work environments, stress, and productivity: an examination using ASSET. *International Journal of Stress Management*, 12, 409–423.

Dweck, C.S., Hong, Y. and Chiu, C. (1993). Implicit theories: individual differences in the likelihood and meaning of dispositional inference. *Personality and Social Psychology Bulletin*, 19 (5), 644-656.

Emery, Charles R., & Barker, Katherine J. (2007). The Effect of Transactional and Transformational Leadership Styles on the organizational commitment and job satisfaction of customer contact personnel. *Journal of Organizational Culture, Communication and Conflict*, 11 (1), 77.

Evans, L. (1999). *Teacher morale, job satisfaction and motivation*. London, Paul Chapman Publishing.

Glisson, C. & Durick, M. (1988). Predictors of job satisfaction and commitment in human service organizations. *Administrative Science Quarterly*, 33, 61–81.

Godwin, L., Neck, P., and Houghton, D. (1999). The impact of thought self-leadership on individual goal performance: A cognitive perspective. *The Journal of Management Development*, 18 (2), 153-169.

Goleman, D., Boyatzis, R., & McKee, A. (2002). *Primal leadership*. Boston: Harvard Business School Press.

Kotter, J. P. (1999). *What leaders really do*. Cambridge, MA: Harvard Business Review Books.

Kouzes, James M., & Posner, Barry Z. (2002). *The Leadership Challenge (3rd Ed.)*. New York: Wiley.

Kuo, Chia-Chen (2004). Research on Impacts of Team Leadership on Team Effectiveness. *Journal of American Academy of Business*, 5 (1), 266.

Latham, G., and Baldes, J. (1975). The Practical Significance of Locke's Theory of Goal Setting. *Journal of Applied Psychology*, 60, 122-124.

Latham, G.P. and Yukl, G.A. (1975). A review of research on the application of goal setting in organizations. *Academy of Management Journal*, 60 (4), 187-91.

Lawler, E. E. (1994). *Motivations in work organizations*. San Francisco, CA: Josey- Bass.

Lewin, K. and R. Lippitt. (1938). An experimental approach to the study of autocracy and democracy: A preliminary note. *Sociometry*, 1, 292-300.

Locke, E. A. (1976). *The nature and causes of job satisfaction*. In M. D. Dunnette (Ed.) *Handbook of industrial and organizational psychology*. Chicago, IL: Rand McNally College Publishing.

Locke, E.A. (1968). Toward a theory of task motivation and incentives. *Organizational Behavior and Human Performance*, 157-89.

- Locke, E.A. and Latham, G.P. (1990). *A Theory of Goal Setting and Task Performance*. Prentice-Hall, Englewood Cliffs, NJ.
- Locke, E.A., & Latham, G.P. (1984). *Goal setting: A motivational technique that works*. Englewood Cliffs, NJ: Prentice Hall.
- Locke, E.A., Cartledge, N., & Knerr, C. S. (1970). Studies of the relationship between satisfaction, goal setting, and performance. *Organizational Behavior and Human Performance*, 5, 135-158.
- Locke, E.A., Shaw, K.N., Saari, L.M. & Latham, G.P. (1981). Goal setting and task performance: 1969-1980. *Psychological Bulletin*, 90, 125-152.
- Longnecker, C.O. & Neubert, M. (2000). Barriers and gateways to management cooperation and teamwork. *Business Horizons*, 42 (5), 37.
- Matsui, T., Kakuyama, T. and Onglatco, M.L. (1987). Effects of goals and feedback on performance in groups. *Journal of Applied Psychology*, 72 (3), 407-15.
- McKee, J. G. (1991). Leadership styles of community college presidents and faculty job satisfaction. *Community/Junior College Quarterly of Research and Practice*, 15 (1), 33-46.
- Medley, F., & Larochele, D.R. (1995). Transformational leadership and job satisfaction. *Nursing Management*, 26 (9), 64-68.
- Mento, A.J., Steel, R.P. and Karren, R.J. (1987). 'A meta-analytic study of the effects of goal setting on task performance: 1966-1984. *Organizational Behavior and Human Decision Processes*, 39, 152-83.
- Muchinsky, P.M. (1990). *Psychology applied to work: An introduction to industrial and organizational psychology*. Pacific Grove, CA: Brooks/ Cole Publishing Co.
- Ozaralli, N. (2003). Effects of transformational leadership on empowerment and team effectiveness. *Leadership & Organization Development Journal*, 24 (5), 335.
- Podsakoff, P.M., S.B. MacKenzie, and W.H. Bommer (1996). Transformational leader behaviors and substitutes for leadership as determinants of employee satisfaction, commitment, trust, and organizational citizenship behaviors. *Journal of Management*, 22, 259-298.
- Quinn, Robert E. (2003). *Becoming a Master Manager – A Competency Framework*. NY: Wiley and Sons.
- Reynolds, J., Bailey, S., Seden, J. & Dimmock, B. (2003). Understanding people. *Nursing Management*. 10,7,32-35.
- Roberts, W. (2001). *It takes more than a carrot and a stick*. New York: Andres McMeel.
- Rodgers, R. and Hunter, John E. (1993). A component process theorem of job Satisfaction. *The International Journal of Human Resource Management*, 4 (2).
- Scarpello, V. & Campbell, J. P. (1983). Job satisfaction: Are all the parts there? *Personnel Psychology*, 36, 577-600.
- Schnake, M.E. (1983). An empirical assessment of the effects of affective response in the measurement of organizational climate. *Personnel Psychology*, 36, 791-807.
- Spector, P. E. (1997). *Job satisfaction: application, assessment, cause and consequences*. Thousand Oaks, CA: Sage Publishers.
- Spencer, L.M. and Spencer, S.M. (1993). *Competence at work – Models for Superior Performance*. John Wiley & Sons, New York.
- Stone, P. (1992). Transformational leadership in principals: An analysis of multifactor leadership questionnaire results. *Professional leadership development monograph series*, 2.
- Sutton, R.L., & Ford, R.H. (1982). Problem solving adequacy in hospital subunits. *Human Relations*, 35, 675-701.
- Tobias, C.U. (1999). *The way we work*. Nashville, TN: Broadman & Holman.
- Tornabeni, J. (2001). The competency game: my take on what it really takes to lead. *Nursing Administration Quarterly*. 25, 4,1-13
- Tubbs, M. E. (1986). Goal setting: a meta-analytic examination of the empirical evidence. *Journal of Applied Psychology*, 71 (3), 474-83.
- Tubbs, M.E. (1993). Commitment as a moderator of the goal-performance relation: a case for clearer construct definition. *Journal of Applied Psychology*, 78 (1), 86-97.
- Turner, D. & Crawford, M. (1994). "Managing Current and Future Competitive Performance: The Role of Competence" *Competence based Competition* (1994) edited by Hamel, G. and Heene, A., John Wiley & Sons, Chichester.
- Van Der Vegt, G., Emans, B. & Van De Vliert, E. (2000). Team members' affective responses to patterns of intragroup interdependence and job complexity. *Journal of Management*, 26, 633-655.
- Wang, G. S. (2001). *Team leadership and team effectiveness: The inter mediator effect of intra team*. Taiwan University, Graduate School of Psychology Master Thesis.
- Wanous, J.P., & Lawler, E.D. (1972). Measurement and meaning of job satisfaction. *Journal of Applied Psychology*, 56 (2), 95-105.
- Whetten, D.A. & Cameron, K.S. (1995). *Developing Management Skills (3rd Ed.)*. New York: HarperCollins, 534-35.
- Yammarino, F.J., & Bass, B.M. (1990). Transformational leadership and multiple levels of analysis. *Human Relations*, 43 (10), 975-95.
- Yukl, G.A. (1999). An evaluation of conceptual weaknesses in transformational and charismatic leadership theories. *Leadership Quarterly*, 10, 285-305.
- Yukl, G.A. (2002). *Leadership in organizations*. Upper Saddle River, NJ: Prentice Hall.

Privacy in Electronic-Marketing: A Theoretical Framework

Mr. Satinder Kumar

Asst. Professor
School of Management Studies
Punjab University
Patiala

Dr. Rishi Raj Sharma

Professor
Guru Nanak Dev University
Amritsar

Abstract

The Electronic-marketing has offered lot of options for companies to market themselves and their products effectively and inexpensively, but there is need to exercise considerable care to ensure that their functions/activities or their. Consumer concerns about unethical practices on Internet are directly having a direct effect on the take up of Electronic-marketing. While many people are willing to do exchange but a lack of trust prevent them from purchasing via Internet. Consumers still prefer traditional channels when making purchases because of Privacy issue in E-marketing. Review of literature reveal that privacy has become important concern for all online businesses, more over consumers are more aware about their personal information which has been collected by companies without their consent.

Introduction

Our country quickly is moving toward new world wireless world. In last few years Internet has played an important role in many fields of Indian economy. The Internet has changed the design and implementation part of marketing strategies. This dynamic technology has provided marketers with efficient and powerful methods of designing, promoting, and distributing products, conducting research, and gathering market information. As we enter the twenty first century, the Internet has become the hottest marketing medium ever known.

Electronic-Marketing is the lifeblood of modern business. Electronic-Marketing may be defined as the process of building and maintaining customer relationship through Internet activities and to satisfy the goals of both buyers as well as sellers. As far as traditional marketing is concerned ***“Marketing is human activity directed at satisfying needs and wants through exchange process”*** (Kotler and Turner, 1981). The foundation of the marketing remains the same creating a strategy to deliver the right message to the right people. What has changed is the number of means. Electronic-Marketing means using digital technologies to sell goods and services to targeted customers. These technologies, like e-mail and websites, are a valuable complement to traditional marketing methods. Electronic marketing means the application of marketing principles and techniques by electronic media and more specifically the Internet. The terms Electronic-Marketing, Internet Marketing and Online Marketing, are frequently interchanged, and can often be considered synonymous.

The evolution of the Electronic-Marketing has created a number of ethical issues, especially in the area of privacy. Some people fear that collecting such personal information from web sites users may violate their privacy, especially if it is done without their knowledge.

Keywords

Privacy, Opt-in and Opt-out, Marketing, Personal Information

Privacy refers to the ability of the individual to protect information about him/her self. There are two types of threats to one's privacy in Cyberspace: 1 your passive or active activities on the Internet could be monitored by unauthorized parties; and 2 logged and preserved for future access and subsequently disclosed many years later without your permission. Many researches suggested that one of the primary concerns relating to privacy is the lack of the control consumers have over their personal information (Nowak and Phelps, 1995).

Customer privacy issues generally revolve around security and privacy of sensitive customer information related to online sales and services transactions, the collection and use of customer data and statistics, as well as the protection of a customer's right to privacy. It is also important to note that there is a distinction between private and personal information. Personal information is information containing personal attributes of a person, such as a phone number or an address that might not always be private information, although this would depend upon the person and the application. The essence is that not all personal information is necessarily private information, but by treating it as such, involuntary privacy violations could be avoided. This is especially important, as all personal information could be considered private under some circumstances.

Goodwin (1991) defines **consumer privacy** as "the consumer's ability to control (i) presence of other people in the environment during a market transaction or consumption behavior and (ii) dissemination of information related to or provided during such transactions or behavior to those who were not present." This definition leads to a classification of privacy states based on high or low control over the environment (presence of others) and over disclosure. Privacy can be divided into two parts: Individual privacy and Corporate privacy, while the individually sensitive and corporate sensitive information link and overlap, the privacy-preserving problem in each case is different. The corporate privacy issue is usually about business secrets and thus about sharing the data with other agents. In individual privacy perspective the privacy issue is not an issue if users have given authorization to use the data for the data-mining task.

Consumers are more concerned about the privacy and security of their personal information in Cyberspace and are looking for greater protections. According to a recent survey, a concern about the privacy of their personal information and communications is the top reason many consumers have stayed off the Internet (Business Week, 1998).

Consumers still prefer traditional channels when making purchases. Only approximately 1% of the total revenues on the retail sector come from e-commerce transactions (OECD 2002). Concerns with improper collection and usage of personal information by businesses or governments have been seen as critical to the success of the emerging electronic commerce. In a survey, the Federal Trade Commission (FTC) found that 99% of

online companies collect personal information from the individuals visiting their web sites (Seligman and Taylor, 2000).

The FTC has also identified core principles to guide online content providers' development of privacy policy and provide specific instructions as to how online businesses should act to increase online commerce. Fair information practices define the privacy rules for a self-regulatory regime. They are global principles that balance the privacy interests of individuals with the legitimate need of business to derive value from customer information. At the heart of fair information practices are the following five aspects that can be used to describe a web site's position concerning privacy: **Notice** that is an indicator to the consumer about what information is collected, how it will be used, whether it will be disclosed to third parties and whether cookies are used or not. **Choice** is the consumer given the choice to agree with aspects of information gathering? **Access** does the consumer have access to the information gathered? Is the consumer given the possibility to review and correct the information? **Security** concerns the protection of information transfer and subsequent storage. **Contacts** are consumers given a contact person or address for asking questions or registering complaints regarding privacy?

Privacy is a multi-faceted concept encompassing a number of specific issues. The term 'privacy' is widely used to refer to a group of related rights that are accepted nationally and internationally. In Australia, privacy is defined as "people's right to the privacy of their own body, private space, privacy of communications and information privacy" (Collier, 1995). From this definition, one can see that the key aspects of privacy relate to the privacy of the person, the privacy of personal behavior, the personal right to communicate freely and the right of a person to control information about him/herself. The rise of the Internet, which permits companies to obtain information about customers more easily than before, has brought much attention to the issue of information privacy. The information revolution, moreover, opens up important public policy issues, as companies are increasingly building comprehensive consumer databases and applying sophisticated data-mining techniques to target consumers. The issue of consumer information privacy has attracted a lot of attention from different groups world-wide: academic researchers have mainly focused on exploring privacy concerns; market researchers have focused on quantifying the share of consumer concern about information privacy violations and tracking changes over time; and public policy-makers have reacted with laws and regulations to protect consumers.

As use of the Internet has increased, many issues of privacy have risen. User wonder: will my privacy be protected if I provide information to this Internet vendor? Will my credit card remain secure? McAfee.com has earned a Trust by disclosing the following:

- ♦ What information the Co. collects or tracks.
- ♦ How Co. uses the information?

- ♦ With whom the Co. share the information.
- ♦ The Co.'s opt-out policy
- ♦ The Co.'s policy on correcting and updating personally identifiable information
- ♦ The Co.'s policy on deleting or deactivating customers name from database.

Literature Review

In the light of grown consumer marketplace at an exponential rate and as well as Technology at the same rate has increased many times the capacity of online companies to collect, store, transfer and analyze vast amount of data from and about the consumer who visit their Web sites for shopping. Just as the Electronic-Marketing created many exciting new opportunities, it also introduced many new questions that warrant careful study. Increasing Internet usage also raises questions about how best to protect consumer privacy and prevent digital piracy. Several studies have been conducted in the past couple of years to gauge the concern consumers might have relating to their privacy rights in the age of internet. Some of the important studies mentioned below will highlight the significance attached to the privacy relating to Electronic-Marketing: Ellen R. et al (1993) found that profession faced ethical conflicts because application of these technologies commonly invades consumer privacy. Mackline Ben (1999) examined the top 200 most accessed websites in Australia. The study highlighted that over 90% of the web sites were not adequately informing the consumers of what personal information they are collecting, how it is to be used and what safe guards are in place to secure it. Basho Kalinda (2000) claimed that increase in use of individuals' personal information raise a new threat to privacy in the electronic marketplace. Information used to create customized advertising campaigns, make decision about which customers to market product to and predict consumers' future purchase. Current solutions to online privacy fail to give consumers control over how their information is used or compensation for the data they share. Douglas, et al (2001) conducted an empirical study to explore key aspects of consumer response towards shopping on the Internet. The major findings of study were: - convenience was not a major inducement in local Internet shopping, probably because of geographical proximity. For instance "Pricing" was the major motivation behind online shopping. Product variety and product brand name were also important factors. Trust was a major concern for Internet shoppers. Fareena, et al (2002) investigated the determinants and role of consumer trust in e-business. The study has empirically demonstrated that web site characteristics indeed significantly affect perceptions of trust in a web site. The study also found that consumer characteristics such as past experience with the Internet and with a particular web site, do significantly affect trust perceptions. The significant finding of the study that trusts is mediating variable between web site, consumer characteristics and consumer behaviour intent. Harris

Lisa, et al (2002) explored the ethics of business-to-business electronic commerce, with a focus on the banking sector. Important areas identified for further research-included freedom of choice, trust and transparency of business-to-business transactions and limits to responsibility with regard to the facilitation of fraud. Rich (2002) critically examined that we losing trust through technology. The field of marketing has had a history of Individuals and organizations attempting short term gain through less than ethical mean. Kossecki Pawel, et al (2003) opined building customers' trust is essential for internet supplier in acquiring consumers' loyalty, increasing their satisfaction, encouraging customers to move their spending from traditional to e-market. Beltramini, Richard (2003) provided a brief overview of the application of the FTC's lesser-known unfairness doctrine as a potential framework for better understanding emerging privacy and e-commerce issues, and specific examples were provided for illustration. Richards Sarah (2005) studied on Internet shopping by carrying out a world wide Survey of 1001 adults. The Survey aimed to identify why people do or don't shop online, what they buy and how much they spend, if they have encounter any problems and what proportion of their shopping they intend to do online in the future. This study showed some interesting trend. Over six in ten people with internet access had shopped online over the previous 12 months. Convenience was a large motivating factor for people to shop online than prices. Most people shop once every two to three months, with men being slightly more likely to do so than women. (CDs, tapes and records were the most popular items to be purchased online, followed by DVDs, videos, computer games, books and travel tickets. Fears over the security of websites was the main reason why some people with Internet access choose not to shop online. Over a third of people who have internet access chosen not to shop online because of the fear over payment security. .Katyal K. (2005) opined that our need to expand intellectual property protection must be reconciled with the existing protections for informational privacy and personal expression. Changi Nam et al (2006) studied and proposed a model incorporating antecedents, privacy concern, and intent to disclose personal information. To test the proposed model, an online survey was conducted. Ann E. Schlosser et al (2006) investigated the impact of Web site design investments on consumers' trusting beliefs and online purchase intentions. Such investments signal the component of trusting beliefs that was most strongly related to online purchase intentions: ability. **Petrovic Dejan** (2007) explored the most relevant behavioural characteristics of online consumers and examined the ways they find, compare and evaluate product information. Jonna Jarvelainen (2007) opined Security and privacy issues had drawn much attention in the electronic commerce research area, and e-vendors had adjusted their online shopping systems to convince customers that vendors and systems were trust worthy.

A vast majority of web sites collect customer data without asking. Some of the sites offer a mechanism to let their customers “opt out” of the collection process. The time is now ripe for companies to take a more proactive approach, whereby the opt in policies must become a standard procedure. Such policies facilitate collection of data only from those customers who give the site manager permission to do so in advance. A growing number of companies are taking initiative to provide a certification program for data collection on the web (Nycum, 2000).

OPT-IN and OPT-OUT Privacy Policy :

Concern about the privacy of Internet usage seems to be a major factor determining the penetration of usage of the Net, particularly for e-commerce (Hoffman et al. 1999). One issue at the center of the controversy surrounding privacy on the Internet and the role of possible government regulation is what action is required of consumers to express their preferences. For example, according to the European Union Data Directive (European Union 1995), a consumer must opt-in to any program that collects personal information such as demographics or purchase and click stream histories. By **opting-in**, they must give their explicit consent to a set of rules that govern the way that information can be used, traded or sold. In contrast, policy in the United States takes no formal stand on consumers’ needed consent and the most common practice among Internet sites appears to be an opt-out policy, requiring the consumer to make an explicit request not to be included in a program that collects personal information. The U.S. Congress has been considering legislation, which will require an **opt-out** policy, although an opt-in alternative has also been proposed. While this distinction is very salient when talking about Web privacy, it is also quite relevant in related domains, particularly what has become to be known as permission marketing (Godin and Peppers 1999). In this paper we examine whether asking consumers to opt-in or to opt-out makes a difference. Does opting-in produce different levels of participation than opting out? In addition, we explore the mechanisms underlying possible differences. This issue has important implications for public and business policy. Different forms of action assume different types of knowledge on the part of market participants. On one hand market based solutions suggest that consumers have well articulated ideas of the value of their personally identifying information. In these circumstances, customers can make informed decisions about the use of privately identifying information. For example they might avoid web sites that collect such information, demand compensation for its provision, adopt technological solutions, or willingly provide it in return for the benefit it provides in terms of customization. However, if customers have less well-articulated values about the importance of privacy and related issues, then other forms of consumer protection might be advocated

The Internet has triggered revolutionary changes in our lives. People consider it to be a reliable source of information on products and services (Gervey and Lin,

2000). However, the use of the Internet for consumer purchasing has not been growing as fast as its other uses as an information source. One explanation for this disparity in growth rates may be consumers’ reluctance to provide personal information on the Internet. For example, Ernst and Young’s survey (1999) indicated that the most important reason why consumers do not make purchases on the Internet is their concern about sending out credit card information. A survey showed that only 24.9% of consumers felt comfortable using their credit card for purchasing on the Internet (Graeff and Harmon 2002). Media scrutiny of Internet fraud, hacking, and identity theft has heightened people’s awareness of the risks of conducting transactions on the Internet.

In late 1990’s e-commerce was expected to expand rapidly and become a normal part of consumer’s everyday life. Nowadays some Internet-related services such as electronic newspapers and information search are widely used by consumers, but there are only few commercially successful fields of e-commerce. One of the reasons for the failure of expectations is mentioned to be consumer trust, or more likely the lack of trust (Merrilees & Frye 2003).

Volunteering Personal Information on the Internet:

Accurate consumer personal information is one of the most strategic assets of a firm. Without accurate consumer personal information, firms cannot effectively perform direct marketing, customer-relationship management, and strategic production of goods and services (Henderson and Snyder, 1999; Long et al., 1999;). The importance of consumer personal information is salient as the Internet serves as a distribution channel. According to Hoffman et al. (1999), the willingness of consumers in providing personal information is one of the most important determinants of the commercial development of the Web. However, most consumers concern about their privacy information and are reluctant to provide personal information online. According to Hoffman et al. (1999), almost 95% of Web users have declined to provide personal information to Web sites at one time or another when asked, and 40% who have provided demographic data have gone to the trouble of fabricating it. A 2001 Harris Interactive survey found that about 83% of online users have refused to give information to a business or company and even over 44% online users have avoided specific Web sites because of dubious privacy practices (Harris interactive, 2001). According to Jupiter Media Matrix’s Consumer Survey in 2002, 70% of U.S. consumers are concerned about their privacy online (Jupiter Media Matrix’s Consumer Survey, 2002). The reluctance to provide information online could be attributed to some Internet characteristics. For example, the information provided online could be combined with some information (e.g., cookies or page views behavior of individuals) that are surreptitiously collected over the Internet to profile the behaviors of individuals (Dommeyer and Gross, 2003).

In addition, the collection of personal information could be performed without the consumers' awareness or permission (Milne and Culnan, 2004). Due to these characteristics, consumers would be more concerned about their privacy protection in an online environment. Thus an in-depth understanding of the strategies promoting information disclosure is of paramount importance to managers as well as researchers. In the existing literature, many researchers proposed that the "risk-benefit" tradeoff was essential to the information disclosure decision of consumers: Individuals should assess the outcomes they receive as the risk of providing personal information to firms (Culnan and Bies, 2003). Based on such an assessment, a positive net outcome should mean people are more likely to accept the loss of privacy that accompanies any disclosure of personal information as long as an acceptable level of risk accompanies the benefits. Implied by this "risk-benefit" perspective of information provision is that firms or websites could enhance the willingness of consumers to disclose personal information in two ways (Culnan and Bies, 2003): (1) offering attractive benefits to consumers or (2) decreasing the perceived risk of consumers in information disclosure. Thus, two types of instruments promoting information disclosure were discussed in the existing literature. From the benefit side, some researchers have suggested that firms should offer direct and immediate rewards in the form of discount coupons and bonus points to encourage consumers to register and provide personal information (Hann et al., 2003). On the other hand, several researchers and privacy advocates have proposed that firms could adopt initiatives, which decrease the perceived risk of consumers in information disclosure. Based on this risk perspective, instruments such as privacy notices, privacy seals from third parties, and the Platform for Privacy Protection (P3P) are emphasized in promoting personal information disclosure (e.g., Milne and Culnan, 2004; Das et al., 2003; Culnan and Armstrong, 1999). Consumers are becoming increasingly aware that their electronic purchases and other activities are being monitored, cataloged, and sold.

Customers' Concern for Information Disclosure:

In addition to the customer information that is voluntarily provided by the customers themselves, businesses can also collect information on customer online behaviour using cookies and click-stream analysis, which do not require the conscious participation of the consumer (Rust, Kannan, and Peng 2002). The dwindling cost of technology has rendered data collection, storage, and retrieval cheaper than ever before. This has led to efficient and cost-effective data mining techniques and data warehousing technology, allowing marketers to analyze and target their customers better (Markoff 1999, Richards 1997). The network environment within which customer information is collected and coded makes it easy to distribute or sell the collected information efficiently, thus combining pieces of seemingly disparate customer information to develop full, integrated profiles of customers and their behavior (Rombel 2001). Thus the consumer may not be entirely paranoid if he begins to

view online marketing efforts with reserve, especially since marketing practices on the internet give customers little control over their information (Franzak, Pitta, and Fritsche, 2001). Consumers today expect to provide retailers with a certain modicum of personal purchase information in order to facilitate transactions. They have also proven receptive to sharing personal information under certain situations and with businesses and other organizations they trust and few consumers view all requests for and uses of personal information as invasions of privacy (Dommeyer and Gross, 2003). Furthermore, most consumers are willing to give up some privacy simply to participate in a consumer society (Milne, 2000; Phelps, Nowak, & Ferrell, 2000). However, consumers are also likely to believe that retailers have profited at their expense if information about personal purchase patterns is sold to other marketers (Graeff and Harmon, 2002). It is imperative to recognize there are two sides to this marketing exchange, and there are sets of rights and duties on both sides; as well as a need to consider the ethical issues of human dignity and value, autonomy, territoriality, anonymity, security, and protection (Mascarenhas, Kesavan, and Bernachhi, 2003).

Scarce Commodity in Electronic Marketing

Information privacy is a scarce commodity in cyberspace. The technical infrastructure of cyberspace makes it remarkably simple and inexpensive to collect substantial amounts of information identifiable to particular individuals. Once these data have been collected, information technologies make it very easy and cheap to process the data in any number of ways (for example, to make profiles of particular users' interests).

Personal Identifying Information E-mail address, Name, Postal address, Telephone number, Credit card number, Fax number, Social security number, **Demographic Information** Age/date of birth, Zip code/city/state, Sex, Preferences/interests 76 21.1% Occupation, Other demographic, Income, Education, Family information. There is no doubt that developments in computer technology have led to an increase in the availability of online data for use by marketers. Many of this personal information are available for purchase directly from vendors who develop, manage and market the data. One form of data that marketers have used for many years is the mailing list which consists of name, address, telephone numbers, and other pieces of information that are useful in producing targeted marketing campaigns. In the past, mailing list databases consisted of information on individuals or companies and were available primarily in output format such as computer papers, index cards and magnetic data tapes that required a mainframe computer to process. However, in recent years, these mailing lists have become more high tech and are now available as marketing databases on the internet (Krassen, 1998). Marketers can use these databases for a variety of purposes, specifically to:

- ◆ Identify prospects

- ♦ Determine which prospects or customers should receive a particular offer
- ♦ Deepen customer loyalty
- ♦ Reactive customer purchase by automatically sending out promotional offers (Kotler, 2000)

Privacy has consistently been identified as a chief concern of Internet users throughout the past decade. According to Flaherty (1989), individuals can assert privacy interests in information about themselves in the right to: Individual autonomy, Be left alone, A private life, Control information about oneself, Limit accessibility, Exclusive control of access to private realms, Minimize intrusiveness, Expect of confidentiality, Enjoy solitude, Enjoy intimacy, Enjoy anonymity, Enjoy reserve and Secrecy.

Customer Awareness of Privacy Protection:

It is quite widely believed that consumer awareness of privacy protections is lacking. Consumers likely harbor misconceptions about business practices affecting consumer privacy (Dommeyer et al, 2003). It has been suggested that consumers who are knowledgeable of privacy practices and options for safeguarding their own information may experience more perceived control and, thus, less privacy-related anxiety (Foxman et al, 1993; Nowak et al, 1995; Phelps, et al, 2000). Nowak and Phelps (1992) study found uncertainty and misinformation about the sources of personal information available to marketers. They concluded that much anxiety about privacy is based largely on ignorance. Those respondents who were most concerned about threats to personal privacy were also those most likely to erroneously believe marketers have access to any and all sources of personal information. Further, they were less aware of actions they could take to protect their own privacy. Milne and Rohm (2000) reported even less consumer knowledge of name removal procedures from a national database of direct mail purchasers. 58 percent reported no knowledge. A *American Demographics* survey found only 30% and 24% of respondents, respectively, have asked to have their name removed from a mailing list or telephone list (Paul, 2001). Many in Milne and Rohm's (2000) study also demonstrated limited awareness of the types of information stored in marketing databases, including awareness of the fact that marketers store credit card and purchase history information. Nowak and Phelps (1995) suggest consumers' knowledge of data collection can be identified as either full knowledge of collection and use, knowledge of collection but not of use, or ignorance of both collection and use. The threat to consumer privacy is minimal under the first condition (full knowledge) and greatest under the last condition where consumers do not know of the collection or the use (Graeff Harmon, 2002).

References:

Ann E. Schlosser, Tiffany Barnett White, & Susan M. Lloyd (2006), "Converting Web Site Visitors into Buyers: How Web Site Investment Increases Consumer Trusting Beliefs and Online Purchase

Intentions", *Journal of Marketing*, Vol. 70 (April 2006), pp.133-148

Basho Kalinda (2000), "The Licensing of Our Personal Information: Is it a Solution to Internet Privacy?" *Marketing Intelligence & Planning*, Vol.15 (3), pp.142-150

Beltramini, Richard (2003), "Application of the Unfairness Doctrine to Marketing Communications on the Internet", *Journal of Business Ethics*, Vol. 42(4), pp. 393-400.

Business Week (1998), "Business Week/Harris poll: online insecurity", *Business Week*, 16 March, p. 102.

Changi NamChan Ik Park, Euehun Lee, Chanhoo Song (2006), "Consumers' Privacy Concerns and Willingness to Provide Marketing-Related Personal Information Online", *Journal of the American Society for Information Science and Technology*, Vol. 57(4), pp. 479-492.

Collier, G., 1995. Information Privacy. *Information Management & Computer Security*, *Journal of Social Issues*, 3(1), 41-45.

Culnan M. J., & Robert J. B. (2003). Consumer privacy: Balancing economic & justice considerations. *Journal of Social Issues*, 59(2), 323-342.

Culnan, M. J., & Armstrong, P. K. (1999). Information privacy concerns, procedural fairness and impersonal trust: An empirical investigation. *Organization Science*, 10, 104-115.

Das S. et al. (2003). The effect of interpersonal trust, need for cognition, and social loneliness on shopping, information seeking and surfing on the web. *Marketing Letters*, 14, 185-202.

Dommeyer, C. J., & Gross, B. (2003). Consumer knowledge, awareness, and use of privacy protection strategies. *Journal of Interactive Marketing*, 17(2), 34-51

Douglas, Ching Shan HUI (Oct. 2001), "Key Aspects on Consumer Behaviour of Hong Kong Internet Shopper", *Social Science Research Network Electronic Paper Collection*: <http://papers.ssrn.com/abstract=287997>

Ellen R. Foxman and Paula Kilcoyne (1993), "Information Technology, Marketing Practice, and Consumer Privacy: Ethical Issues", *Journal of Public Policy & Marketing*, Vol. 12 (1) pp. 106-119.

Ernst and Young (1999), *The second annual Ernst and Young Internet shopping study*.

European Union. (1995). "Directive 95/46/EC of the European Parliament and of the Council of 24, October, 1995, on the Protection of Individuals with Regard to the Processing of Personal Data and on the Free Movement of Such Data."

- Fareena Sultan, Urban Glen L., Shanker Venkatesh and Bart Lakov Y. (Dec. 2002), "Determinants and Role of trust in E. Business", working paper 4282-02, MIT Slon School of Management, http://ssrn.com/abstract_id=380404
- Federal Trade Commission (1998), Privacy Online: A Report To Congress [Online], available at <http://www.ftc.gov/opa/1998/9806/privacy2.htm>
- Flaherty 1989. Protecting Privacy in Surveillance Societies. University of North Carolina Press, Chapel Hill.
- Foxman, R.F., And Kilcoyne, P., 2001, Information Technology, Marketing Practice, And Consumer Privacy: Ethical Issues; Journal Of Public Policy And Marketing, Vol. 12 (1), Pp 106-119
- Gervey, B. and J. Lin (2000), "Obstacles on the Internet: a new Advertising Age survey finds privacy and security concerns are blocking the growth of e-commerce," Advertising Age, 71, 113.
- Godin, Seth, and Don Peppers. (1999). Permission Marketing: Turning Strangers Into Friends, and Friends into Customers. New York: Simon and Schuster.
- Goodwin, Cathy (1991), "Privacy: Recognition of a Consumer Right," Journal of Public Policy & Marketing, 10 (Spring), 149-66.
- Graeff, T. R. and S. Harmon (2002), "Collecting and using personal data: consumers' awareness and concerns," The Journal of Consumer Marketing, 19, 302-318.
- Hann, I. H., Hui, K.-L., Lee, T. S., Png, I. P. L. (2003). The value of online information privacy: An empirical investigation. Working Paper at WUSTL.
- Harris Interactive (2001). Consumer privacy attitudes and behaviors/or the privacy leadership initiative (PLI). Harris Interactive.
- Harris Lisa and Spence Laura J. (2002), "The Ethics of E-banking", Journal of Electronic Commerce Research, Vol. 3(2), pp. 59-66.
- Henderson, S. C., & Snyder, C. A. (1999). Personal information privacy: Implications for MIS managers. Information & Management, 36, 213-220.
- Henry Michael. "International Privacy, Publicity and Personality Laws." Reed Elsevier. pp 233 - 250. 2001.
- Hoffman, D. L., Novak, T. P., & Peralta, M. (1999). Building consumer trust online. Communications of the ACM, 42(4), 80-85.
- Hoffman, Donna, Thomas Novak, and Marcos Peralta. (1999). "Building Consumer Trust Online," Communications of the ACM, 43, 80-85.
- Jonna Järveläinen (2007), "Online Purchase Intentions: An Empirical Testing of a Multiple-Theory Model", Journal of organizational computing and electronic commerce, Vol. 17(1), pp. 53-74.
- Jupiter Media Matrix. (2002) March Consumer Privacy Survey. Retrieved March 10. 2003 from <Http://retailindustry.about.com/library/bl/02q2/bl-jmm060302>
- Katyal K Sonia (May 2005), "Privacy v/s Privacy", Yale J. Law & Tech, Vol. 7, pp. 222
- Kossecki Pawel, Swierczynska-Kaczor Urzula (2003), "No Trust, No Transaction-The Implication for Te Internet Suppliers", Information Security Solution European Conference, The European contribution, Speech/00/344.
- Kotler, P. and Turner, R. (1981), "Marketing Management", Prentice-Hall, Englewood Cliffs.
- Kotler. P, 2000, Marketing Management, 10th ed., Prentice Hall, Upper Saddle River, NJ
- Long, G., Hogg, M. K., Hartley, M., & Angold, S., (1999) Relationship marketing and privacy. Exploring the thresholds, Journal of Marketing Science, Applied Marketing Science, 5, 4-20.
- Mackline Ben (March 1999), "E-Commerce at what price: Privacy protection in the Information Economy", Berkeley Technology Law Journal, Vol. 20, pp. 14-28.
- Markoff, J.; (1999), The Privacy Debate: Little Brother And The Buying And Selling Of Consumer Data, Upside Vol. 11, No. 4, Pp. 94-106.
- Merrilees, B. & Frye, M-L. 2003. E-trust: the Influence of Perceived Interactivity on E-retailing Users. Marketing Intelligence & Planning. Vol. 21. No. 2, 123-128.
- Milne, G. R., & Culnan, M. J. (2004). Strategies for reducing online privacy risks: Why consumers read (or don't read) online privacy notices. Journal of Interactive Marketing, 18(3), 15-29.
- Milne, G.R. and Rohm, A.J., (2000). Consumer privacy and name removal across direct marketing channels: Exploring opt-in and opt-out alternatives. Journal of Public Policy and Marketing 19 2, pp. 62-73.
- Mohsen Attaran (1999), "Internet Based business opportunities; buyers beware of scams", Information Management & Computer Security, Vol. 7(4), pp. 176-177.
- Nowak, G. J., and Phelps, J., (1997). Direct Marketing and the Use of Individual-Level Consumer Information: Determining how and when Privacy Matters., Journal of Direct Marketing (11:4), pp. 94-109.
- Nycum, S. 2000, "Play fair with information on the web", Information week, No.814, Nov-27, P-192

-
- OECD (2002), OECD Information Technology Outlook 2002, <http://www.sourceoecd.org>
- Petrovic Dejan (2007) "Analysis of Consumer Behaviour Online" Quelch, J. and Klein, L. (1996), "The internet and International Marketing", *Management Review*, spring, pp. 61-75.
- Phelps, J., Nowak, G., And Ferrel, E.; (2000), Privacy Concerns And Consumer willingness To Provide Personal Information, *Journal Of Public Policy And Marketing*, Vol. 19, Pp. 27-41.
- Privacy International. Country reports - Republic of India. <http://www.privacyinternational.org/survey/phr2000/countrieshp.html#Heading3>. vis-ited 02 Oct 04.
- Rich Michal K. (2002), "Are we losing trust through technology?" *Journal of Business and industrial Marketing*, vol. 17(2/3), pp.215-222
- Richards Sarah (Aug. 2005), "Internet Shopping: the consumer perspective", *Welsh Consumer Councilor* (www.walea-consumer.org)
- Rombel, A. 2001, "The Privacy law debate: navigating the privacy law divide" *Global Finance*, Vol. 15, P.28.
- Seligman, T.J. and Taylor, J.D. "FTC Reverses Privacy Policy." *New York Law Journal*, June 19,2000 (www.loeb.com/CM/Articles/articles24.asp).
- Spink, A, Jansen, BJ, Wolfram, D and Saracevic, T (2002), 'From E-Sex to E-Commerce: Web Search Changes', *IEEE Computer*, vol. 35, no. 3, pp. 107-109.

Strategies for Enhancing Competitiveness of Indian Automobile Industry

Praneeta Sahu

Research Scholar
Dept. of MBA
Utkal University
Bhubaneswar

Abstract

Automobile industry is a symbol of technical marvel by human kind. The automobile industry referred as “the industry of industries” around the world has continuously invented and reinvented itself, always driven by innovation. During the last two decades, the automobile industry has been a bright spot in India’s progress and has become one of the largest manufacturing sectors in India. During the past few years, the production and management systems in the Indian automobile industry have been revolutionized. One of the major changes in the industry has been the opening up and growth of several emerging markets. The delicensing of the sector and the subsequent opening up of 100 per cent Foreign Direct Investment (FDI) through the automatic route marked the beginning of a new era for the Indian automobile industry. However, the industry is now facing new and pressing challenges. Globalisation, digitalisation, changing consumer preferences and increasing competition are changing the face of the industry. The purpose of this paper is to present a short overview of the automobile industry in India and mention challenges facing the industry. In this context, several strategic steps have been discussed which will enable the automobile firms in India to enhance their competitiveness and establish a strong foothold in the international market.

Introduction

Peter Drucker called the automobile industry as “the industry of industries”. The automobile industry has continuously invented and reinvented itself, always driven by innovation. During the last two decades, the automobile industry has been a bright spot in India’s progress and it has adapted itself well to the demands of globalisation. Due to its deep forward and backward linkages with several key segments of the economy, the automobile industry has a strong multiplier effect on the growth of a country and hence is capable of being the driver of economic growth. It plays a major catalytic role in developing transport sector in one hand and help industrial sector on the other to grow faster and thereby generate significant employment opportunities. The Indian automobile industry ably fulfils this catalytic role by producing a wide variety of vehicles such as passenger cars and multi-utility vehicles, light, medium and heavy commercial vehicles, two-wheelers such as scooters, motorcycles, mopeds as well as three-wheelers. The Indian automobile industry is currently experiencing an unprecedented boom in demand for all types of vehicles. This boom has been triggered primarily by two factors: (1) increase in disposable incomes and standards of living of middle class Indian families and (2) the Indian government’s liberalisation measures such as relaxation of the foreign exchange and equity regulations, reduction of tariffs on imports and banking liberalisation that has fueled financing-driven purchases. These trends have encouraged many multinational automakers from Japan, U. S. A., and Europe to enter the Indian market mainly through joint ventures with Indian firms. The Indian automobile industry has attained a substantial growth and has become one of the largest manufacturing sectors in India. In the export market, the industry has earned a strong reputation and Indian vehicles as well as components are in great demand the world over. The delicensing of the sector

Keywords

*Automobile, Globalisation,
Competitiveness, Strategies*

and the subsequent opening up of 100 per cent Foreign Direct Investment (FDI) through the automatic route marked the beginning of a new era for the Indian automobile industry. The Indian automobile industry is expected to be the world's seventh-largest automobile market by 2016 and the third largest by 2030, only behind China and U.S.A. The major automobile manufacturing companies in India are Tata Motors Ltd., Maruti Suzuki India Ltd., Bajaj Auto Ltd., Hero MotoCorp Ltd, Hyundai Motor India Ltd. and Mahindra & Mahindra Ltd.

Table 1 shows that two- wheelers constitute more than two- third of the Indian automobile market followed by

passenger vehicles which occupies about 16% of the market. Table 2 & 3 show that the passenger vehicles segment however, holds the highest growth potential growing at a CAGR of 17.92% during the period 2007-11, while exports of passenger vehicles grew at a CAGR of 22.95% during the same period. It is further observed that while overall production of automobiles has grown at a CAGR of 12.74% during the last five years, the export of automobiles have grown at a significant CAGR of 23.32%. Thus it can be said that India holds huge potential in the export market and exports should be encouraged as they help in making the industry globally competitive.

Table 1
Segment-wise market share of automobiles in India (2010-2011)

| Category | Market Share |
|---------------------|--------------|
| Two- wheelers | 76% |
| Passenger vehicles | 16.25% |
| Commercial vehicles | 4.36% |
| Three- wheelers | 3.39% |

Source: SIAM (Society of Indian Automobile Manufacturers)

Table 2
Trends in Automobile Production (no. of vehicles)

| Category | Passenger vehicles | Commercial vehicles | Three-wheelers | Two-wheelers | Grand Total |
|----------|--------------------|---------------------|----------------|--------------|-------------|
| 2006-07 | 1,545,223 | 519,982 | 556,126 | 8,466,666 | 11,087,997 |
| 2007-08 | 1,777,583 | 549,006 | 500,660 | 8,026,681 | 10,853,930 |
| 2008-09 | 1,838,593 | 416,870 | 497,020 | 8,419,792 | 11,172,275 |
| 2009-10 | 2,357,411 | 567,556 | 619,194 | 10,512,903 | 14,057,064 |
| 2010-11 | 2,987,296 | 752,735 | 799,553 | 13,376,451 | 17,916,035 |
| CAGR | 17.92% | 9.69% | 9.50% | 12.11% | 12.74% |

Source: SIAM

Table 3
Trends in Automobile Exports (no. of vehicles)

| Category | Passenger vehicles | Commercial vehicles | Three-wheelers | Two-wheelers | Grand Total |
|----------|--------------------|---------------------|----------------|--------------|-------------|
| 2006-07 | 198,452 | 49,537 | 143,896 | 619,644 | 1,011,529 |
| 2007-08 | 218,401 | 58,994 | 141,225 | 819,713 | 1,238,333 |
| 2008-09 | 335,729 | 42,625 | 148,066 | 1,004,174 | 1,530,594 |
| 2009-10 | 446,145 | 45,009 | 173,214 | 1,140,058 | 1,804,426 |
| 2010-11 | 453,479 | 76,297 | 269,967 | 1,539,590 | 2,339,333 |
| CAGR | 22.95% | 11.40% | 17.03% | 25.55% | 23.32% |

Source: SIAM

Recent Trends

- The turnover of automobile industry in India is estimated to reach US\$ 145 billion by 2016
- FDI inflow in 2009–2010 for the auto components sector was recorded at US\$ 1.2 billion, which was 4 per cent of the total FDI inflow in the country in the same period.
- India is the world's second-largest two-wheeler market

- ♦ Largest three- wheeler market in the world
- ♦ India is Asia's third-largest passenger vehicles (PV) market
- ♦ India is the world's fourth-largest commercial vehicle (CV) market
- ♦ The country is the world's fifth-largest bus and truck market (by volume)

- ♦ Presence of strong industry associations and supporting industries
- ♦ Large market with significant potential for growth in demand

India: Competitive Advantages

India enjoys various competitive advantages in the automobile sector which are mentioned below:

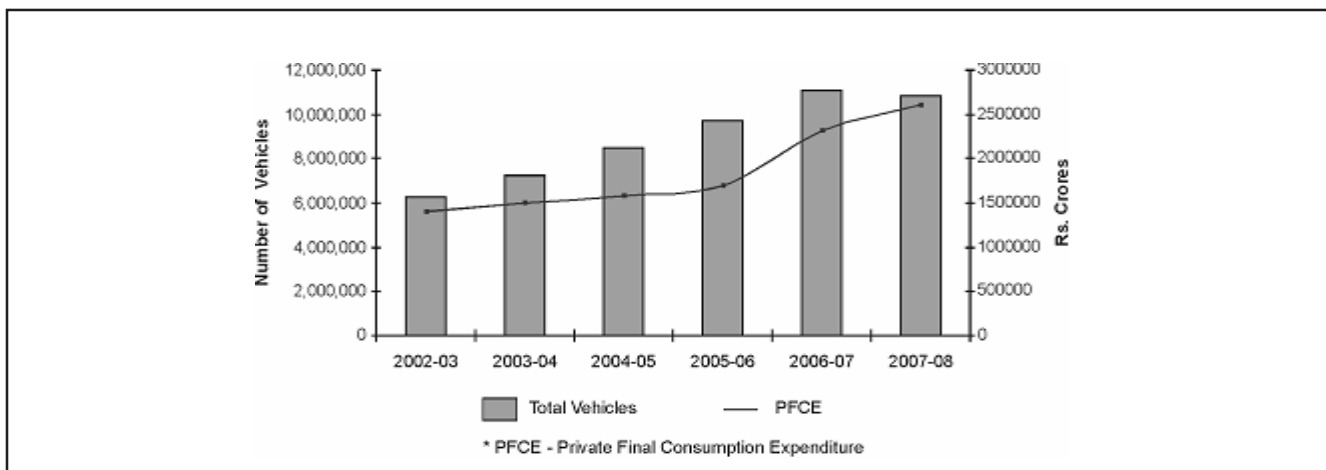
- ♦ Availability of skilled manpower with engineering and design capabilities
- ♦ Large target consumer base and rising income levels
- ♦ Changing lifestyles, driving demand for new segments
- ♦ Proximity to emerging and key markets
- ♦ High Quality Standards
- ♦ Product Development Capabilities
- ♦ Stable Economic Policies adopted by Successive Governments

Challenges faced by Indian Automobile Industry

However, inspite of the advantages enjoyed by the automobile firms in India, the industry still has a long way to go before it becomes globally competitive. It is because of the numerous challenges faced by the automobile manufacturers. They are:

- ♦ Growth in input costs
- ♦ Fuel price volatility
- ♦ Changing consumer preferences
- ♦ Low R&D orientation
- ♦ Infrastructure constraints
- ♦ Low ICT interface
- ♦ Incidence on levies/duties
- ♦ Production cuts
- ♦ Growing competition from foreign players
- ♦ Human resource challenges

Trends between India's PFCE and Automobile Sales



Need for Competitiveness

Firms need strategy to sustain and grow profitability, revenues, market share and most importantly-acceptance. Standalone strategies are not enough. Competitive strategy is concerned

with how a company competes in a particular business and gains a competitive advantage through a distinctive

way of competing. Competition determines the appropriateness of a firm's activities that can contribute to its performance, such as innovations, a cohesive culture and good implementation. Competitive strategy helps to search for a favourable competitive position in an industry, aims to establish a profitable and sustainable position against the forces that determine

industry competition. The ability of a company to capture the opportunity that an industry gives depends on its core competency.

The Indian automobile industry is striving to achieve sustainable competitiveness. The factors, which are driving the Indian automobile industry to be more competitive, are threefold. Firstly globalisation, which is the dominant trend across many industrial sectors, is affecting the Indian automobile industry which is unusual in the extent to which truly global alliances and mergers have formed and have led to the creation of supply networks based around a new tier of supplier companies with the scale and expertise to match the vehicle manufacturers' requirements. A second driver is over-capacity which is spread unevenly across companies and across the different segments of the industry. This factor is likely to increase in importance as new capacity comes on-stream. Thirdly, the need for automobile manufacturers to develop new models and get them to market quickly has assumed new importance as the market fragments and manufacturers look to new model niches rather than traditional product offerings. This has led Indian automobile manufacturers to push responsibility for design increasingly down the supply chain and to value suppliers that are able to offer innovative products and technologies which will differentiate that manufacturer's product. The Indian automobile industry's performance has improved significantly in recent years but it still trails the best of its competitors and is some way from being globally competitive.

Strategies to Enhance Competitiveness

The concept of attaining competitiveness on the basis of low cost and abundant labour, favourable exchange rates, low interest rates and concessional duty structure is becoming inadequate and therefore, not sustainable. In the light of the above, it is felt that a greater emphasis is required on the development of factors which can ensure competitiveness on a long-term basis. The strategies mentioned below will be helpful in providing guidelines for improving the competitiveness of the automobile firms on a sustained basis:

Increased Investment in Research & Development (R&D):

It has been realised all over the world that sustained competitiveness in the automobile industry comes through improvement in productivity, which calls for continuous innovation by the manufacturers. However, it is observed that the total expenditure of the Indian automobile companies on R&D as a percentage of their total sales value is relatively low as compared to the global players such as Honda, Toyota or General Motors. The R&D cost shares are higher in Europe (2-4%) than in India which is less than 2%. This is primarily due to

the fact that Indian firms are mainly focused on designing vehicles for the domestic markets and other developing markets and not for competing with international brands in the global markets. The Indian automakers are under growing pressure to scale up R&D expenditure by 25-30%. This is necessary in the face of fierce competition from global rivals looking to lure consumers with superior product innovations and cheaper compact models in the Indian automobile market. There is also a need for India to have world class logistics, testing & certification centres. The foreign players in the Indian automobile market have already started investing huge amounts in their R&D activities. General Motors has set up an R&D centre in Bengaluru, the company's first outside U.S.A., at an investment of more than US\$ 21 million. This is expected to cater to the needs of countries in the Asia-Pacific region. Hyundai Motors India Ltd.'s management plans to make the company's Indian R&D centre a hub for the development of small cars such as the i10 and the i20 for global markets at an investment of US\$ 50 million. Suzuki Motorcycles India aims to set up its R&D facilities in India and integrate its R&D activities with those of Maruti Suzuki India Ltd. Hence conscious efforts are required from both the Indian automobile manufacturers and the Govt. for spending more on R&D so as to make the automobile industry globally more competitive. The Govt. of India has already established the National Automotive Testing and R&D Infrastructure Project (NATRIP) with an investment of Rs.1718 crores to create core global competencies in the automobile sector and facilitate its integration with the world economy. During the year 2009-10 Tata Motors spent Rs.1, 170.97 crores on R&D activities including expenditure on capital assets purchased for Research and Development which was 3.29% of the net turnover.

Cost Efficiency:

Cost efficiency is very necessary for Indian automobile manufacturers to enhance their competitiveness in the global automobile market. Cost efficiency is considered the only real means in as mature an industry as automobiles to retain or improve market share. Many global auto-manufacturers especially from Japan, have initiated cost reduction exercises. Some firms have also shifted from standard costing to Kaizen costing and target costing. Kaizen costing is the process of cost reduction during the manufacturing phase of existing product. Cost containment strategies may also include working with suppliers to reduce the costs in their processes, implementing low cost designs / segments of the product, or through reduction of wastages. Strengthening the lean manufacturing practices, being adopted in India by firms such as Maruti Suzuki as also across the world, would also help improve competitiveness of Indian industry. Such practices show greater efficiencies in machine utilization, fewer labor

hours per machine, shorter machine setup times and identification of bottlenecks and cost reduction opportunities swiftly. Both the automobile and the auto component industry are interlinked and are dependent on each other for survival, and hence they should collectively work towards cost reduction. In a country like India, where customers are highly price sensitive, localisation of industries are of paramount importance. The automobile manufacturing firms should help in establishment of auto-component units around their assembly plants, and help them in technological improvement, R&D, and identification of machineries and equipments. The auto-component units concentrate on on-time supply and servicing of orders and cost containment in production, and thereby promote competitive pricing among the industry players.

Improving Capacity Utilisation:

Capacity utilisation has a significant positive effect on technical efficiency and in improving the competitiveness of Indian automobile manufacturers. Capacity utilisation and better maintenance also help in reducing the cost of manufacture of automobile firms to a great extent. Hence automobile firms should enhance their efficiency by fully utilising their capacities. It is observed that capacity utilisation has been rising in the recent years in the automobile manufacturing sector, particularly in the commercial and passenger vehicles segment. Maruti Suzuki's actual production of 10, 27,879 vehicles in 2009-10 as against an installed capacity of 9, 43,000 shows that the trend is changing. However the increase in capacity utilisation is not significant enough to remain globally competitive. Most of the automobile manufacturers in India produce less than their installed capacity. This is because of various reasons. First, capacity utilisation is totally demand dependent. Secondly, some of these firms intentionally keep their installed capacity higher than what is required to let it serve as a buffer capacity to cater for growth and demand uncertainty. Thirdly, the production is flexible and gets adjusted based on market forecasts. The automobile manufacturers need to improve their capacity utilisation and minimise their inventories, by better market research and a greater focus on exports, since that would provide additional market to absorb inventories and maximise capacity utilisation. Many firms in the automobile sector operate below their capacities, probably because they generally focus on domestic markets and occasionally over-estimate the demand for their products.

Strategies to Tackle the Rising Cost of Inputs:

The automobile manufacturers in India are adversely affected by the rise in aluminium and steel prices which are the most crucial inputs in automobile production. According to analysts, the aluminium and steel prices which were up nearly 15% y-o-y and 14% respectively

has affected the profit margins of the Indian automobile companies. However, input prices have eased a little over the past few months but still they continue to be comparatively higher than the prices that prevailed a few years ago. Therefore, the automobile manufacturers should adopt appropriate strategies to tackle with the problem of rising cost of inputs and to enhance its competitiveness. The strategies include reallocation of product mix, cost reduction through better adoption of 'lean manufacturing' practices, and negotiation with suppliers and vendors. Strengthening lean manufacturing solutions would be helpful for the automakers to tackle the challenge of input cost escalations. However the success of lean production at the industry level depends not only on the efforts of the manufacturers, but also on the suppliers and on institutional and cultural factors. Many automobile manufacturers in India such as Tata Motors, Ashok Leyland and Maruti Suzuki Ltd. have already introduced cost reduction programmes to avoid wastages, to improve their productivity and enhance their global competitiveness. Maruti Suzuki Ltd. has introduced a programme of 'one component, one gram', thereby bringing down the overall weight of a car by 2.5 Kg., and thereby save about Rs. 10 crores per annum. Ashok Leyland Ltd has introduced the 'Mission Gemba', which aims to improve productivity while reducing the cost of production.

Enhanced Use of Information Technology:

The significant nature of changes to the Information technology area and the manner in which information will be processed will be drastic over the next 10-15 years. The enhanced use of IT in the automobile industry is very important for improving the productivity, growth and competitiveness of the industry and in achieving its global aspirations. The Indian IT industry needs to streamline its operations into automobile technology also. This will help in designs and automation. In addition, IT interface helps the automobile manufacturers to interact frequently with vendors and consumers also, and leverage their ideas/preferences into vehicle design. Increased IT adoption in the automobile industry not only enhances the competitiveness of the

industry in the existing markets but also creates new markets for the industry. An example in this regard is Tata Motors Ltd. which uses Digital Product Development, Digital Manufacturing Solutions and better integration with vendors in order to improve significantly its product development processes and capabilities. The NANO website has been launched which facilitates online booking along with exhibiting all other product details. Launch of a web based supplier portal fulfills the business requirement of capturing potential supplier's information, communication platform for suppliers and news about supply chain. The company has instituted an online Dealer Management System for the channel partners

that have helped the dealerships keep a step ahead of the increasing challenges of the automobile industry. The company is leveraging its connected dealer network for communication and training.

Supply Chain Management:

The Indian automobile manufacturers face stiff international competition in the wake of all major US and European car manufacturers entering the Indian market. In the contemporary scenario, supply chain management practices can be adopted to improve competitiveness, operational efficiency and profits. Supply chain management (SCM) practices, which aim to streamline and optimize the processes involved in acquiring input from suppliers; converting these inputs into finished products, and delivering these products to the consumers help in improving efficiency of automobile firms. Indian automobile players today face several key challenges in managing their supply chains such as integrating the end-to-end supply chain, managing inbound logistics, managing supply chain costs, etc. The process of planning, implementing and controlling cost effective flow of materials; maintenance of in-process inventory, finished goods and related information from the point-of-production to the point-of-consumption; and efficiency in conforming to customer requirements in the Indian automobile sector need to be improved to compete efficiently in a global market place. In India, logistics account for significant amount of inventory carrying cost, which is affecting the cost competitiveness of the auto component industry. Supply chain management thus forms as an important strategy for Indian automobile industry. Just-In-Time (JIT) production processes as adopted by Maruti Suzuki India Ltd., Tata Motors Ltd., identification of shorter transportation routes, e-sourcing are some supply chain strategies which can be helpful in enhancing competitiveness of Indian automobile industry.

Export Promotion:

India is not a major exporter of automobiles in the world. However, India's automobile exports have grown significantly over the last few years. As per Ernst & Young analysis, revenues from automobile exports from India are estimated to increase from US\$ 40 billion in 2002 to US\$ 300 billion in 2015, thereby increasing its share from 0.8 percent to 3.5 per cent. Vehicle exports of India (in most of the sub-categories) are mainly directed towards developing countries of South Asia, Africa and Latin America. It is seen that most of the automobile manufacturers in India are more domestic-oriented, though they do export a small proportion of their production. Most of them have a better future outlook for domestic market than the international one, mainly because of the huge demand potential in India. Since exports: sales ratio has a significant positive impact on enhancing competitiveness, it is imperative for the

government to encourage exports by means of higher Market Development Assistance (MDA) grants and by further strengthening the provisions under different promotional schemes. The most important measure that the government could take is to ensure that the rupee does not appreciate unduly vis-à-vis other currencies. In addition, Special Economic Zones (SEZs) can avail other exclusive incentives such as exemptions in almost all taxes and duties, tax holidays for 15 years and world-class infrastructure. The incentives could be given to all those export oriented firms who continuously export more than 50 per cent of their output, irrespective of their location. Export promotion is helpful in enhancing competitiveness of automobile firms because of the learning and technological upgradation facilitated by exporting to markets that impose sophisticated standards, speedy delivery schedules by importers abroad and the possibility of market risk diversification by exporting. Hyundai Motor India Ltd is the largest exporter of passenger vehicles in the country, with a 64 per cent share in 2009–2010. Hyundai currently exports 40 per cent of its small cars produced in India, including the Santro, which sells in 97 countries across the world and is produced only in India.

Development of Alternate Fuel Vehicles and Hybrid Vehicles:

Product development has happened in all aspects in the Indian automobile industry except in utilisation of alternate energy sources for vehicles. Continuous efforts need to be made towards incessant modernisation of the industry by facilitating indigenous design, research and development and to develop vehicles propelled by alternate energy sources. This would further enhance the competitiveness of the Indian automobile industry in the global market. Alternative transportation fuels provide economic advantages while also offering significant environmental benefits. Canada is recognized as a world leader in the development and use of alternative transportation fuels with more than 170,000 alternative fuel vehicles in use across Canada. The automobile manufacturers in India should also therefore take adequate steps for developing hybrid vehicles that mainly use two sources of fuel - one of which is generally an electric battery - and have lower emissions as well as reduced operating costs. Such vehicles deliver the same performance with lower emissions and higher fuel efficiency. The Government, in the latest budget announcements, has cut the excise duty on hybrid vehicles from 24% to 14%, (subsequently by another 4% reduction across the board to boost the demand) to promote hybrid vehicles in the country. The development of the US\$ 2,250 Nano and India's first electric car, the Reva showcased India's ability to innovate and design. Companies such as Mahindra &

Mahindra and Hero Group are also planning to develop electric cars in India. Tata Daewoo, a subsidiary of Tata Motors, recently developed an LPG-based MCV (4.5 tonnes), the Novus, which conforms to Euro V emission norms. Ashok Leyland has developed India's first six-cylinder CNG engine for buses using the multipoint fuel injection system, which conforms to Euro IV emission standards. Two-wheeler manufacturers Bajaj Auto, Hero Honda Motors Limited and Mahindra & Mahindra are planning to jointly develop technology that enables two-wheelers to run on natural gas instead of gasoline. Hence Indian automobile manufacturers can become more competitive if they invest a sizable amount in the development of alternate fuel vehicles.

Human Resource Development:

Development of human resources is an important criteria for enhancing the efficiency and competitiveness of Indian automobile firms. The cost pressure on global auto majors, who are mainly present in developed countries, viz., USA, Europe and Japan, is making the industry shift to developing nations. In addition, these countries are facing shortage of skilled manpower, which is expected to grow multi-fold in the years to come. India has large human resource base; however, India needs to enhance the skill-sets that are required for the industry in order to enhance its competitiveness and become a global automotive hub. The Automotive Mission Plan has projected a workforce requirement of an additional 25 million by 2016. To solve the emerging problem of skill shortages and skill mismatches, training capacities and vocational skill development capacities need to be developed urgently. The proposed National Automotive Institute should be quickly established with active participation of private industry players. The Indian automobile industry also lacks skilled and efficient management professionals, which is one of the constraints for many firms to scale up their operations. This problem also needs to be addressed, by both industry and the government, by organising world-class management training programmes. The training programmes vary according to the need of the employees at various levels. Based on the behavioral traits, some of the trainings introduced in 2009-10 by Maruti Suzuki India Ltd. were 'changing mindset-changing lives'; 'being the best'; 'emotional intelligence'; 'planning organizing problem solving'; 'assertiveness & self confidence'; and 'conflict management'. Some of the trainings based on technical needs include 'market research'; 'capital budgeting'; 'risk management & hedging'; 'unigraphics'; 'business simulation games'; etc. The company also has higher education schemes for its employees.

Conclusion

The automobile industry is a very dynamic industry and so are its challenges and strategies. The Indian

automobile industry has the potential to emerge as one of the largest in the world. It may be mentioned that the Indian automobile industry holds significant scope for expansion, both in the domestic market, where the vehicle penetration level is on the lower side as compared to world average, and in the international market, where India could position itself as a manufacturing hub. In the presence of global competitors and a global market, the Indian companies would be able to acquire most of the share of the automobile market and establish a strong foothold in the global market by following sound business strategies. The Indian automobile and component industry needs to look out for opportunities to cut cost, undertake value engineering and enhance disciplines into the system. The industry may take necessary steps to upgrade the skills of the employees and enhance the focus on market research, product

development and customer interactions. Considering the growing demand for automobiles in India and higher capacity utilisation over the years, key Indian automobile manufacturers have already begun to revisit their strategies to enhance their competitive position.

References

- Annual Reports of Automobile Companies
- Badri Narayanan G. and Pankaj Vashisht (2008). Determinants of Competitiveness of Indian Auto Industry. Working paper No.201, ICRIER, New Delhi.
- Exim Bank of India (2008), Indian Automotive Industry: At the Crossroads, Occasional Paper No.129, Published by Quest Publications, Mumbai
- Haritha Saranga, Competitiveness of Indian Auto Component Industry: An Empirical Study, Research policy, pp.139-165
- India Brand Equity Foundation (2006), Automotive, Report by KPMG for IBEF, Gurgaon.
- India Brand Equity Foundation (2010), Automotives, Report by IBEF, Gurgaon
- K.Narayanan, (1998). Technology Acquisition, De-regulation and Competitiveness: A Study of Indian Automobile Industry, Research Policy, 27(2), pp. 215-228
- L.G. Burange and Shruti Yamini (2008). Competitiveness of firms in Indian Automobile Industry. Department of Economics, Mumbai University.

Ministry of Heavy Industries and Public Enterprises (2006a). Automotive Mission Plan 2006-2016: A Mission for Development of Indian Automotive Industry, New Delhi.

Sumit Jain and Dr.R.K.Garg, Business Competitiveness: Strategies for Indian Automobile Industry, Conference on Global Competition & Competitiveness of Indian Corporate

Viswanathan Krishnan, (2002), Indian Automotive Industry: Opportunities and Challenges Posed by Recent Developments, IMV Publication No. 0104a, International Motor Vehicle Program at the Massachusetts Institute of Technology, Cambridge

Websites:

1. www.ibef.org

2. www.siamindia.com

Dimension of Voluntary Disclosures – A Snapshot Of Infosys Technologies Ltd.

Dr. Swagata Sen

Professor of Commerce
University of Calcutta

Dr. Swapna Roychowdhury

Assistant Professor
Dept. of Commerce
Narasinha Dutt College, Howrah

Abstract

The last decade has experienced profound changes in corporate disclosure practices all over the globe including India. Changing economic and business conditions, rapid technological innovation, proliferation of the internet and globalization are creating competitive market environment are some of the factors which are driving corporate sectors to transform the manner in which they disseminate information to the stakeholders. The days of minimalist corporate reporting are over with the market crying out for more information and companies continuing to report in the traditional manner have felt the necessity to change thereby going beyond the statutorily required minimum financial reporting in its annual reports. This article explores the dimension of voluntary disclosure practices in Indian IT industry in the form of a case study of Infosys Technologies Ltd.

Introduction

Presently, we are going through the age of technology and information, where corporate disclosure practices contribute a major part to the national as well as global economy. In India, the last decade has experienced profound changes in corporate disclosure practices. The changes have occurred not only in the informational content of annual reports but also in its presentation. Changing economic and business conditions, rapid technological innovation, proliferation of the internet and globalization are creating an increasing competitive market environment that is driving corporate sectors to transform the manner in which they disseminate information to the stakeholders. Gone are the days of minimalist corporate reporting with the market crying out for more information and companies continuing to report in the traditional manner, have felt the necessity to change thereby going beyond the statutorily required minimum financial reporting in its annual reports. Information today is the lifeblood of capital markets. Investors risk their hard-earned capital in the markets, and they rely on information they receive from companies in making their investment decisions. Given the increasing complexity of business today, there is an urgent need for annual reports to include comprehensive yet concise information that, among others, analyses and explains, the main factors underlying the results and financial position of a company.

To address these needs, companies have at their disposal two kinds of publishing variants: mandatory and voluntary disclosures. Mandatory disclosures are the minimum level of disclosures a company is bound to make in its financial statements as to comply with the stakeholders' legal requirements of disclosures. Any additional information over and above

Keywords

*Disclosure system,
Voluntary Disclosures.
Mandatory Disclosures*

mandatory disclosures are voluntary disclosures which comes to complete the mandatory reporting process that often seems to be inadequate for satisfying users' needs.

Corporate reporting is an end-result of the interplay of several factors - akin to the elements constituting an information / disclosure system.

Elements of an Information / Disclosure System:

Disclosure system

Sender
 Message
 Channel
 Receiver
 Monitor

corporate reporting system

Accounting Entity
 Facts & Figures
 Annual Reports / Other Published Statements
 Users
 Regulatory Environment

Miller (2000) presents four axioms concerning what might happen if financial reporting does not adequately describe financial operation in that:

- ♦ Incomplete information fosters uncertainty
- ♦ Uncertainty creates risk
- ♦ Risk motivates investors to demand higher rate of return
- ♦ That demand results in a higher cost of capital and lower security prices.

The present study tries to make an assessment of the emerging trends of voluntary disclosure practices of Infosys Technologies Limited (belonging to the IT sector) in their published annual report. For analyzing the voluntary disclosure practices of Infosys Technologies Ltd., we would depend on secondary data to be obtained from the published annual reports for a period of 3 years 2004-05, 05-06 & 06-07. The time frame was selected to capture the effect of the implementation of many new accounting standards by ICAI from 2004-05 and onwards.

Literature review

In the International Scenario:

Buzby (1975) found that the extent of disclosure was positively associated with the size of a company's assets and was not affected by whether the firm was listed or not. Singhvi & Desai (1971) found that the listing status (quoted or unquoted) was a major explanatory variable in accounting for the disclosure level. They also found a relationship between higher levels of disclosure and 1) greater asset size, 2) greater number of shareholders, 3) large auditing firms, 4) higher rates of return & higher earnings margins. Cerf (1961) also derived a disclosure index which was applied to annual reports and he found that asset size, no. of shareholders and listing status were all positively associated with greater / additional disclosure levels.

Singhvi (1967) examined corporate disclosures through the annual reports, both in the US and India, for the period

1964-65 by using a disclosure index consisting of 34 items. The study was conducted on a sample of 155 US companies (100 listed and 55 unlisted and 45 listed Indian companies). Findings of the study demonstrated the following: Companies in the US that were disclosing inadequate information were small in size (as measured by total assets and number of shareholders, free from listing requirements, audited by a small CPA firm, and less profitable (as measured by the rate of return and earnings margin). For the listed Indian companies, on the other hand, the study found that the companies that disclose inadequate information were small in size (as measured by total assets and number of shareholders), less profitable (as measured by the rate of return and earnings margin) and managed by Indian managers. Internationally, many leading companies of the US disclose much more information than what laws, regulations and accounting standards require.

Michael Firth tried to design the list of voluntary informations that would appear in corporate annual reports and being useful for investors and various other users of financial statements. Similar researchers were made by Anderson, 1962; Backer, 1970; Bradish, 1965; Buzby, 1974, 1975; Cerf, 1961; Chandra, 1974; Choi, 1973; Horngren, 1970; Pankoff and virgil, 1970; Singhvi and Desai, 1971. However, the list was subjected to two criteria. The first is that the items should exclude those items that had to appear in annual reports because of statutory regulations (e.g. Companies Acts). The second criterion is that the item was almost certainly bound to be present in a company.

There has been an increasing demand for corporate social responsibility reporting and "it is apparent that the issue of external reporting of corporate social performance is building up a head of stream" (Diley, 1975). The SEC was ordered by the federal district court to disclose the type of information the public interest groups have required (The Wall Street Journal, 1974). Several accountants have suggested that the accounting profession should become involved with corporate social

responsibility reporting (Estes, 1972; Linowes, 1972; Tiggos, 1976), a part of voluntary disclosures.

In the international scenario, Sydney Gray and Kenth Skogsvik refer to the valuation relevance of voluntary disclosures of the major pharmaceuticals industries in Sweden and UK. Voluntary disclosures are provided at the discretion of company managers. According to S. J. Gray and K. Skogsvik, such disclosures are concerned with the effects on important numbers if alternative measurement principles had been used, forecasts of key financial numbers or information about more qualitative aspects of a company.

Trotman and Zimmer (1968) found that voluntary disclosures are not useful unless they are readily available and processable. Adolph Berle, Jr. demanded the management to accept public responsibility to make fuller disclosure of corporate affairs, particularly to investors. Meek & Gray (1989) argue that multinational firms adopt voluntary disclosure to assuage institutional and market-related pressures. Bushman and Smith (2001), states, that firms with timely disclosure of high quality financial accounting information can effect economic performance through accounting's role in reducing information asymmetries among investors.

Researches made by Akerlof (1970) showing that voluntary disclosures can be expected by market participants who possess 'above average' quality. Penman (1978) indicated that voluntary disclosures might induce a fully revealing capital market equilibrium. A more rigorous analysis, stressing the importance of proprietary costs, was carried out by Verrecchia (1983). Characteristics of this research – Ohlson & Buckman (1981), Ronen & Livnat (1981) and Dye (1985) – is the idea that accounting information merely can be modeled as a signaling device.

Helen Kang & Sidney J. Gray (2009) examines corporate voluntary disclosure issues, with an emphasis on disclosure practices in developing markets, and reviews different applications of the use of content analysis in measuring voluntary disclosure levels. A total of 48 voluntary disclosure studies selected from the last two decades of research are reviewed and a variety of voluntary disclosure issues, including social responsibilities, environmental issues, corporate governance, non-financial information and intangible assets are identified. Further, corporate and country-specific factors which may be associated with disclosure levels are assessed. The applicability of content analysis and potential problems associated with its use as a research method to measure voluntary disclosure levels are critically examined.

In the National Scenario:

Several research studies have been conducted to examine the corporate reporting practices in India, the noted ones being Shankar (1972), Dasgupta (1977), ICAI (1981 and 1985), Lal (1985), Vasal (1992), Chakravorty (1994) and Banerjee (1994 and 2002). The Indian

research in this direction instituted in the early seventies with the study by Shankar in 1972. Shankar (1972) examined the adequacy of reporting in Indian annual reports vis-à-vis reports of USA, Germany, Britain and Japan. The findings of the study were that Indian annual reports are "the least innovative and informative" and are prepared largely within the legal framework in contrast to much more informative and illustrative foreign annual reports.

"Financial reporting in India" by Dasgupta (1977) is a pioneering work in this field. He dealt with the structure, theory, objectives and history of Indian financial reporting and the influence of British law and practice on the then financial reporting practices, and examined the trends in financial reporting in India and abroad (like USA, UK, France, Australia etc.). After examining the accounting pronouncements issued by professional accounting bodies in the USA, the UK and by the IASC, he opined that inclusion of 'statement of highlights', 'summarized balance sheet and profit and loss', 'statement of sources and application of fund', 'statistical records', 'diagrams and charts' and 'inflation adjusted statement' would make annual reports more informative and useful. He concluded that most of the companies publish the bare minimum financial information, and, in some cases, they even violate the provisions of the law.

Chakravorty (1994) made a comprehensive study of the provisions of Companies Acts of 1882, 1913, 1936 and 1956 relating to accounting and reporting in order to show the evolutionary nature of the development of accounting and reporting in India. He found that, by and large, Indian companies complied with statutory disclosure requirements. But, as regards disclosure of additional information on human resources, social responsibility of the business etc., public sector companies fared better than the private sector companies. He, therefore, offered some suggestions for improvement in the accounting and reporting scenario in India.

Banerjee (2002) examined corporate reporting practices of 50 companies in India of which 25 companies (referred to as group A) were among the top 50 companies out of 500 companies ranked by 'Economic Times' based on market capitalization and other 25 companies (referred to as group B) were outside those 500 companies. He investigated the compliance with the mandatory reporting and voluntary reporting practices. He found that all the sample companies disclosed information as required under the Companies Act, 1956, although there was a great amount of diversity in reporting information in the profit and loss account. He concluded that compliance with accounting standards appeared to be good with many companies disclosing information much more than what is required under the Act confirming a significant improvement in the quantity and quality of information provided in the financial statements as reflected from the study of the sample companies for the period 2000-2001.

Case study of infosys technologies ltd.

Infosys Technologies Ltd. is one of the biggest names in the Indian IT industry. Infosys Technologies Ltd. started its journey on July 2, 1981 when N. R. Narayana Murthy along with six others launched a software development company called "Infosys Consultants Pvt. Ltd." with N. S. Raghavan being the first employee of the organization. The name was changed to Infosys Technologies Ltd. in June 1992, and became a public limited company. From a mere US \$250 company in 1981, Infosys has come up a long way to become a global leader with revenues of more than US \$4 billion. Presently, the multinational IT service company has offices in 22 countries and development centres in India, Japan, China, Australia, UK and Canada and is headquartered in Bangalore, India.

Infosys went public in 1993. According to Forbes Magazine, since listing on the Bombay Stock Exchange till the year 2000, Infosys sales and earnings compounded at more than 70% a year. In 2001, it was rated the Best Employer in India by Business Today. Infosys was rated best employer to work force in 2000, 2001 and 2002 by Hewitt Associates. One of the major initiatives of Infosys Technologies Ltd. is its Global Delivery Model (GDM). It came forth as a disruptive force that leads to the rise of offshore outsourcing and enabled it to develop software collaboratively in different geographic locations. Infosys has also made a mark in the software industry by its highly innovative solution for the banking industry – 'Finacle'. Infosys was the only Indian company to win the Global MAKE (Most Admired Knowledge Enterprise) award for the years 2003, 2004 and 2005 and is inducted into the Global Hall of Fame for the same.

Infosys came into the list of 20 biggest companies on NASDAQ stock exchange in terms of market

capitalization and was the first India registered company to become listed on an American Stock Exchange. Infosys has become the icon of modern India. The following table lists a few awards received by Infosys on multiple occasions.

A List of Selected Awards received by Infosys Technologies

- ◆ Ranked the best employer in India by *Business Today* – *Hewitt* in their annual survey.
- ◆ Ranked as best managed company in India by *Asia Money*.
- ◆ Received the best annual report award of *The Institute of Chartered Accountants of India*.
- ◆ Ranked No.1 among Asia's leading companies in India by *Far Eastern Economic Review*.
- ◆ Rated the most globally competitive company, most dynamic company, most ethical company and best IT company by *The Business World*.

The list of items of voluntary disclosures has been arranged in dictionary order to locate any item on a random basis. Figures within the bracket in the caption represent the total number of pages contained in the annual report to gauge the size of the annual report and the volume of disclosures made therein. In the table below, a two-point scale has been used where the rank / scale 1 represent disclosures made and 0 stands for non-disclosures relating to the referred items in the annual reports. The number of pages within brackets on the related items shows the relative stress and importance paid by Infosys Technologies Ltd. in disclosing such items.

Voluntary Disclosure Practices of Infosys Technologies Ltd.

| Sl. No. | | INFOSYS TECHNOLOGIES LTD. | | |
|---------|--|----------------------------------|----------|----------|
| | | Years of Annual Report: | | |
| | | 2004-05. | 2005-06. | 2006-07. |
| 1. | Actual Vs. Planned Performance. | 1 | 1 | 1 |
| 2. | Additional Information on Directors. | 1 | 1(3) | 1(4) |
| 3. | Age Distribution of Existing Employees. | 1 | 1 | 1 |
| 4. | Attrition Rate. | 1 | 1 | 1 |
| 5. | Awards & Achievements of the Company. | 1(5) | 1(5) | 1 |
| 6. | Balance Sheet including Intangible Assets. | 1(1) | 1(1) | 1(1) |
| 7. | Book Value Per Share over last 5 or 10 Years | 1(1) | 1 | 1 |
| 8. | Brand Valuation Statement. | 1(2) | 1(2) | 1(1) |
| 9. | Capital Expenditure over last 5 or 10 Years. | 1 | 1 | 1 |
| 10. | Chairman's Letter or CEO's Message. | 1(2) | 1(2) | 1(2) |
| 11. | CEO or CFO Certification. | 1(1) | 1(1) | 1(1) |
| 12. | Code of Business Conduct & Ethics. | 1 | 1 | 1 |
| 13. | Companies Core (Key) Competence. | 0 | 0 | 0 |
| 14. | Company Information. | 1 | 1 | 1 |
| 15. | Contents of Annual Report. | 1(1) | 1(1) | 1(1) |
| 16. | Contribution to National Exchequer. | 0 | 0 | 0 |
| 17. | Corporate Governance Rating by Rating Agencies | 1 | 1 | 1 |

| Sl. No. | | INFOSYS TECHNOLOGIES LTD. | | |
|---------|--|----------------------------------|----------|----------|
| | | Years of Annual Report: | | |
| | | 2004-05. | 2005-06. | 2006-07. |
| 18. | Corporate Governance Report in Compliance with Regulation of some Foreign Countries. | 1 | 1 | 1 |
| 19. | Corporate Social Responsibility Statement. | 1 | 1 | 1(1) |
| 20. | Credit Rating by Credit Rating Agencies. | 1 | 1 | 1 |
| 21. | Current Cost Adjusted Financial Statement. | 1(1) | 1(2) | 1(2) |
| 22. | Customer Satisfaction Review. | 0 | 0 | 0 |
| 23. | Debt Collection Period / Status. | 1 | 1 | 1 |
| 24. | Debt-equity Ratio. | 1 | 1 | 1 |
| 25. | Demand & Supply Analysis. | 0 | 0 | 0 |
| 26. | Director's Resume / Profile. | 1 | 1 | 1 |
| 27. | Dividend Policy of the Firm. | 1 | 1 | 1 |
| 28. | EVA Statement. | 1(1) | 1(1) | 1(1) |
| 29. | Employee Strength over last 5 or 10 Years. | 1 | 1 | 1 |
| 30. | Enterprise Value. | 1 | 1 | 1 |
| 31. | Expected Profit for the Coming Year under Indian GAAP & US GAAP. | 0 | 0 | 0 |
| 32. | Financial Highlights of past 5 or 10 Years. | 1(1) | 1(1) | 1(1) |
| 33. | Financial Statement as per GAAP of Foreign Countries (Except US GAAP). | 1(17) | 1(17) | 1(17) |
| 34. | Financing of New Projects. | 0 | 0 | 0 |
| 35. | Frequently Asked Questions (FAQ). | 1 | 1 | 1 |
| 36. | Fund Flow Statement (FFS). | 0 | 0 | 0 |
| 37. | Future Programme on Capacity Expansion. | 0 | 0 | 0 |
| 38. | Gender-wise Presentation of Change in the Number of Employees. | 1 | 1 | 1 |
| 39. | Global Presence Information (GPI) - In Descriptive | 1(1) | 1(1) | 1(2) |

| Sl. No. | | INFOSYS TECHNOLOGIES LTD. Years of Annual Report: | | |
|---------|--|---|-----------|-----------|
| | | 2004-05. | 2005-06. | 2006-07. |
| 56. | Non-mandatory Requirements under Clause 49 of Corporate Governance (Whistle-blowers Policy). | 1 | 1 | 1 |
| 57. | Percentage of Company's Export on India's Total Export. | 0 | 0 | 0 |
| 58. | Percentage of Company's Export to Total Revenue. | 1 | 1 | 1 |
| 59. | Percentage of Company's Revenue on India's GDP. | 0 | 0 | 0 |
| 60. | Percentage of Non-Indian Employees to Total Work Force. | 0 | 0 | 0 |
| 61. | Plan for Capacity Addition Through Subsidiaries. | 1 | 1 | 1 |
| 62. | Product Details with Picture. | 0 | 0 | 0 |
| 63. | Product Flow Chart. | 0 | 0 | 0 |
| 64. | Productivity (Sale or Profit per Employee over the Past Years). | 0 | 0 | 0 |
| 65. | Projects - Ongoing & New. | 0 | 0 | 0 |
| 66. | Ratio Analysis. | 1(1) | 1(1) | 1(1) |
| 67. | Reconciliation of Indian GAAP with US GAAP. | 1 | 1 | 1 |
| 68. | Revenue Expenditure on Social Overheads. | 0 | 0 | 0 |
| 69. | Risk Management. | 1(7) | 1(8) | 1(3) |
| 70. | Senior Management Team. | 1 | 1 | 1 |
| 71. | Shareholders / Investors Grievance Committee. | 1 | 1(.5) | 1 |
| 72. | Statistical Data of Public & Employee Grievance Cases. | 1 | 1 | 1 |
| 73. | Sustainability Reporting. | 1 | 1 | 1 |
| 74. | The Year at a Glance. | 1(1) | 1(1) | 1(1) |
| 75. | Total Shareholders Return. | 1 | 1 | 1 |
| 76. | Value Added Statement. | 1(.5) | 1(.5) | 1(.5) |
| 77. | Value Chain & Supply Chain Statement. | 0 | 0 | 0 |
| 78. | Value Reporting. | 1(1) | 1(1) | 1(1) |
| 79. | Vision / Mission Statement. | 1 | 1 | 1 |
| 80. | Weighted Average Cost of Capital (WACC). | 1 | 1 | 1 |
| | TOTAL NO. OF ITEMS DISCLOSED: | 58 | 58 | 58 |

Findings and Recommendations

- The comprehensive framework developed in this study for organizing and evaluating voluntary disclosures is an initial step in the direction of examining voluntary disclosure practices from the perspective of Indian IT companies.
- In addition to investors' information needs, other factors such as the outlook of company management, contribution of intangible assets for generating revenue and market complexity affect both the volume as well as the quality of voluntary disclosures.
- Total voluntary disclosures expanded too as the corporate report moved away from being primarily a statutory document concerned with financial stewardship towards a public relations document. This shift in emphasis also led to a revamping of the corporate report with more disclosures.
- A close study of the voluntary disclosure practices of Infosys Technologies Ltd. revealed that in addition to complying with mandatory disclosure requirements, the company disclosed 58 items out of 80 items such as additional information on directors, attrition rate, code of business conduct & ethics, corporate social responsibility statement,

FAQ, globalization initiatives, vision / mission statement and other items.

- ♦ Items such as contribution to national exchequer, demand & supply analysis, product flow chart, value chain & supply chain statement, productivity and other items have not been highlighted by Infosys Technologies Ltd. in their annual reports although they are issues of burning concern.
- ♦ Infosys have put stress on environment, employee health and safety. The Health, Safety & Environment (HSE) policy of Infosys is “*Infosys as a corporate citizen is committed to demonstrating a high standard of environmental protection, sharing of best practices and provision of a safe and healthy work place*”. This involves: a) Conservation of resources; b) Prevention of pollution; c) Adherence to all applicable legislations; d) Eliminating accidents, occupational illnesses and injuries at work.
- ♦ Financial markets have started opening up across the globe and today investors have a wide choice of capital markets to invest in. A key issue in international financial analysis is the restatement and translation of financial reports that describe operations conducted in one environment, but which are the subject of review and analysis in another. Infosys Technologies Ltd. have disclosed unaudited financial statements as per GAAP of some developed countries, specially as per US GAAP in their annual reports. In this respect, the following excerpt from the annual report of Infosys Technologies Ltd. for 2005-06 is worth to be noted: “*As an investor-friendly company, committed to highest standards of disclosure, we have been voluntarily providing unaudited financial statements prepared in substantial compliance with the GAAP requirements of Australia, Canada, France, Germany, Japan and the United Kingdom, besides those of the US and India*”.

Suggestions

- ♦ While results of this study confirm the findings of previous researchers that companies are disclosing more information on voluntary basis than they were doing previously. However, companies should attempt to match the information disclosed with the information desired by the stakeholders by careful and systematically assessing stakeholders' information needs.
- ♦ The cost of disclosing additional information should be considered. This view is supported by Gray, Radebaugh and Roberts who found that, on average, financial executives tend to perceive most voluntary disclosure items in terms of their net cost. Gray et al (1990) also found that there is a general agreement among financial executives that the most important cost factor is the indirect cost of competitive disadvantage resulting from the disclosure of information such as future-oriented information.
- ♦ Disclosures that are made voluntarily should be reliable and consistent and should improve the quality of corporate communication. Furthermore, the

interest of the users of corporate annual reports should take precedence over the interests of the compilers. Compilers should identify what is perceived to be useful decision-making information in terms of user needs and should respond by improving the non-financial information content of the annual report and by formulating an effective disclosure policy.

- ♦ There is an apprehension that disclosure of too many items in the annual report may result in information overload. To avoid financial disclosure overload in future, it may ultimately be necessary to publish separate, supplementary or summarized reports that serve the different needs of the various stakeholders.
- ♦ In order to avoid confusion on the part of stakeholders, the annual report should clearly mention the items which are actual figures (i.e. backed by vouchers) and which are estimated figures (i.e. not backed by vouchers).

Limitations of the Study

- ♦ The study is based on the published annual report of Infosys Technologies Ltd. Hence, a comparative study could not be made with other companies belonging to the IT sector or with companies of other industries.
- ♦ The study is based on the published annual reports of only three years, which makes this study a snapshot. Analysis of annual reports over a longer period of time would have given a better picture and trend in the corporate voluntary disclosure practices.

References – Books & Others

- American Institute of Certified Accountants (AICPA). *The Measurement of Corporate Social Performance*. New York: AICPA, 1977.
- Banerjee, Bhabatosh. *Accounting Standard Setting in India – An Evaluation in Banerjee B. and Basu A. K. Ed., Corporate Financial Reporting*. DSA in Commerce, Calcutta University, 2001.
- Regulation of Corporate Accounting and Reporting in India*. Calcutta: The World Press, 2002.
- Cerf, A. R. *Corporate Reporting and Investment Decisions*. Berkeley: University of California Press, 1961.
- Chakravorty, D. K. *Development of Corporate Accounting in India*. New Delhi: Venus Publishing House, 1994.
- Chattopadhyay, P. *Social Responsibility Accounting: Gaps in the Contemporary Approaches, in Banerjee, Bhabatosh Ed., Contemporary Issues in Accounting*. Calcutta: Indian Accounting Association Research Foundation, 1991.
- Choi, F., and G. Mueller. *International Accounting*. 2nd ed. Englewood Cliffs, N. J.: Prentice Hall, 1992.

- Dasgupta, N. *Financial Reporting in India*. New Delhi: Sultan Chand & Sons, 1977.
- Gray, S. J. and C. B. Roberts. *Hopwood: Voluntary Information Disclosure and the British Multinationals: Corporate Perceptions of Costs and Benefits*. Ed. A. G. International Pressures for Accounting Change, Prentice-Hall.
- Hornigren, C. T. *Implications for Accountants of the Uses of Financial Statements by Security Analysts*. Compustat Information Manual, Standard Statistics Co., 1970.
- Institute of Chartered Accountants of India (ICAI). *Trends in Published Accounts*. New Delhi: ICAI, 1985.
- Jaganathan, Shankar. *Corporate Disclosures: The Origin of Financial and Business Reporting - 1553-2007 A.D.* New Delhi: Routledge, 2009.
- Lal, J. *Corporate Annual Report: Theory and Practice*. New Delhi: Sterling Publishers, 1985.
- Sen, Swagata. *Segment Reporting in India*. Kolkata: Jyotsna Publishing House, 2005.
- Singhvi, S. S. "Corporate Disclosure through Annual Reports in the USA and India". Diss. Columbia University, USA, 1967.
- Vasal, V. K. *Corporate Reporting in India: Financial and Social Performance Disclosures*. New Delhi: New Century Publications, 2006.
- References - Journals**
- Banerjee, B. "Regulation of Corporate Reporting in India: Perceptions of Users – A Case Study". *Indian Journal of Accounting* 30(1999).
- Regulation of Accounting in India: Issues and a Suggested Framework". *Indian Accounting Review* 4(2000).
- Barrett, M. E. "Financial Reporting Practices: Disclosure and Comprehensiveness in an International Setting". *Journal of Accounting Research* 14(1976): 10-26.
- Belkaoui, Ahmed. "Is There a Consensus on Disclosure? The Reality Challenges Common Belief". *CA Magazine* May (1979): 44-46.
- Buzby, S. L. "Selected Items of Information and their Disclosure in Annual Reports". *The Accounting Review* 49(1974): 423-435.
- Eccles, R. G. and S. C. Mavrinac. "Improving the Corporate Disclosure Process". *Sloan Management Review* 36(1995): 11-25.
- Gray, S. J. "Statistical Information and Extensions in European Financial Disclosure". *International Journal of Accounting* Spring(1978): 27-40.
- Guthrie, J., and L. D. Parker. "Corporate Disclosure Practice: A Comparative International Analysis". *Advances in Public Interest Accounting* 3(1990): 159-75.
- Healy, P. M., and K. G. Palepu. "The Effect of Firms' Financial Disclosure Strategies on Stock Price". *Accounting Horizons* 7(1993): 1-11.
- Kang, H., and S. J. Gray. "Corporate Voluntary Disclosure Practices: a Review of Content Analysis Research". *Indian Accounting Review* 13(2009): 19-38.
- Parker, L. D., and A. Kerri. "Presenting Financial Elements of Annual Reports". *The Chartered Accountant in Australia* Dec.(1986): 50-53.
- Skogsvik, Kenth. "Conservative Accounting Principles, Equity Valuation and the Importance of Voluntary Disclosures". *British Accounting Review* 30(1998): 361-381.
- Wallman, S. M. H. "The Future of Accounting and Financial Reporting, part IV: 'Access' Accounting". *Accounting Horizons* 11(1997): 103-116.
- Watts, R. L., and J. L. Zimmerman. "Towards a Positive Theory of the Determination of Accounting Standards". *The Accounting Review* 53(1978): 112-134.

**Research Methodology
Concepts and Cases**
Ms.Rakhi Dutta

 Asst. Professor
Srusti Academy of Management
Bhubaneswar, Odisha

Manoranjan Palai

 Asst. Professor
Srusti Academy of Management
Bhubaneswar, Odisha

Author : Dr. Deepak Chawla
Dr. Neena Sondhi
Publisher: Vikas Publishing House Pvt. Ltd.
Year : 2011
Pages : 670
Price : Rs.395/-

For many of us, the term 'Research' conjures up an image of a phantom which is both invincible and unfathomable. The authors, **Dr. Deepak Chawla & Dr. Neena Sondhi** through their seminal book **Research Methodology, Concepts and Cases** have been able to address a much felt requirement of an easy to understand yet elaborate book on research methodology, which is definitely capable of keeping this phantom at bay.

The book has six sections viz. Research Process: Problem Definition, Hypothesis Formulation and Research Designs; Data Collection, Measurement and Scaling; Respondents Selection and Data Preparation; Primary Data Analysis and Interpretation; Advanced Data Analysis Techniques and Reporting Research Results.

Each section starts with brief explanations about what to expect from each of the constituent chapters. Each chapter has clear learning objectives. The writing style is very endearing. Each chapter begins with a caselet which not only makes for an interesting reading but also sets the tone for what follows in the chapter. Highlights of important concepts have been given in the margins. Equal thrust has been given on explanation and clarification of concepts and working with data. Examples used throughout the text are very contemporary and readers will easily be able to identify with them, especially people from India. Each and every minute concept has been explained in great detail which has left no room for confusion, which is a problem many a times in books on technical subjects. In-depth coverage is there in the book on advanced data analysis techniques under which the authors have clearly explained correlation and regression, factor analysis, discriminant analysis, cluster analysis and multidimensional scaling. Conjoint analysis has been explained under addendum 1.

The book has also incorporated SPSS (Statistical Package for Social Sciences) commands in keeping with the trend of using SPSS for data analysis. An introduction to the package has been given and each chapter has the relevant commands after the text.

The book will prove useful for not only people who aspire to gain knowledge for research purposes, but also students who need to study research methodology as a subject, as it has easy explanations and elaborate case studies. Teachers will find it very handy as each chapter has variety of questions, objective type, conceptual, application and cases. Answers have also been provided to the objective type questions. Questions which have already come in different Universities in MBA courses have been included which will help candidates to prepare for similar exams.

The book is a big leap forward from most of the other books available on research in India. A list of all thirty-five, end-of-chapter Indian cases given in the book, has been provided just after the contents with page numbers, so that the reader knows exactly where to look for a case on a particular preferred area/ company. A unique

feature of the book is the two comprehensive cases at the end which have questions pertaining to all chapters dealt in the book and will test at one go the entire learning from the book. Report writing which is not given much importance in several books has been explained with emphasis on each step of report writing. Sample report has also been given. Even a fringe topic, like ethics in research, has been given due attention.

The book is an absolute delight to read and even the publishers deserve a pat on their back for the impressive reader friendly layout of the book. A beautiful blend of different font styles and sizes has added to the appeal of the book. The different components of a chapter can be easily distinguished and all features which may accentuate the reading experience have been well incorporated and adequately highlighted.

We really liked going through the book and are happy to be among the early reviewers and would surely recommend it to all readers who are looking for a one stop solution for research related knowledge and clarifications. Happy Reading to all the readers of this book!

Ms. Snigdha Mohapatra

Asst. Professor
Srusti Academy of Management
Bhubaneswar, Odisha

- Alessi S M and Trollip S R (1985). *Computer-based instruction methods and development*. Englewood Cliffs, Prentice-Hall.
- Ambron S and Hooper K (1990). *Learning with interactive multimedia: developing and using multimedia tools in education*. Microsoft Press. Redmond
- American Society for Training & Development (1999). *ASTD Trainers toolkit job descriptions in workplace learning and performance*. American Society for Training & Development. Alexandria
- ANTA (Australian National Training Authority). (1999). *Training Package for Assessment and Workplace Training*. Australian Training Products, Ltd. (2004). Melbourne.
- Axtell C, Axtell S, and others. (1996). "Predicting Immediate and Longer-Term Transfer of Training." *Personnel Review* 26 (3): 201–13.
- Baker E and O'Neil H F (1994). *Technological assessment in education and training*. Hillsdale, Erlbaum.
- Baldwin T, and Ford J (1988). "Transfer of Training: A Review and Directions for Future Research." *Personnel Psychology* 41 (1): 63–105.
- Barron A E and Orwig G W (1995). *Multimedia technologies for training: An introduction*. CO: Libraries Unlimited. Englewood.
- Bartram S and Gibson B (1997). *Training needs analysis*. Gower Pub Co. Hampshire
- Beeby J M, and Rathborn S (1983) "Development Training - Using the Outdoors in Management Development", *Management Education and Development* 14 3, 170-181.
- Berrett-Koehler (1959). "Techniques for Evaluating Training Programmes." *Journal of the American Society of Training Directors* 13 (11): 3–9.
- Bramley P and Newby A (1984). "The Evaluation of Training, Part 1: Clarifying the Concept." *Journal of European Industrial Training* 8 (6): 10–16.
- Briggs G and Naylor J (1962). "The Relative Efficiency of Several Training Methods as a Function of Transfer Task Complexity." *Journal of Experimental Psychology* 64: 505–12.
- Bushnell D (1990). "Input, Process, Output: A Model for Evaluating Training." *Training and Development Journal* 44 (3): 41–43.
- Carr C (1992). *Smart training: The manager's guide to training for improved performance*. McGraw Hill, Highstown.
- Craig R L (Ed.) (1996). *The ASTD training and development handbook: A guide to human resource development* (4th ed.). McGraw-Hill.
- Dawson R (1995). "Fill This In before You Go: Under- Utilized Evaluation Sheets." *Journal of European Industrial Training*, 19 (2): 3–7.

- Dixon N (1990). "The Relationship between Trainee Responses on Participation Reaction Forms and Post-test Scores." *Human Resource Development Quarterly* 1: 129–37.
- Esterby-Smith M (1985). "Turning Course Evaluation from an End to a Means." *Personnel Management* 17 (4): 25–27.
- Fitz-Enz J (1994). "Yes, You Can Weigh Trainers' Value." *Training* 31 (7): 54–58.
- Fleishman E (1953). "Leadership Climate, Human Relations Training, and Supervisory Behavior." *Personnel Psychology* 6: 205–22.
- Fripp J (1993). *Learning through simulations: A guide to the design and the use of simulations in business and education*. McGraw-Hill.
- Gist M, Stevens C, and Bavetta A (1991). "Effects of Self-Efficacy and Post-Training Interventions on the Acquisition and Maintenance of Complex Interpersonal Skills." *Personnel Psychology* 17: 183–211.
- Gupta K (1998). *A practical guide to needs assessment*. Pfeiffer.
- Holden L and Livian Y (1992). "Does Strategic Training Policy Exist?: Some Evidence from Ten European Countries." *Personnel Review* 21 (1): 12–22.
- Holton E (1996). "The Flawed Four-Level Evaluation Model." *Human Resource Development Quarterly* 7 (1): 5–21.
- Huczynski A and Lewis J (1980). "An Empirical Study into the Learning Transfer Process in Management Training." *Journal of Management Studies* 17 (2): 227–40.
- Kaufman R, Keller J and others. (1995). "What Works and What Doesn't: Evaluation Beyond Kirkpatrick." *Performance and Instruction* 35 (2): 8–12.
- Latchem C and Lockwood C (Eds.). (1998). *Staff development in open and flexible learning*. Routledge. London
- Lawlor P and Handley P (1997). *The creative trainer: Holistic facilitation skills for accelerated learning*. McGraw-Hill.
- Lee S and Pershing J (2002). "Dimensions and Design Criteria for Developing Training Reaction Evaluations." *Human Resource Development International* 5 (2): 175–97.
- Morrison J (1991). *Training for performance: Principles of applied human learning*. Wiley.
- Nilson C (1999). *Training & development yearbook 1999 (annual)*. Prentice Hall Trade.
- Overfield K (1998). *Developing and managing organizational learning*. American Society for Training & Development. Alexandria
- Pulley M (1994). "Navigating the Evaluation Rapids." *Training & Development* 48 (9): 19–24.
- Salas E. and Cannon-Bowers J (2001). "The Science of Training: A Decade of Progress." *Annual Review of Psychology* 52: 471–99.
- Tamkin P, Yarnall J and others. (2002). "Kirkpatrick and Beyond: A Review of Models of Training Evaluation." Institute of Employment Studies, UK.
- Taschereau S (1998). *Evaluating the Impact of Training and Institutional Development: A Collaborative Approach*. World Bank. Washington, DC.
- Taylor P (2003). *How to Design a Training Course*. Continuum. London.
- Thiagarajan S (1997). *Simulation Games by Thiagi* (6th ed.). Bloomington, Thiagi.
- Thiagarajan S and Parker G M (1999). *Teamwork and teamplay: Games and activities for building and training teams*. San Francisco, Jossey-Bass.
- Torres C and Fairbanks D M (1996). *Teambuilding: The ASTD trainer's sourcebook*. McGraw-Hill. New York.
- Truelove S (1997). *Training in practice*. Blackwell Pub. Malden

Special Section

on

International Conference

on

*Competition & Competitiveness of
Global Corporate Sector (ICCC - 2011)*

Content

| | |
|---|-----|
| Study of seasonality in Bombay Stock Exchange <i>-Girija Nandini, Dr. Bishnupriya Mishra</i> | 89 |
| Developing a Model for Evaluating Corporate Governance Practices: An Empirical Study of Indian Petroleum Industry <i>- Prof. (Dr.) S. C. Bardia, Prof.(Dr.) G. K. Sharma</i> | 95 |
| Globalization: Development of International Political economy & emerging Economic Giants (BRIC & SANE) <i>- Upasana Giri</i> | 105 |
| Relationship between Marketing & Buddhism-An Analysis of Eight fold Path <i>-Nalin Abeysekera, Buddhika Hewawasam & Dr.K.S.Chandrasekar</i> | 113 |
| Service quality gap analysis in Indian Public Sector Banks <i>- Manish Yadav, Dr Rohan Rai & Dr Alok Kumar Rai</i> | 117 |
| Assessing Customers Satisfaction through Customer Satisfaction Portfolio <i>- Dr. Alok Kumar Rai</i> | 127 |
| Customer Relationship Management as A Strategic Marketing Issue in Small Businesses <i>- Dr.Bhavani.M.R</i> | 135 |
| Role of HR in Mergers & Acquisitions: A Theoretical Proposition <i>- Ms. Sambedna Jena, Dr. Chandan Kumar Sahoo</i> | 143 |
| Challenges of HR Professional as a Strategic Partner <i>- Ms. Sandhya.R</i> | 151 |
| A Workforce of One : Customising HR Practices for Optimum Performance <i>- Dr. Harsh Dwivedi, Ms. Garima Bardia</i> | 155 |
| Strategic Management of non Profit Organizations <i>- Dr. Memcha Loitongbam</i> | 161 |

Girija Nandini

Assistant Professor
Regional College of Management
Bhubaneswar

Dr. Bishnupriya Mishra

Dean
Modern Institute of Technology
and Management
Bhubaneswar

Abstract

In recent years the testing of seasonality in stock returns has become an active field of research in empirical finance and has been receiving attention from not only academic journals but also the financial press. Among the more well-known volatilities are the size effect, the month effect and the day-of-the week effect. The day of the week effect is a phenomenon that constitutes a form of anomaly of the efficient capital markets theory. According to this phenomenon, the average daily return of the market is not the same for all days of the week, as we would expect on the basis of the efficient market theory. Month of the year effect would exist if returns on a particular month are higher than other months. This paper attempts to investigate the presence of seasonal effects in the Bombay Stock exchange(BSE) through week day effect and month of the year effect . The closing price of SENSEX has been taken for 17 years, from 1993 to 2009. Variety of statistical techniques have been used to see if any seasonality is present in the Bombay Stock exchange.

Introduction

Earlier studies have found the existence of the day of the week effect not only in the USA and other developed markets but also in the emerging markets like Malaysia, Hong Kong, Turkey). For most of the western economies, (U.S.A., U.K., Canada) empirical results have shown that on Mondays the market has statistically significant negative returns while on Fridays statistically significant positive returns. In other markets such as Japan, Australia, Singapore, Turkey and France the highest negative returns appear on Tuesdays. The most satisfactory explanation that has been given for the negative returns on Mondays is that usually the most unfavorable news appears during the weekends. These unfavorable news influence the majority of the investors negatively, causing them to sell on the following Monday. The presence of calendar anomalies has been documented extensively for the last two decades in financial markets. The most common are , the month effect and the day-of-the week effect . The day of the week patterns have been investigated extensively in different markets. Studies (Cross 1973; French 1980; Keim and Stambaugh 1984; Rogalski 1984; Aggarwal and Rivoli 1989) document that the distribution of stock returns varies according to the day of the week. The average return on Monday is significantly less than the average return over the other days of the week. The day of the week regularity is not limited to the U.S. equity market. It is also documented that the day of the week regularity is present in other international equity markets (Jaffe and Westerfield 1985; Solnik and Bousquet 1990, Barone 1990, among others) and other financial markets including the futures market, treasury bill market, and bond market (Cornell 1985; Dyl and Maberly 1986). It is important to know whether there are variations in volatility of stock returns by day of the week patterns and whether a high (low) return is associated with a corresponding

Keywords

*Stock market, Seasonality,
Day of the week effect,
month of the year effect*

high (low) return for a given day. Having such knowledge may allow investors to adjust their portfolios by taking into account day of the week variations in volatility. For example, Engle (1993) argues that investors who dislike risk may adjust their portfolios by reducing their investments in those assets whose volatility is expected to increase. Finding certain patterns in volatility may be useful in several ways, including the use of predicted volatility patterns in hedging and speculative purposes and use of predicted volatility in valuation of certain assets specifically stock index options.

The presence of anomalies in international financial markets can be a clear sign that a lack of integration among these markets exists, thus investment opportunities derived from different behaviours in the generation of returns are available. Several studies have centred on relative anomalies in the seasonality of distinct financial markets of developed countries as an explanation to why there is an absence of integration between international financial markets. The growing use of daily data has led to additional research in the financial literature, specifically extending the analysis of seasonal behaviour to include the day of the week effect, the weekend effect and the month of the year effect. The financial literature on this topic has offered several justifications for these anomalies.

A common problem in the low and slow growth of small developing economies is the swallow financial sector. Financial markets play an important role in the process of economic growth and development by facilitating savings and channeling funds from investors to company. Volatility may impair the smooth functioning of the financial system and adversely affect economic performance. Similarly, stock market volatility also has a number of negative implications. A rise in stock market volatility can be interpreted as a rise in risk of equity investment and thus a shift of funds to less risky assets. This move could lead to a rise in cost of funds to firms and thus new firms might bear this effect as investors will turn to purchase of stock in larger, well known firms. While there is a general consensus on what constitutes stock market volatility and, to a lesser extent, on how to measure it, there is far less agreement on the causes of changes in stock market volatility. Some economists see the causes of volatility in the arrival of new, unanticipated information that alters expected returns on a stock. Thus, changes in market volatility would merely reflect changes in the local or global economic environment. Others claim that volatility is caused mainly by changes in trading volume practices or patterns, which in turn are driven by factors such as modifications in macroeconomic policies, shifts in investor tolerance of risk and increased uncertainty. So the study on seasonality in BSE which is the major indicator of Indian Stock Market can help forecasters and also the investors for the analysis of their investment.

Objective of the Study:

The objective of the study is to examine the seasonality in the Bombay Stock Exchange .More specifically the objective of the study are:

1. To find out the day of the week on which the BSE return is the highest and the day on which it is lowest.
2. To examine the month of the year pattern for the highest and that for the lowest market returns in BSE.
3. To study the significance of seasonality in returns across different days of the week and different months of the year.

Literature Review

There is a large number of literature on the day of the week effect and months of the year effect. In fact, studies on such stock market anomalies started since the late 1930 where Kelly (1930) revealed the existence of a Monday effect on the US markets. From thereon, researchers have documented findings in support of the low Monday returns in the US markets. Fields (1931) studied the day of the week effect and was of the opinion that the security prices declined on Saturday and this was because of the unwillingness of traders to carry their holdings over the uncertainties of a week-end which led to liquidation of long accounts. Cross (1973) using the standard and poor's 500 index showed that the Monday returns were negative and the Friday returns were very high in the U.S stock market. Officer (1975) detected the presence of seasonality in Australian stocks market. In fact, according to French (1980), firms intentionally delay announcements of bad news until the weekend in order to prevent the market from disruption. Moreover, some researchers⁵ have documented on a settlement period hypothesis to explain day of the week effects. In all markets, there is a time lag between payment and trading of securities. Lakonishok and Levy (1982) also in their studies inferred that no particular day of the week effect was found out in the U.S.A stock market after the period 1974.

Keim and Stambaugh (1984) studied the day of the week effect for the period 1928 to 1982 and found out that Monday returns were consistently negative but gained no significant differences in the average returns in the later period after 1973. Smirlock and Starks (1986) found that aside from positive first-hour returns, hourly returns on Mondays were negative and lower than their counterparts on other trading days. Santestanes (1986) using the Madrid Stock Exchange Index and the daily returns of 40 samples studied the seasonality for the period January 1979 to December 1983 and revealed that there was no confirmation of presence of the day of the week effect in the Spanish market. Flannery and Protopapadakis (1988) investigated for the period 1976 to 1984 and observed that intra-week seasonality particularly negative Monday returns still continued to be significant. Damodaran (1989) in his study had tried to explain the Week-end effect on the basis of information release hypothesis which stated that "Firms have a tendency to release adverse information after trading closes for the Week-end". Solnik and Bousquet (1990) test day of week effect for Paris Bourse, reporting a strong

and persistent negative return on Tuesday, which is in line with studies on Australia and Japan. Chaudhury (1991) studied the seasonally in share returns particularly the day of the week effect in the Indian context for the period June 1988 to January 1991. He observed that return on Monday was negative. But what was more interesting to note that Tuesday's mean return was having a still higher negative value. Tang (1993) studied the day of the week effect for the period January 1980 to December 1989 by taking Dow Jones Industrial Average and observed that the Monday effect existed for the said period. Lin and Lim (2001) argued that there might be a link between the US Monday seasonal and the Asia-Pacific DOW effect as they are one -day out of phase due to their different time zones. Moreover, Nath and Dalvi (2004) examined the week day effect in the Indian equity market and found evidence of Monday and Friday effects before the rolling settlement in 2002. Bodla and Jindal (2006) studied Indian and US market and found evidence of seasonality. Kumari and Mahendra (2006) studied the day of the week effect using data from 1979 to 1998 on BSE and NSE. They reported negative returns on Tuesday in the Indian stock market. Moreover, they found returns on Monday were higher compared to the returns of other days in BSE and NSE. Choudhary and Choudhary (2008) studied 20 stock markets of the world using parametric as well as non-parametric tests. He reported that out of twenty, eighteen markets showed significant positive return on various day other than Monday.

Among the pioneering works, Wachtel (1942) documented the January effect and found that the Dow-Jones Industrial Average from 1927 to 1942 showed frequent bullish tendencies from January to December. Kinney (1976) whose study was based on the New York Stock Exchange showed that the average returns were 3.5% in January compared to 0.5% for other months for the period 1904 to 1974. Banz (1981) reported that returns of small firms were significantly higher in January than those with large market values, James and Edmister (1981) had also observed that there existed the January effect in the stock market. Keirn (1983) noted that daily abnormal return distributions in January have large means relative to the remaining 11 months. Lakonishok and Smidt (1984) had also confirmed the January effect in their study. Berges, Mc Connell and Sclarbaum (1984) investigated the January effect in Canada stock market for the period 1951-80 and had a strong evidence in favour of January effect Jones, Pearce and Wilson (1987) tested the presence of January effect over roughly 50 years. They also found out that January effect existed prior to income taxation. Additionally, Bhabra, Dhillon and Ramirez (1999) found evidence of excess trading activities in the month of December for the period 1980 to 1994 on the NYSE/AMEX monthly returns and associated this excess trading to tax related changes. Easterday and Stephan (2006), re-examined the joint small firm/January effect proposed by Keim (1983), over a 62-year period of study but break it into three distinct sub-periods: 1963-1979 (the same years as in Keim 1983), 1943-1962 and 1980-2004. They found that during

the Keim period (1963-79), the returns in January for small firms were significantly higher to other months but for the and post Keim period the returns were remarkably lower.

Bombay Stock Exchange – an Overview

The stock markets in India have an important role to play in the building of a real shareholders democracy. A market, which deals in securities that have been already issued by companies, is known as the secondary market or stock Market. For the efficient growth of the market, a Sound secondary market is an essential requirement. There are currently 23 recognized stock exchange in India of which 4 are national and 19 are regional exchanges. The four national level exchanges are Bombay Stock Exchange (BSE), National Stock Exchange (NSE), Over the Counter Exchange of India (OTCEI) and Inter-connected Stock Exchange of India (ISE). All these exchanges operate with due recognition from the government under the Securities & Contracts (Regulations) Act, 1956. The overall development and regulation of the securities market was entrusted to the Securities and Exchanges Board of India (SEBI) by an act of Parliament in 1992. There are stringent regulations to ensure that directors of joint stock companies keep their shareholders fully informed of the affairs of the company.

The first stock exchange in India was started in Bombay in 1875. BSE was established in 1875 under the name of "The Native Share & Stock brokers Association". It is the oldest Stock exchange in Asia. In March 1995, BSE has introduced screen based trading called BOLT (BSE on-line trading). The bolt is designed to get best bids and offers from jobbers' book as well as the best buy and sell orders from the order book. Slowly the network is being extended to other cities too. Now the BOLT has a nation wide network. Trading work stations are connected with the main computer at Mumbai through Wide Area Network (WAN). The capacity of the tandem hardware of BOLT is 5,00,000 trades per day (in 6 hours i.e from 9:30 a.m to 3:30 p.m).

The most visible and tracked parameter of any stock market is the movement of the stock index. This is just a number that helps to measure the movement of the market against a benchmark index, taken as 100, on a base year. Most stock indices attempt to be proxies for the market they exist in. Each stock exchange has a flagship index like the Sensex of BSE or the Nifty of NSE. An index is calculated daily by tracking the share prices of its constituent member companies. For example, the Sensex is an index comprising 30 component stocks representing a sample of large, well established and leading companies while the Nifty consists of 50 company stocks. Sensex and Nifty are calculated using market capitalization weighted method. Every index is associated with a base year. For example, the base date for Sensex is 1st April 1979 and for the Nifty is 1st April 1995. This means that the Sensex and Nifty were assumed to be 100 on these respective base dates. It may be interesting to know that Sensex actually came into existence only on 1st January, 1986, when the

index was computed at 598.53. In fact, the base date does not have any significance beyond the introduction date, since for all the subsequent days the index is calculated by comparing the previous day's value.

Research Methodology

The data for this study consists of BSE that comprise of daily closing price of SENSEX for the period 1993-2009. Various statistical analysis has been done and the P value is used to test the significance. Daily stock prices have been converted to daily returns. The present study uses the logarithmic difference of prices of two successive periods for the calculation of rate of return. The return has been calculated on the basis of the model:

$$r_t = \ln(I_t/I_{t-1}) \times 100$$

where

- r_t = Return on equity price
- \ln = Natural logarithm
- I_t = The closing index of BSE on a day, month as the case may be
- I_{t-1} = The closing index of BSE on the preceding day, month as the case may be

(i) Day of the week effect

Hypothesis (Ho): $a_1 = a_2 = a_3 = a_4 = a_5$

Where a_1 to a_5 are the mean return for each day-of-the-week

If this hypothesis is rejected, it would imply that the mean daily returns are significantly different from each other, i.e. there is seasonality in returns across different days of the week.

(i) Month of the year effect

Hypothesis (Ho):

$$b_1 = b_2 = b_3 = b_4 = b_5 = b_6 = b_7 = b_8 = b_9 = b_{10} = b_{11} = b_{12}$$

Where b_1 to b_{12} are the mean return for each month of the year .

If this hypothesis is rejected, it would imply that the mean monthly returns are significantly different from each other, i.e. there is seasonality in returns across different months of the year.

Analysis of Data and Results

The table 1 below provides summary statistics for daily Nifty returns across the days of the week for 17 years from 1993-2009.

TABLE I
SENSEX - DAY OF THE WEEK EFFECT

It is observed from the Table No. 1. that the mean returns for Tuesday is the lowest. The highest average return is observed on the Wednesday. The standard deviation as a measure of volatility is found to be the highest on Monday and the lowest on Tuesday. The return distributions are positively skewed on Monday and Wednesday. And all other days it is negatively skewed. The Wednesdays return distribution is more skewed than of the other days. For normal curve the value of kurtosis is 3, which is called as Mesokurtic. When the value is more than 3, the curve is said to be Leptokurtic. When it is less than 3, the curve is called as platykurtic. Leptokurtic distribution means sharper than a normal distribution, with values concentrated around the mean and thicker tails. This means high probability for extreme values. So here the return distributions are observed to be leptokurtic by nature on Monday, Tuesday and Friday. Platykurtic distribution is flatter than a normal distribution with a wider peak. The probability for extreme values is less than for a normal distribution, and the values are wider spread around the mean. So here the return

distributions are observed to be platykurtic by nature on Wednesday and Thursday.

P-value is a measure of how much evidence you have against the null hypothesis. The smaller the p-value, the more evidence you have. One may combine the p-value with the significance level to make decision on a given test of hypothesis. In such a case, if the p-value is less than some threshold (usually .05, sometimes a bit larger like 0.1 or a bit smaller like .01) then you reject the null hypothesis. Here the calculated P value is more than .05. So the variation in returns across different days of the week in BSE is not significant at the 5% level, i.e. the null hypothesis is accepted. This suggest that no evidence in favour of the day of the week effect. The results are in sharp contrasts with the findings of Gibbons and Hess (1981), Mills and Coutts (1995), and Arsad and Coutts (1997) where the significant day of the weeks effects were noted in the US and UK markets.

Table II
Sensex - month of the year effect

| | Jan | Feb | Mar | Apr | May | Jun | July | Aug | Sep | Oct | Nov | Dec |
|--------------------|---------|--------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------|
| Mean | 0.4116 | 2.0219 | -3.1177 | -3.1177 | 0.9731 | 1.1430 | 1.7884 | 2.2337 | 0.1746 | -2.6499 | 2.4317 | 4.2603 |
| Standard Deviation | 8.4459 | 6.0470 | 8.2969 | 8.2969 | 10.6677 | 8.1502 | 6.0267 | 6.4971 | 8.2995 | 9.2211 | 8.5255 | 4.3649 |
| Kurtosis | -0.1169 | 0.0796 | -0.9366 | -0.9366 | 0.5097 | 1.8746 | -0.3806 | -0.3162 | -1.2155 | 2.3953 | -0.4570 | 1.4863 |
| Skewness | 0.1088 | 0.3053 | 0.0805 | 0.0805 | 0.4416 | -1.1225 | -0.8695 | -0.3082 | -0.3461 | -0.7944 | -0.1321 | 0.1687 |
| Observations | 16 | 17 | 17 | 17 | 17 | 17 | 17 | 17 | 17 | 17 | 17 | 17 |
| P-value | 0.77 | 0.46 | 0.59 | 0.86 | 0.46 | 0.52 | 0.95 | 0.79 | 0.82 | 0.57 | 0.66 | 0.35 |

It is observed from the Table No. 2. that the mean returns are negative for the month of March, April and October. The mean returns of March and April is found to be the lowest and that for the December is the highest. The standard deviation which measures the volatility of share returns is found to be the highest in the month of May followed by October. The least fluctuation in share returns is in December. The skewness of return distribution is found to be the highest in the month of May. Here all the months have a platykurtic return distributions, i.e the probability for extreme values is less than for a normal distribution, and the values are wider spread around the mean. The calculated P value is more than .05. So the variation in returns across different month of the year in BSE is not significant at the 5% level, i.e. the null hypothesis is accepted. This suggest that no evidence in favour of the month of the year effect. The results, on overall, do not seem to have a strong support in the month of the year seasonality. It seems that returns are not more or less random, consistent with the efficient market hypothesis.

Conclusion

This paper has investigated day of the week effects in the BSE for 17years from 1993 to 2009. The results, on overall indicate no significant presence of the day of the week effect for the whole period. This paper also investigated there is no existence of the month of the year effect in BSE. This analysis heavily supports the predictions of efficient market hypothesis that the returns are not dependent on all the months of the year. These above results undoubtedly call for further research on the presence of a week day effect and month of the year effect based on individual securities.

References

Aggarwal R. y P. Rivoli (1989): "Seasonal and day of the week effect in four emerging stockmarkets", *Financial Review*, 24, pp. 541-550.

Athanassakos, G. y M.J. Robinson (1994): "The day of the week anomaly: The Toronto stock exchange experience", *Journal of Business Finance and Accounting*, 21, pp. 833-856.

Baillie R.T. y R.P. DeGennaro (1990): "Stock Returns and Volatility". *Journal of Financial and Quantitative Analysis*, 25, pp. 203-214.

Barone, E. (1990): "The Italian stock market: Efficiency and calendar anomalies", *Journal of Banking and Finance*, 14, pp. 483-510.

Campbell, J. y L. Hentschel (1992): "No news is good news: An asymmetric model of changing volatility in stock returns", *Journal of Financial Economics*, 31, pp. 281-318.

Chang, E., M. Pinegar, y R. Ravichandran (1993): "International evidence on the robustness of the dayofthe-week effect", *Journal of Financial and Quantitative Analysis*, 28, pp. 497-513.

Condoyanni, I., J. O'Hanlon, y C. Ward (1987): "Day of the Week Effects on Stock Returns: International Evidence", *Journal of Business Finance and Accounting*, 14, 2, pp. 159-174.

Cross, F. (1973): "The behavior of stock prices on Fridays and Mondays", *Financial Analyst Journal*, November-December, pp. 67-69.

Dubois, M. y P. Louvet (1996): "The Day of the Week Effect: International Evidence", *Journal of Banking and Finance*, 20, pp. 1463-1484.

Easton, S. y R. Faff (1994): "An Examination of the Robustness of the Day of the week Effect in Australia", *Applied Financial Economics*, 4, pp. 99-110.

Engle, R.F. (1982): "Autoregressive Conditional Heteroskedasticity with Estimates of the Variance of United Kingdom Inflation", *Econometrica*, 50, pp. 987-1007.

French, K. (1980): "Stock returns and the weekend effect", *Journal of Financial Economics*, 8, pp. 55-69.

French, K., G. W. Schwert y R. Stambaugh (1987): "Expected Stock Returns and Volatility", *Journal of Financial Economics*, 19, pp. 3-29.

Gibbons, M. y P. Hess. (1981): "Day of the week effects and asset returns", *Journal of Business*, 54, pp. 579-596.

Glosten, L. R., R. Jagannathan y D. E. Runkle (1993): "On the relation between the expected value and the volatility of the nominal excess return on stocks", *Journal of Finance*, 48, pp.

-
- Harvey, C. (1995): "Predictable Risk and Returns in Emerging Markets", *Review of Financial Studies*, 8, 3, pp. 773-816.
- Jacquillat, B. y B. Solnik (1978): "Multinational are Poor Tools for Diversification", *Journal of Portfolio Management*, 4, 2, Winter.
- Stambaugh (1984): "A further investigation of weekend effects in stock returns", *Journal of Finance*, 39, pp. 819-840.
- Kim, C.K. y J. Park (1994): "Holidays Effects and Stock Returns: Further Evidence", *Journal of Financial and Quantitative Analysis*, 1, pp. 145-157.
- Kyimaz, H. y H. Berument (2001): "The day of the week effect on Stock Market Volatility", *Journal of Economics and Finance*, 25, 2, pp. 181-193.
- Lakonishok, J. y M. Levi (1982): "Weekend effect in stock return: A note", *Journal of Finance*, 37, pp. 883- 889.
- Nelson, D.B. (1991): "Conditional Heteroskedasticity in Asset Returns: A New Approach", *Econometrica*, 59, pp. 347-370.
- Osborne, M. (1962): "Periodic structure in the brownian motion of stock prices", *Operations*
- Theodossiou, P. y U. Lee (1995): "Relationship between volatility and expected returns across international stock markets", *Journal of Business Finance & Accounting*, 22, pp.
- Wang, K., Li, Y. and Erickson, J. (1997), "A new look at the Monday effect", *Journal of Finance*, Vol. 52 No. 5, pp. 2171-86.

Developing a Model for Evaluating Corporate Governance Practices: An Empirical Study of Indian Petroleum Industry

Prof. (Dr.) S. C. Bardia

Professor
Department of Accountancy &
Business Statistics
University of Rajasthan
Jaipur, Rajasthan, India

Prof.(Dr.) G. K. Sharma

Principal
Srusti Academy of Management
Bhubaneswar
Orissa

Abstract

Executive Summary: Corporate governance extends beyond corporate law. Its fundamental objective is not mere fulfillment of the requirements of law but in ensuring commitment of the board of directors in managing the company in a transparent manner for maximizing stakeholders value. The real onus of achieving desired levels of corporate governance lies with corporates themselves and not in external measures. This research paper gives a frame work for evaluating corporate governance practices pursued by corporates. The paper also examines the CG practices adopted by Indian Petroleum Industry with special focus on two leading Indian Petroleum companies for the years 2004-05 to 2008-09.

Introduction and objectives of corporate governance

Corporate governance deals with laws, procedures, practices and implicit rules that determine a company's ability to take informed managerial decisions vis-à-vis its claimants – in particular, its shareholders, creditors, customers, the State and employees.

Good governance is integral to the very existence of a company. It ensures company's commitment to higher growth and profits. Mainly, the object of good corporate governance is : maximizing long term shareholder value.

It seeks to achieve following objectives :

- i. A properly structured board capable of taking independent and objective decisions is in place at the helm of affairs ;
- ii. The board is balanced as regards the representation of adequate number of non executive and independent directors who will take care of the interests and well being of all the stakeholders ;
- iii. The board adopts transparent procedures and practices and arrives at decisions on the strength of adequate information ;
- iv. The board has an effective machinery to sub serve the concerns of stakeholders;
- v. The board keeps the shareholders informed of relevant developments impacting the company ;
- vi. The board effectively and regularly monitors the functioning of the management team ; and

Keywords

*Corporate Governance
Practices, Indian
Petroleum Industry,
Stakeholders' Value*

- vii. The board remains in effective control of the affairs of the company at all times.

Corporate governance has emerged as an important discipline in its own right, bringing together contributions from accounting, finance, law and management. Corporate governance now offers a comprehensive, interdisciplinary approach to the management and control of companies. Corporate professionals of today and tomorrow must imbibe in themselves the evolving principles of good corporate governance across the globe on a continual basis. Excellence can be bettered only through continuous study, research and interaction in theory and in practice of good corporate governance.

Scope, Methodology and Objectives of the Study

Scope of the Study

The study comprises of two renowned companies of Indian Petroleum industry namely Oil and Natural Gas Corporation Ltd. (ONGC) and Bharat Petroleum Corporation Ltd. (BPCL) Both the companies are listed on Bombay stock exchange (BSE) & National stock Exchange (NSE). The entire study is based on the published annual report for the years 2004-05 to 2008-09.

Objectives of the Study

1. to set certain standards of corporate governance viz. evaluation criteria from out of mandatory and non-mandatory requirements of Listing Agreement, or, otherwise ;
2. to observe and find out the extent of compliance by the companies under consideration (viz. ONGC and BPCL) of such criteria ;
3. to suggest corrective actions and improvements, if any, required in compliance by the companies under consideration beyond what is contemplated as 'mandatory requirements'.

Significance and Relevance

Significance : Everywhere the shareholders are re-examining their relationships with company bosses – what is known as their system of 'corporate governance'. Every country has its own, distinct brand of corporate governance, reflecting its legal, regulatory and tax regimes. The problem of how to make bosses accountable has been around ever since the public limited company was invented in the 19th century, for the first time separating the owners of firms from the managers who run them....”

Governance has two facets : fulfilling responsibilities and performing roles. Responsibilities are what aspects of governance, the substantive issues and the matters to which the board must attend. Roles are the how aspect, the sets of activities the board must perform. Together, responsibilities and roles specify the essence of the verb to govern. Mere compliance with mandatory requirements doesn't and cannot amount to corporate governance, as the same is ensured merely with a view to maintain “listed

status” of the company. Hence, compliance with corporate governance practices beyond such mandatory requirements shall amount to 'compliance in true spirit'. Hence, this study to make an attempt to evaluate the compliance with corporate governance practices beyond what is contemplated as 'mandatory requirements'.

Relevance : This study deals with the most talked topic of the day i.e. Corporate Governance, which is not only contemporary and modern in nature, but also important for the large number of people of India who are the stakeholders in various companies. By analyzing the actual compliance with corporate governance in India, this study will ensure whether the two Indian companies have actually brought the theory and principles of corporate governance in actual practice.

Data Collection :

1. Sources of Data collection: For the purposes of this study, the secondary data viz. the financial statements published by the companies have been considered.
2. Tools of data collection: For the purpose of collecting the annual reports of the various companies covered under this study, their websites have been referred.

Research Methodology

- ♦ Identifying mandatory and other requirements of CG (not all);
- ♦ Translating them into marking/scoring scheme ;
- ♦ Allotting Marks to criteria based on its importance ;
- ♦ Collecting Actual Data/position from Annual Reports ;
- ♦ Awarding marks based on extent of compliance in that criteria ;
- ♦ Assigning a Grade based on total score ;
- ♦ Hypothesis testing as to compliance with 70% benchmark and inter-company differences ;
- ♦ Enlisting significant finding/observations ; and
- ♦ Giving suggestions for further improvement.

Limitations of the Study :

- ♦ The study is limited to information available in the published annual report of the two selected companies over the period of 5-years.
- ♦ While the 5-year data may be taken representative of the corporate governance scenario within the company, however, the compliance by the selected companies may not be representative of corporate governance compliance in general.

Detailed criteria for evaluation with importance of each criteria considered for this study

I. Board & its composition :

Board composition is one of the most important determinants of board effectiveness. A board should have a mix of inside and independent directors with a variety

of experience and core competence. An aspect of board structure which is fundamental but is very less visited is that of the board size. Board size is also an important determinant of board effectiveness. The size should be large enough to secure sufficient expertise on the board, but not so large that productive discussion is impossible.

It covers the following four aspects -

No. of non-executive directors on the Board :

(a) Legal requirement : As per **Clause 49 I(A)(i)**, the Board of directors of the company shall have an optimum combination of executive and non-executive directors with not less than fifty percent of the board of directors comprising of non-executive directors.

(b) Role and Importance : The Non-executive directors are not directly engaged in the execution of operations. They act as invigilators, who keep vigilance of the work done by the executive directors.

Hence, their percentage in the Board has been considered for evaluation and total marks allotted to this point are : 5 marks.

No. of independent directors on the Board :

(a) Legal requirement : As per **Clause 49 I(A)(ii)**, where the chairman of the board is a non-executive director, at least one-third of the board should comprise of independent directors and in case he is an executive director, at least half of the board should comprise of independent directors.

(b) Independent Director's Meaning : As per Clause 49 of the Listing Agreements an 'independent director' shall mean non-executive director of the company who:

- ♦ apart from receiving director's remuneration, does not have any material pecuniary relationships or transactions with the company, its promoters, its senior management or its holding company, its subsidiaries and associated companies;
- ♦ is not related to promoters or management at the board level or at one level below the board;
- ♦ has not been an executive of the company in the immediately preceding three financial years;
- ♦ is not a partner or an executive or was not partner or an executive during the preceding three years, of any of the following :
 1. the statutory audit firm or the internal audit firm that is associated with the company, and
 2. the legal firm(s) and consulting firm(s) that have a material association with the company.
- ♦ is not a supplier, service provider or customer or a lessor or lessee of the company which may affect independence of the director; and
- ♦ is not a substantial shareholder of the company, i.e. owning two percent or more of the block of voting shares.

[Institutional directors on the boards of companies shall be considered as independent directors whether the institution is an investing institution or a lending institution.]

(c) Role and Importance : Since the independent directors have no personal interest in the functioning of the company, they can take care of the shareholders' interest in a better manner.

Hence, their percentage in the Board has been considered for evaluation and total marks allotted to this point are : 10 marks.

No. of independent directors (exclusive of nominee directors) on the board :

(a) Legal requirement : No legal requirement ;

(b) Role and Importance : The meaning of Independent Director, as aforesaid, includes within its ambit the 'nominee directors' i.e. the directors appointed by lenders/ financial institutions. But, in our view, such directors cannot be considered as independent directors in true sense. They are, in fact, appointed by lender/financial institutions, who, prima facie, have first interest in the sum lent by them. Hence, such directors cannot be considered to fully emphasize on shareholders' interest; not, even in part, the interest of other parties.

Hence, percentage in the Board has been considered for evaluation and total marks allotted to this point are : 10 marks.

Board Qualification :

(a) Legal requirement : No legal requirement

(b) Role and Importance : Only a qualified board can take informed and dynamic decisions. The qualification has been considered only in the perspective of 'educational qualification'; the 'experience' could not be considered in view of non-disclosure of such information in most of the cases.

Hence, percentage in the Board has been considered for evaluation and total marks allotted to this point are : 10 marks.

Other Provisions as to Board and Directors

1. Attendance of Non-Independent Directors in the Board Meetings

(a) Legal requirement : No legal requirement (The Companies Act only provides that no director should absent himself from three consecutive board meetings without first taking the leave from the Board).

(b) Role and Importance : The Directors, who are charged with governance, should not absent themselves when called upon to render their advice in decision-making. They should be well-informed of views of others. They should be able to give their opinion, get their objections/reservations, etc. recorded. Hence, attending the Board meetings is a must.

Hence, the same has been considered for evaluation and total marks allotted to this point are : 5 marks.

Attendance of Independent Directors in the Board Meetings

- (a) Legal requirement : No legal requirement (The Companies Act only provides that no director should absent himself from three consecutive board meetings without first taking the leave from the Board).
- (b) Role and Importance : The Directors, who are charged with governance, should not absent themselves when called upon to render their advice in decision-making. They should be well-informed of views of others. They should be able to give their opinion, get their objections/reservations, etc. recorded. Hence, attending the Board meetings is a must. The same becomes all the more important and relevant in case of independent directors, who are appointed only for the purpose of safeguarding the interests of the company.

Hence, the same has been considered for evaluation and total marks allotted to this point are : 10 marks.

Other Directorships and Committee-Memberships of Directors

- (a) Legal requirement : As per **Clause 49 I(C)(ii)** a director shall not be a member in more than 10 committees and act as chairman of more than 5 committees across all companies in which he is a director. Furthermore it should be a mandatory annual requirement for every director to inform the company about the committee positions he occupies in other companies and notify changes as and when they take place.
- (b) Role and Importance : Restriction on the number of other directorships and committee memberships is necessary with a view to ensure that the concerned director pays more and focused attention over his job in the company under consideration.

Hence, the same has been considered for evaluation and total marks allotted to this point are : 10 marks.

Committees of the Board

1. Whether various committees, as mandatory required, formed and whether membership and chairmanship of all the committees disclosed ?

- (a) Legal requirement : Formation of audit committee, shareholders' grievance committee and remuneration committee are required under the law.
- (b) Role and Importance : This criteria is compliance based.

The same has been considered for evaluation and total marks allotted to this point are : 2 marks, which will be allotted as per observation.

Audit Committee :

- (a) Legal requirement :

- i. Composition : As per Clause 49 II(A)(i) the audit committee shall have minimum three directors as members. Two-third of the members of audit committee shall be independent directors.
- ii. Attendance : As per Clause 49(B) the audit committee should meet at least four times in a year & not more than four months shall elapse between two meetings. The quorum shall be either two members or one third of the members of the audit committee whichever is greater, but there should be minimum of two independent members present.
- iii. Qualification : As per Clause 49 II(A)(ii) all members of audit committee shall be financially literate and at least one member shall have accounting or related financial management expertise.
- iv. Chairman : As per Clause 49 II(A)(iii) the chairman of audit committee shall be an independent director.

- (b) Role and Importance : A key element in the corporate governance process of any organization is its audit committee. The battle for financial statement integrity and reliability depends on balancing the pressures of multiple stakeholders, including management, regulators, investors & the public interest.

This committee is responsible for overseeing the company's financial reporting process, reviewing the quarterly/half-yearly/annual financial statements, reviewing with the management on the financial statements and adequacy of internal audit function, recommending the appointment/re-appointment of statutory auditors and fixation of audit fees, reviewing the significant internal audit findings/related party transactions, reviewing the Management Discussion and Analysis of financial condition and result of operations and also statutory compliance issues.

The committee acts as a link between the management, external and internal auditors and the board of directors of the company.

- (c) Aspects covered : The following three aspects have been considered for evaluation under this Study -

- i. No. of independent directors : 5 marks
- ii. Attendance of the member-directors in the meetings of audit committee : 10 marks
- iii. Qualification of the members of the Audit Committee : 10 marks

Shareholders'/Investors' Grievances Committee :

- (a) Legal requirement, if any in respect of the following three aspects considered :

- i. Composition : As per Clause 49(IV)(G)(iii) a board committee under chairmanship of a non-executive director shall be formed to specifically look into the redressal of shareholder and investors complaints like transfer of shares, non receipt of balance sheet, non receipt of declared dividends, etc.
- ii. Attendance : No legal requirement
- iii. Ratio of disposal of complaints : No legal requirement

(b) Role and Importance : Another board committee known as Shareholder's/ Investors' Grievance specifically looks into the redressal of shareholder and investor complaints like transfer of shares, non-receipt of balance sheet, non receipt of declared dividends, etc. Hence, the same has been considered for the purpose of evaluation of corporate governance compliance. TOTAL MARKS allotted to this point are : 5 + 5 + 3 = 13 marks.

Other aspects

a. **Laying down of code of conduct on the website and declaration of compliance with the code by the CEO in the annual report - 3 MARKS** : As per **Clause 49 I(D)(i)** the board shall lay down a code of conduct for all board members and senior management of the company. The code of conduct shall be posted on the website of the company. As per **Clause 49 I(D)(ii)** all board members and senior management personnel shall affirm compliance with the code on an annual basis. The annual report of the company shall contain a declaration to this effect signed by the CEO.

b. **Compliance with Accounting Standards - 3 MARKS** : As per Clause 49 IV(B) the fact that accounting standard has been followed or if not then the reasons for the same, shall be disclosed in the annual report. The Auditors also disclose the compliance with the Accounting Standards. The compliance with the Accounting Standards is necessary to ensure fairness in the accounting data.

c. **In case any new director is appointed or any existing director is reappointed, then, whether the company has complied with requirements of clause 49 - 3 MARKS** : As per Clause 49 IV(G)(i) in case of appointment of a new director or re-appointment of a director the shareholders must be provided with the following information :

- A brief resume of the director;
- Nature of his expertise in specific functional areas;
- Names of companies in which the person also holds directorship & membership of committees; and
- Shareholding of non-executive directors.

These information make the investors informed about the goodness and quality of their representation on the Board.

Presence at AGM - 5 MARKS : The chairman of the audit committee is required to be present at the AGM. presence of directors at the AGM is necessary to ensure that those charged with governance are made accountable to the owners of the company. They should face the queries of the shareholders. Hence, this point has also been included for the purpose of this Study.

Whether proper disclosure with reference to remuneration of directors has been made - 3 MARKS

: As per Clause 49 IV(E) -

- a. all pecuniary relationship or transactions of the non-executive director's vis-à-vis the company shall be disclosed in the annual report.
- b. disclosure regarding all elements of remuneration package, fixed component, incentives, service contracts, etc.
- c. criteria for making payment
- d. disclose the number of shares held by non-executive directors.

This information brings about objectivity in payment of remuneration.

Disclosure of material related party transactions - 2 MARKS

: As per Clause 49 IV(A) a statement of summary form of transactions with related parties in the ordinary course of business shall be placed periodically before the audit committee. Details of material individual transactions with related parties that may have potential conflict with the interests of company at large, shall be disclosed. This avoids creation of vested interests and siphoning of the company's funds in the hands of those having control over them.

Whistle Blowing Policy - 3 MARKS : As per the non-mandatory requirement, the company may establish a mechanism for employees to report to the management concerns about unethical behaviour, actual or suspected fraud or violation of the company's code of conduct or ethics policy. This mechanism could also provide for adequate safeguards against victimization of employees who avail of the mechanism & also provide for direct access to the chairman of the audit committee in exceptional cases. Once established, the existence of the mechanism may be appropriately communicated within the organization.

Whether any awards received - 3 MARKS : No legal requirement under Clause 49 of Listing agreement. However, evaluation by others has been considered to a very limited extent here. Only awards in the field of "Financial Reporting", or "Corporate Governance", or, "Corporate Social Responsibility" and the like, only, have been considered for the purposes of this Study and, that too, to a very limited extent.

Various criteria for evaluation at a glance:

- Board and Its Composition 35 marks
 - Board Attendance & Directorships 25 marks
 - Committees of the Board 40 marks
 - Other Aspects of CG 25 marks
- Total 125 marks**

GRADES

(Based on % of Total Score out of 125)

| <i>Percentage</i> | <i>Grade</i> |
|-------------------|--------------|
| Above 80% | A+ |
| 70% - 80% | A |
| 60% - 70% | B+ |
| 50% - 60% | B |
| Below 50% | C |

PART-IV:

Marks actually scored by ONGC and BPCL

Marks scored by ONGC

| Year | C-1 (35 marks) | C-2 (25 marks) | C-3 (40 marks) | C-4 (25 marks) | Total (125 marks) |
|-------------|-----------------------|-----------------------|-----------------------|-----------------------|--------------------------|
| 2004-05 | 9 | 18 | 27 | 17 | 71 |
| 2005-06 | 10 | 16 | 27 | 20 | 73 |
| 2006-07 | 12 | 19 | 25 | 23 | 79 |
| 2007-08 | 10 | 19 | 20 | 21 | 70 |
| 2008-09 | 14 | 19 | 24 | 20 | 77 |

Marks scored by BPCL

| Year | C-1 (35 marks) | C-2 (25 marks) | C-3 (40 marks) | C-4 (25 marks) | Total (125 marks) |
|-------------|-----------------------|-----------------------|-----------------------|-----------------------|--------------------------|
| 2004-05 | 15 | 19 | 29 | 20 | 83 |
| 2005-06 | 13 | 19 | 28 | 19 | 79 |
| 2006-07 | 13 | 19 | 29 | 19 | 80 |
| 2007-08 | 15 | 23 | 29 | 19 | 86 |
| 2008-09 | 15 | 21 | 29 | 20 | 85 |

**Summarized Total Scores out of 125 marks
(with Percent and Grades)**

| Year | ONGC | | | BPCL | | |
|-------------|--------------|----------|--------------|--------------|----------|--------------|
| | Score | % | Grade | Score | % | Grade |
| 2004-05 | 71 | 56.80% | B | 83 | 66.40% | B+ |
| 2005-06 | 73 | 58.40% | B | 79 | 63.20% | B+ |
| 2006-07 | 79 | 63.20% | B+ | 80 | 64.00% | B+ |
| 2007-08 | 70 | 56.00% | B | 86 | 68.80% | B+ |
| 2008-09 | 77 | 61.60% | B+ | 85 | 68.00% | B+ |

PART-V: Significant Findings

Significant Findings of ONGC

- **In 3 years (2005-06 to 2007-08), the ONGC had not complied with mandatory requirement of non-executive directors on the Board.**
- In all 5 years (2004-05 to 2008-09), ONGC had not complied with the mandatory requirement of independent on the Board.
- Qualification of all the Directors on the Board has never been disclosed separately in the Annual reports
- Average Attendance of Directors in the Board Meetings is around 85% over a period of 5 years
- The directors hold only a few directorships elsewhere, thus, increasing exclusivity & commitment of the directors
- The Audit committee has only one expert in finance and accounts, as required mandatorily. The others are found to be non-finance persons.
- The investors' complaints have been duly disposed of over the years.
- Majority of the Directors have not attended the AGM held in 2007-08 and 2008-09.
- Even though all mandatory requirements have not been complied with in all the years, the company has received CG awards

Significant findings of BPCL

- **In all 5 years (2004-05 to 2008-09), BPCL had not complied with the mandatory requirement of independent directors on the Board.**
- Qualification of all the Directors on the Board has been duly disclosed in Annual report in all years
- Average Attendance of Directors in the Board Meetings is around 85% over a period of 5 years
- The directors hold only a few directorships elsewhere, thus, increasing exclusivity & commitment of the directors
- The Audit committee has only one expert in finance and accounts, as required mandatory. The others are found to be non-finance persons.
- The investors' complaints have been duly disposed of over the years.
- Majority of Directors regularly attend the AGM
- BPCL doesn't have any whistle blowing policy even now.
- Even though all mandatory requirements have not been complied with in all the years, the company has received CG awards

PART-VI: Testing of Hypothesis: t-test t - test for compliance with 70% Benchmark (set for 'A' Grade)

| Particulars | Statistical Notation | ONGC | BPCL |
|--|----------------------|-----------------|-----------------|
| Average Score over 5-year period | X | 74 | 82.6 |
| 70% Ideal Score or Population Mean | U | 87.5 | 87.5 |
| Standard Deviation in Scores | SD | 3.46 | 2.73 |
| No. of samples | n (No. Of years) | 5 | 5 |
| Test statistic | t (calculated) | -7.79 | -3.59 |
| Table Value (degree and level of significance) | t (4, 10%) | ± 2.13 | ± 2.13 |
| Result : The Null Hypothesis is | | REJECTED | REJECTED |

t-test for difference of mean scores between ONGC & BPCL

| Company | Particulars | Statistical Notation | Value |
|--|---|-----------------------|-----------------|
| ONGC | <i>Average Score over 5-year period</i> | <i>X1</i> | 74 |
| | <i>Standard Deviation in Scores</i> | <i>SD1</i> | 3.46 |
| | <i>No. of samples</i> | <i>N1</i> | 5 |
| BPCL | <i>Average Score over 5-year period</i> | <i>X2</i> | 82.6 |
| | <i>Standard Deviation in Scores</i> | <i>SD2</i> | 2.73 |
| | <i>No. of samples</i> | <i>N2</i> | 5 |
| | Population Variance | <i>Var.</i> | 12.15 |
| | <i>Test statistic</i> | <i>t (calculated)</i> | -3.9 |
| | <i>Table Value</i> | <i>t (28,10%)</i> | ± 1.7 |
| <i>Result : The Null Hypothesis is</i> | | | REJECTED |

Result of Hypothesis Testing

- **T-test for 70% benchmark :**

- ONGC lags far behind the 'A' grade
- BPCL lags a bit behind the 'A' grade

- **T-test for difference of means :**

- There is significant difference between the average scores of ONGC & BPCL.
- The score of BPCL is better.

PART-VII: Suggestions

- **Independent Directors :**

- Majority of directors be non-executive independent directors.
- Independent directors, for this purpose, should mean, directors other than the directors who are appointed/nominated by the investing or lending institutions. Such nominee directors are not independent in 'true' sense.
- Minimum number of independent directors should be based upon the market capitalization/public investment of/in the company, as higher the stake of the public in the company, the higher should be number of independent directors.
- A brief profile of every director (executive ; or non-executive ; or independent) should form part of the annual report.

- **Board Attendance :**

- Attendance of directors be made compulsory and only a very few leaves in case of defined urgency be allowed.
- concept of deemed vacation of office of absent independent director should apply strictly and such director be disqualified from appointment elsewhere.

- **Other Engagements :**

- 'One Man One Post' should be the principle ;
- If a director acts as independent director in one company, he should be disqualified from appointment as such elsewhere. This avoids 'business of being independent directors'.
- A regulatory authority be framed to look into these aspects.

- **Presence at AGM :** Presence of all directors at AGM be made compulsory.

- **Remuneration :** The non-executive/independent directors are not allowed any remuneration except receipt of sitting fees for attending meeting. Thus, they have no incentive. They should also be allowed adequate remuneration for the services so that they act with an incentive and can made accountable.

- **Whistle blowing policy :** Companies should provide for adequate safeguards against victimization of employees who avail of the whistle blowing mechanism, and also allow direct access to the

Chairperson of the Audit Committee in exceptional cases.

- *Decision-making :*

- An advisory board containing representatives from various stakeholders be formed for advise of CEO/MD/ Chairman.
- The separation of posts of CEO/MD & Chairman and setting of roles and responsibilities in clear terms is the need.

- *Appointment of Independent Directors (IDs) :*

- Nomination committee to determine qualifications for Board membership and to identify and evaluate candidates for nomination to Board.
- Qualifications, Roles and Responsibilities of IDs be set in law ;
- A person who is an executive director in any company be ineligible for appointment as independent director in any other company.
- Certification of Independence and Review be carried out to ensure that independence exists not only in reality but also in appearance.

- *Tenure of ID :* ID may have a tenure not exceeding in the aggregate, a period of 5 years. A person who served as ID in any company not be allowed to become executive director in that company.

- *Training of Directors :* Provision should be made for training and induction of directors, especially, independent directors.

- *Resignation by IDs :* On the resignation or removal of an independent director, the appointment of the same should be within the time stipulated for next board meeting.

- *Tele-conferencing and video-conferencing :* Board Meetings be allowed through these advanced means so that quality of decisions be improved.

- *Rotation of IDs :* Half of the directors can be fixed as they are experienced and the remaining half should be rotated. Directors from other companies, not related to the promoters or executives or senior management of the company, can be appointed.

- *Legal compliances :* A 'Legal Committee' should be established with legal experts to evaluate and ensure the compliance with laws by the Company.

- *Minority Shareholders :* In case of public companies whose majority shares are in the hand of promoters group, a separate committee to look after the impact of decision on minority shareholders should be constituted and its report (most probably, annual report) should form part of annual report.

- *Appointment of auditors :* Audit committee be given the power to evaluate and recommend appointment of auditors based on their profile, experience, expertise and past performance in respect of the company or elsewhere.

- *Rotation of Audit Partners and Firms :* A policy of rotation of auditors be framed. It must be ensured that the rotation policy doesn't become a 'change the place game' where auditor is sure to be appointed in one out of several companies and company is sure of appointing any one out of a select few.

- *Internal Audit :* Internal audit should not be carried out by employees of the company. Some independent experts should be appointed for the same.

CONCLUSION

- Notwithstanding sluggish governance by bodies corporate, fact remains that today Indian companies are ranked amongst the best in developing world.

- The question is not only of prophylactic treatment of corporate accounting, voluntary disclosures or cosmetic window-dressing of quarterly or annual balance sheets, but it is that of practising corporate ethics and providing and using techniques for performing clinical surgery of the corporate heart !

- Liberal provisions in the corporate statute book permitting adequacy-plus strata for remunerating working directors and managers of public companies speak of lofty intentions of the government to encourage appointment and retention of most fitting and capable incumbents to shoulder responsibility of governance and be accountable for their deeds with clear conscience, adopting good standards and business ethics.

- The government, corporate leaders, investors and regulators all realize that CG practices would not change overnight, so lot of patience is needed. Getting our companies to comply with 'new' rules is a daunting task requiring greater transparency and better enforcement.

-
- Let us hope that the 'new' company law will strengthen the basis for shareholder rights and improve the judicial system in India.

Select References:

- (1) Corporate Governance Standards and Practices in Automobile - 2 Wheeler Industry in India Author : SC Das (The Management Accountant Issue November, 2006)

- (2) Form of Listing Agreement, Mumbai Stock Exchange, Updated 2009
- (3) Corporate Governance Vis-a-Vis The Listing Agreement –II Author: Dr. K.R. Chandratre (The Chartered Secretary Issue date: October , 2003)
- (4) Taxmann's Companies Act with SEBI Rules and Regulations, (2009), Taxman Publications Pvt. Ltd. New Delhi

Globalization: Development of International Political economy & emerging Economic Giants (BRIC & SANE)

Upasana Giri

D.Phil Scholar
G. B. Pant Social Science Institute
Allahabad

Abstract

This paper deals with radical changes happening worldwide to bring developments in international trade. Major eras of globalization led to the generation of complex interdependence and integration of world economies. The emergence of International Political Economy (IPE) as a major subfield of study international trade relations. Major economies are classified as economic or trade Blocs in order to bring up new reforms in the trade affairs. Regionalism and Protectionism are tool drivers to boost up the developments in trade associations. Every country has to develop its comparative advantage in its products and trade them with other members. Trade unions and economic blocs foresee strategic approach to the challenges and opportunities era of globalization. Out of BRIC nations India & China are emerged as Economic Giants and market leaders.

Introduction

Globalization is concerned as most accomplished facts, highlights a series of interrelated changes that may have generated a set of new conditions. Assuming range of transformational process Globalization mainly focuses upon the sources and the consequences of change. The change has also led to increased circulation of idea and people to new perception of the role of government and to heightened expectations from the poor as they become more exposed to developments elsewhere in the world. Governments in order to develop the social platform across the national boundaries includes flow of goods, capital, information technology and people across national border as rightly discussed by Chow (2005) on the impact of globalization. The problem of studying change, however is it very ubiquity within modern world. Indeed, modernity is marked, if not defined, by general expectation of constant change in many of the basic conditions of human existence. The study of change also highlights central theoretical, ontological and methodological issues in study of international affairs. The characteristics process and conditions of globalizations can be seen as instances of timeless and universal properties of human conditions, or as the peculiar creations of highly specific combinations of interest, outlook and technical possibility. In particular, the future of globalization is driven by impersonal, structural conditions, by universal human imperatives or by the voluntary agency of human beings acting individually.

Since the emergence of international political economy (IPE) as a major subfield of the study of International relations in the early 1970s. IPE scholars have generated an enormous literature that has been the outcome of the employment of a wide variety of Theories and methods. Most introductions to the study of IPE have divided the theoretical approaches to the subject into three categories:

Keywords

*Globalization, Regionalism,
Economic Blocs, Eras of
globalization*

liberalism, nationalism, and Marxism. This threefold typology is of limited utility today, given the overlap between many of the approaches classified in different categories, and the wealth theories and methodologies applied in the contemporary study of global political economy.

The basic objectives of this paper deals with are:-

1. To discuss phases of globalization.
2. Influence of globalization on developed and developing economies.
3. To discuss trade blocs and emerging Trade blocs BRIC & SANE.

Study Method

The methodological approach to this paper is based on reviews of multiple documents including various articles through journals and also which are available online. As the topic was scorching in last few years so abundance of literature are available but on aftereffects on Indian economy is still in progress. To make this paper more relevant, have tried to add literature in this reference for that some available published and unpublished articles as much as possible have been reviewed.

Background (Phases of Globalization)

Over the last three decades the sheer scale and scope of global interconnectedness has become increasingly evident in every sphere, from the economic to the cultural. Worldwide economic integration has intensified as the expansion of global commerce, finance and production binds together the economic fortunes of nations, communities and households across the world's major trading regions and beyond within an emerging global market economy. As a credit crunch of 2008 illustrates, the integration of the world economy is such that no national economy is able to insulate itself from the contagion effect of turmoil in the world's financial markets. As we live in a globalizing economy that differs in some fundamental ways from anything that the world has previously experienced. Following section briefly sketches how the world economy evolved to reach its present state.

World Economy Pre-1914

The modern world economy, most economists believe came into existence in the late fifteenth and sixteenth centuries. This was a period in which tyrannical monarchs in Western Europe, seeking to consolidate their power against both internal and external foes, pushed to extend the boundaries of markets. In this era of mercantilism, political power was equated with wealth and wealth with power. Gradually, most parts of the world were enmeshed in a Eurocentric economy, as supplies of raw materials and luxury goods. Early European industrializes trade with their colonies dominions or with the other lands of recent European settlement such as Argentina, Australia, Canada, and India together than by the United States.

In the late 18th century wars and trade with China, had little use of European goods drained silver from the economies of the Western Europe and the United states. In 1857 the final crisis of the free banking era of international finance began, as American banks suspended payment in silver, rippling through the very young

international financial system of central banks. In the United States this collapse was a contributory factor in the American Civil War, and in 1861 the US government suspended payment in gold and silver, effectively ending the attempts to form a silver standard basis for the dollar. Through the 1860–1871 period, various attempts to resurrect bi-metallic standards were made, including one based on the gold and silver franc; however, with the rapid influx of silver from new deposits, the expectation of scarcity of silver ended.

The interaction between central banking and currency basis formed the primary source of monetary instability during this period. The combination that produced economic stability was a restriction of supply of new notes, a government monopoly on the issuance of notes directly and, indirectly, a central bank and a single unit of value. Attempts to avoid these conditions produced periodic monetary crises: as notes devalued; or silver ceased to circulate as a store of value; or there was a depression as governments, demanding specie as payment, drained the circulating medium out of the economy. At the same time, there was a dramatically expanded need for credit, and large banks were being chartered in various states, including, by 1872, Japan. The need for a solid basis in monetary affairs would produce a rapid acceptance of the gold standard in the period that followed.

Thus major points of this era were; firstly, despite the significant changes that occurred in the three centuries before the outbreak of the first World War, the fundamental composition and direction of international trade remained unchanged. Secondly, neither in the field of trade nor of finance was any significant international institution constructed in the years before 1914. Thirdly, advances in technology were the main driving force behind the integration of markets, and they facilitated the enormous growth in investment and migration in the nineteenth century. Lastly great merit of gold standard was introduced to provide certainty for international transactions because it largely removed the risk of foreign exchange losses.

World Economy from 1914-1945

The outbreak of the First World War was a devastating blow to cosmopolitan liberalism: it destroyed the credibility of the liberal argument that economic interdependence in itself would be sufficient to foster an era of peaceful coexistence among states. The war brought to an end an era of unprecedented economic interdependence among the leading industrial countries. The war devastated the economies of Europe: subsequent political instability compounded economic disruptions. Economic reconstruction was further complicated by demands that Germany make reparations for its aggression and that Britain and other European countries repay their wartime borrowings from the United States.

The international gold standard broke down with the outbreak of war in August 1914, when a speculative attack on sterling caused by Bank of England to impose exchange controls- a refusal to convert sterling into gold and de facto ban on gold exports. Leading countries agreed to reinstate modified version of the international gold standard in 1925 but failed to act consistently. The resulting misalignment of currencies was compounded by higher

trade barriers than had existed before 1914, the absence of a country bank with the resources and the will to provide leadership to the system and by a failure of central banks to play by the rules of the gold standard.

By then, the World Economy was in 'Great Depression', following the shocks to the world economy transmitted from the United States after the Wall Street collapsed in October 1929. The gold standard almost certainly worsened by the effects of the depression. Thus states did not negotiate any significant institutionalization of international economic relations in the inter-war period which could work out significant in reestablishments of disarranged economies.

World Economy 1945-1990

The world economy that emerged after the Second World War was qualitatively different from anything experienced before. Compromise were made between the governments after 1945 for safeguarding their domestic economic objectives, especially a commitment to maintaining full employment on the one hand and an opening up of the domestic economy to allow for the restoration of the international trade and investment. The adoption of the principle of embedded liberalism was recognition by governments that international economic collaboration rested on their capacity to maintain domestic political consensus and that international economic collaboration was fundamentally a political bargain.

The commitment to multilateralism that developed in the late 1930s and during the Second World War bore immediate fruit in the founding of the Bretton woods system of monetary management were established the rules for commercial and financial relations between the countries. Multilateral financial institutions: International Monetary Fund and World Bank were also established to achieve the development of international trade. The unprecedented rates of economic growth achieved in the years after 1945 attest to the success of the pursuit of multilateral economic collaboration in this period. Global GDP grew at close to 5 per cent in the period 1950-73. Aggregates rates of growth, however, disguised substantial variations across different regions of the world economy. The gap between rich and poor widened substantially. By the third quarter of the 19th century, however, a marked gap had developed between incomes per capita in the United states and Western Europe on the one hand, and those of the world. Per capita incomes in Africa and in most parts of Asia stagnated. Despite the economic turmoil and slower rates of growth of the inter war years, the absolute gap between the industrialized economies and the rest of the world continued to widen: the divergence increased rapidly in the post 1945 era.

World Economy 1991 onwards

Apart from the development of trade affairs of European countries and United States, significant changes were seen, only a handful of Previously Less Developed Countries (LDC) mostly in east Asia made progress in closing gap of the difference created by the First world countries.

After the liberalization of the economy of India, the Indian economy coupled with the Chinese economy to power Asia into being one of the hotspots for world trade. The

Chinese economy was already booming under the economic measures undertaken by Deng Xiaoping, in the 1980s, and continuing under Jiang Zemin in the 1990s. In 2007, China's economic growth rate exceeded 11% while India's growth rate increased to around 9%. One of the factors was the sheer size of the population in this region. Surprisingly, this size of population was considered as biggest reason for lack of growth of economy by both governments earlier and both countries have taken strong population control measures to improve their economy.

Meanwhile, South Korea, Taiwan, Hong Kong and Singapore emerged as the Four Asian Tigers with their GDPs growing well above 7% per year in the 1980s and the 90s. Their economies were mainly driven by growing exports. The Philippines only began to open up its stagnated economy in the early 1990s. Vietnam's economy began to grow in 1995, shortly after the United States and Vietnam restored economic and political ties. Throughout the 1990s, the manufacturing ability and cheap labor markets in Asian developing nations allowed companies to establish themselves in many of the industries previously dominated by companies from developed nations. Asia became one of the largest sources of automobiles, machinery, audio equipment and other electronics.

At the end of 1997, Thailand was hit by currency speculators, and the value of the Baht along with its annual growth rate fell dramatically. Soon after, the crisis spread to Indonesia, Malaysia, South Korea, Hong Kong, Singapore and many other Asian economies, resulting in great economic damage on the affected countries (Japan largely escaped the crisis). In fact, some of the economies, most notably those of Thailand, Indonesia, and South Korea actually contracted. This later would be known as the Asian financial crisis. By 1999, most countries had already recovered from the crisis.

With emerged as Giants; India and China clearly continued to grow strongly after the Great Recession as first most important reasons was the great economic success experienced by the region itself. The underlying reasons were cultural, others that it was directly economic (cheap labor plus plentiful capital) and few that it was a derivative of the application of a non-liberal model of development employing the strong state to drive through rapid economic development. Secondly, many states in East Asia might have powerful memories of past conflicts; these were beginning to be overridden in the 1990s by a growth in regional trade and investment. The process of East Asia economic integration was slow to develop (ASEAN was formed only in 1967). However, once regionalism began to take off during the 1990s, it showed no signs of slowing down. Thirdly, optimistic virtue of Japanese was instrument of development with once skeptical neighbors. In the end, though all strategic roads in China lead to the one state whose presence in the region remains critical i.e. USA. China has already changed terms of debate and in some time to come China will be rising capitalist power playing by the rules of the market may turn out to be problem to west.

With the brief discussions about eras of globalization various dimension of globalized economies emerge, and

growing interdependence of countries. Further these changes through the centuries would be discussed and also significance of regional integration to in the development of international trade affairs.

Economies classified as trade blocs

For the global economy fully benefit from trade there has to be liberal (free) trade system. Each country can produce what it has a competitive advantage at producing and trade its products with other countries. But there has been a history of protectionism in the global economy. Restrictions, import quotas, duties, trade tariffs, non tariff barriers, subsidies etc. all of these limit the flow of traded goods and services. This has the effect of reducing the volume of trade and therefore any benefits that trade can bring. If a country attempts to protect its economy often other countries will impose protectionist policies on that countries goods and services thereby negating the benefits of protectionism.

With the emphatic change in the global scenario most of the countries have been led to regionalism. Regional trading blocs can reduce barriers between member countries but often maintain and increase restrictions and protectionism against non- member countries. Global trade is becoming dominated by the power of the regional trading Blocs. By this, it is meant to say that they are forming blocs or institutions in order to bring more developments in their trade affairs. Fao rightly classifies Some regional groupings have either market (EU) or command (China) or mixed economies (former communist countries), The Preferential Trade Area (PTA) and The Southern African Development Community (SADC). With these developments, free trade zones have occurred (all internal barriers abolished) economic unions (the EU). The major regional economic organizations are: Association of South East Nations (ASEAN), Asian Pacific Rim countries (APC), Caribbean Community and Common Market (CARICOM), Council of Arab Economic Unity, Economic Community of West African States (ECOWAS), the European Union (EU), Latin American Integration Association, Preferential Trade Area (PTA) and the Southern African Development Conference (SADC). Of these blocs, the EU (reporting 33% of world trade) and EFTA are very important. To counteract the growing power of the EU, the USA and Canada have entered into an agreement with Mexico as a willing partner and created the North American Free Trade Agreement (NAFTA).

These blocs are of various form, power, influence and success. ASEAN is a collaboration of industry and agriculture, PTA in tariffs. SADC and PTA have had historically little impact but are now beginning to grow in importance in view of the normalization of South Africa. The EU, North American Union and the Pacific Rim Union will pose the greatest power blocs in future years. Many developing countries have entered into trading blocs as a reaction against loss of developed country markets or as a base to build economic integration and markets.

The development of trading blocs can bring headaches and advantages to trade. It is worth comparing the European Union, a relatively well developed bloc, with SADC and the PTA which are well developed.

With the help of Regionalism many developing countries such as Brazil, Russia, India and China have changed their political systems to embrace global Capitalism. Goldman Sachs predicts that China and India, respectively, will become the dominant global suppliers of manufactured goods and services, while Brazil and Russia will become similarly dominant as suppliers of raw materials. It should be noted that of the four countries, Brazil remains the only nation that has the capacity to continue all elements, meaning manufacturing, services, and resource supplying simultaneously. Cooperation is thus hypothesized to be a logical next step among the BRICs because Brazil and Russia together form the logical commodity suppliers to India and China. Thus, the BRICs have the potential to form a powerful economic bloc to the exclusion of the modern-day states currently of "Group Of Eight" status. Brazil is dominant in soy and iron ore while Russia has enormous supplies of oil and natural gas. Similarly India And China has actively showing much interest in African trade and thus developing on their part to develop their trade relations with African countries (SANE economies).

Contribution of BRIC Giants (India & China) to IPE

When a Goldman Sachs' study predicted in 2001 that the BRIC—Brazil, Russia, India and China—would emerge as a major economic force by 2050, few could have dreamt that these economies would play a transformational role on the world stage just a decade after the study was published. In these 10 years, not only have the four economies, the largest outside the Organisation for Economic Cooperation and Development (OECD), become powerhouses providing much of the dynamism to the global economy, they are also lending their voices for reforming global institutions to make them more democratic. Grouping the four, however, obscures a simple fact: while the rise of China and India represents a real shift in the power balance, Russia and Brazil are marginal economies propped up by high commodity prices. This difference has profound implications. The fundamental difference between China and India on one hand and Russia and Brazil on the other is that the former are competing with the west for "intellectual capital" by seeking to build top-notch universities, investing in high, value-added and technologically intensive industries and utilizing successful diasporas to generate entrepreneurial activity in the mother country. Chinese officials, for example, are committed to developing 100 world-class universities, with a focus on science and engineering; India boasts one of the most dynamic information technology sectors outside the US. Both countries have seen the creation of a large number of small and medium-sized businesses that compete successfully (and sometimes dominate) in global markets. China is in the process of developing a world-class infrastructure that strengthens its competitive position; India's government has promised to do the same. Both face challenges but they are taking the steps necessary to generate sustainable economic growth. These issues will determine how well the west does with respect to the emerging markets that pose a true challenge to western leadership - China and India. There is no question that the so-called BRIC countries are large,

emerging market economies that are shaping the economic and geopolitical order.

Contribution of SANE Economies to IPE

Africa is a continent of 53 countries, with a vast area of nearly 30 millions square kilometers and is the second most populated region in the world with about 930 million inhabitants. Within this region, the four biggest economies, South Africa, Algeria, Nigeria and Egypt, the so-called SANE, could become an engine of the economic growth in the continent in the same way that the emerging market giant economies of BRIC (Brazil, Russia, India and China) are for the rest of developing world. SANE economies account for almost a fifth and a third of Africa's land mass and population respectively, more than half of its total GDP in both nominal and purchasing power parity terms and more than half of its export, total trade, foreign direct investment and foreign reserves. The SANE area benefits by different comparative advantage factors such as geographical location, resource endowment, market size and large participation of the private sector in the economy, which makes these economies a growth pole for the regional economic prosperity and integration into the international market. If one considers geographical location, all of the SANE economies are situated in strategic positions within Africa. They are all coastal states and therefore enjoy a comparative advantage with respect to landlocked African countries, which facilitates the access to international

market and reduces the trade costs. Moreover, their economies are blessed with huge natural resources: Nigeria, Algeria and Egypt are among the greatest producers of petroleum products and natural gas, while South Africa is one of the world leading exporters of minerals. Finally, the market size in these economies is relatively developed due to their higher GDP per capita and higher population with respect to the rest of the continent, which can stimulate the internal market. Furthermore, the higher active participation of the private sector into the economy, such as the greater amount of FDI, makes the structure of SANE better diversified relative to the rest of the continent.

These countries have also experienced a changing policy towards an open-market economy and a number of attempts of privatization and trade liberalization reforms have been implemented since early 1990s, after decades in which industrialization, viewed as the engine of long run growth, was thought to be attainable through import substitution strategies. The growth performance and the pattern of reforms in SANE area reflect the evolution of Africa over the last three decades. All the economies of the group experienced a significant shift from the import-substitution policy to the pro-market reforms. During the 1960s, apart from South Africa the SANE economies opted for reducing their dependence on imports from developed countries and for diversifying their productive structure by establishing highly restrictive trade policies.

Table 1 : **Economic Indicators for the SANE and BRIC Nations**

| Economies | Population (millions) | Nominal GDP (US\$ Billions) | GDP per capita (US\$) | FDI (US\$ millions) |
|------------------|------------------------------|------------------------------------|------------------------------|----------------------------|
|------------------|------------------------------|------------------------------------|------------------------------|----------------------------|

SANE Economies

BRIC Economies

Source: FDI data are from UNCTAD Database, <http://stats.unctad.org/FDI>. The rest of the data are from IMF World Outlook Database, September 2006.

In the given table as group SANE economies are comparatively better with global emerging economies. As a group, SANE compares relatively well with global emerging economies that make up BRIC. The average per capita income in 2005 was higher in the SANE economies (US\$1,841) than in the BRIC economies (US\$1,669). Although the population of the SANE is about 26 percent of India's population, the nominal GDP of the SANE represents 70 percent of India's GDP. The SANE's population and GDP are 22 percent and 24 percent of China's population and nominal

GDP, respectively. In 2005 SANE attracted US\$16.2 billion worth of foreign direct investment (FDI), which was two and half times the FDI to India. FDI

to the SANE as a group were also higher than FDI to Brazil or Russia. The concept of growth suggests that economic development is not uniform over an entire region, but instead takes place around a specific region such as a key industry or country. Both directly and indirectly,

Industries or countries that are linked then develop around this region. (Kasekende, Louis A.)

Source: World Economic Forum, 2006.

The Table describes measure and ranking of national competitiveness with the Global Competitiveness Index (GCI) which World Forum provides. The GCI measures both the macroeconomic and microeconomic drivers of productivity including institutions, policies, and structural factors across a large number of countries. The GCI also takes into account the various factors affecting productivity and competitiveness in countries at different stages of development. Thus, the GCI separates countries into three specific stages: factor-driven, efficiency-driven, and innovation-driven. This section discusses the structure and performance of the SANE economies and their competitiveness in the global economy. The section reviews the drivers of recent economic performance and examines the sustainability of improved economic growth by looking at the structure of these economies and their stages of development, which in turn has an impact on their productivity and competitiveness. (Kasekende, Louis)

The structure and performance of the SANE economies shows that all four have experienced strong economic growth within the last few years. However, with the exception of Brazil, economic growth rates were much higher in BRIC than in the SANE economies. It also shows that oil is vital to the economies of three SANE countries: Algeria, Nigeria, and Egypt. The contribution of the oil sector to South Africa's economy is relatively low because of the dominance of the financial and manufacturing sectors in gross national output. Unlike Algeria, Nigeria, and Egypt, the structure of the South African economy is relatively diverse, enabling several sectors to contribute substantially to GDP. Comparable to that of China and India—the economies of the SANE countries depend significantly on natural resources and low labor cost to compete in the global economy. But they also require strong institutions, adequate infrastructure, a stable macroeconomic environment, and sufficiently high human development indicators to raise productivity.

The SANE economies have the size and the scale to be drivers of Africa's economic growth, regional economic cooperation, and integration into the global economy. However, the SANE economies would need to address key obstacles to competitiveness and investment climate

before their potentials in both the regional and global economies can be fully realized.

Effects

Effects of globalization on World

Globalization is a historical process. It envisages a vision of a world without borders. As stated in early paragraphs Sumit Roy(2006) added that being rooted in the pre-colonial and colonial era, marked by rivalries between national powers, the contemporary phase of globalization is driven by information and communication technology and reduced transportation costs. It has reshaped flows (trade and finance), collective security, and labor movements. Pro-globalization proponents see the globalization process is turning into a destructive tsunami that wrecks the already low standard of living of vulnerable households. Despite the worldwide passionate debate about the impact of globalization on the world's poor, there are very few studies which have systematically examined the various transmission mechanisms through which globalization ultimately affects the poor within different specific contents.

The frontiers of the state with increased reliance on the market economy and renewed faith in the private capital and resources, a process of structural adjustment spurred by the studies and influences of the World Bank and other International organisations have started in many of the developing countries. Also Globalisation has brought in new opportunities to developing countries. Greater access to developed country markets and technology transfer hold out promise improved productivity and higher living standard. But globalisation has also thrown up new challenges like growing inequality across and within nations, volatility in financial market and environmental deteriorations. Another negative aspect of globalisation is that a great majority of developing countries remain removed from the process. Till the nineties the process of globalisation of the developing economy was constrained by the barriers to trade and investment. Liberalisation of trade, investment and financial flows initiated in the nineties has progressively lowered the barriers to competition and hastened the pace of globalisation.

From an economic perspective, the primary engine that is driving the complex effects of Globalization on trade is liberalization. Globalization emphasizes that trading among Member countries should open up their markets and that trade in goods and services should be “borderless”. A significant part of the world and a large numbers of countries are now effectively participating in the processes of integration and globalization. In this regard globalization may be thought of as the integration of economies through trade, capital flows and information technology. A key assumption underlying the trade liberalization drive is that once markets are free from trade restrictions, factors of production will be directed by the unrestricted forces of demand and supply, leading to efficient investment by producers.

Influence on developing countries

Developing economies’ financial linkages with the global economy have risen significantly in recent decades. However, a relatively small group of these countries has foregathered a lion’s share of private capital flows from industrial to developing countries, which surged in the 1990s. Despite the recent sharp reversals in such “North-South” capital flows, various structural forces are likely to lead to a revival of these flows, and to continued financial globalization, over the medium and long term. Theoretical models have identified a number of channels through which international financial integration can promote economic growth in developing countries. There is some evidence of a “threshold effect” in the relationship between financial globalization and economic growth. The beneficial effects of financial globalization are more likely to be detected when the developing countries have a certain amount of absorptive capacity. International financial integration should, in principle, also help countries to reduce macroeconomic volatility. The available evidence suggests that developing countries have not fully attained this potential benefit. Indeed, the process of capital account liberalization appears to have been accompanied in some cases by increased vulnerability to crises. Globalization has heightened these risks since cross-country financial linkages amplify the effects of various shocks and transmit them more quickly across national borders.

Invariably, the capacity of developing nations to cope with globalization may reveal acute differences. In this respect, there is increasing reliance on China and India, due to their economic performance, of accelerating globalization and benefiting developing countries. The realism of this hope rests on the nature of interaction of these two nations with the world and their pursuit of strategic globalization. Liberalization policies have enhanced the economic powers of both nations. China moreover, as a recent member of the World Trade Organization (2001) could firmly influence global trade negotiations, possibly joining forces with India and Champion the rights of poor nations. Their combined efforts could pressurize the developed nations to fulfill their promise of opening up their markets to developing country agricultural and non agricultural exports.

Given the increasing global interest in Africa, more and more Indian & Chinese companies are looking at expanding their presence in Africa. More and more both the countries are looking at expanding their presence in Africa, in order

to ensure that they do not lose strategic advantage to their foreign counterparts.

As the present study amply documents, African economies are affected differentially by the

competitiveness and growth of Asia. In some cases, there may be complementary effects, as producers benefit from the demand for their outputs from Asia. China and other countries may even want to secure raw materials and improve export infrastructure in selected African countries and offer project finance, FDI and other forms of trade-linked capital flows. In other cases, interests may be competitive rather than mutual.

With the integration of China and India – the “Asian Drivers” – in the world economy gaining momentum, it is ever more manifest that economy and polity in poor countries will be affected in various, complex ways. The sheer size of the Asian Drivers, their phenomenal rate of growth, their hunger for natural resources, and their growing economic and political power ensure that they will re-shape the world economy and influence the rules of the game. Their growing presence is likely to transform past relationships in a number of key respects, providing both competition and opportunities not just to the major trading partners in OECD countries,

but also to developing countries and other emerging economies(SANE). Therefore, innovative policy responses to the Asian Drivers have to be devised. And they will be needed for the long term, as the giants’ rise is unlikely to be only transient.

Impacts of Globalization

Globalization compels businesses to adapt to different strategies based on new ideological trends that try to balance rights and interests of both the individual and the community as a whole. This change enables businesses to compete worldwide and also signifies a dramatic change for business leaders, labor and management by legitimately accepting the participation of workers and government in developing and implementing company policies and strategies. Risk reduction via diversification can be accomplished through company involvement with international financial institutions and partnering with both local and multinational businesses.

In theory, financial globalization can help developing countries to better manage output and consumption volatility. Indeed, a variety of theories implies that the volatility of consumption relative to that of output should go down as the degree of financial integration increases; the essence of global financial diversification is that a country is able to offload some of its income risk in world markets. Since most developing countries are rather specialized in their output and factor endowment structures, they can, in theory, obtain even bigger gains than developed countries through international consumption risk sharing, that is by effectively selling off a stake in their domestic output in return for a stake in global output.

Beneficial Effects

Some economists have a positive outlook regarding the net effects of globalization on economic growth. These

effects have been analyzed over the years by several studies attempting to measure the impact of globalization on various nations' economies using variables such as trade, capital flows and their openness, GDP per capita, foreign direct investment (FDI) and more. These studies examined the effects of several components of globalization on growth using time series cross sectional data on trade, FDI and portfolio investment. Although they provide an analysis of individual components of globalization on economic growth, some of the results are inconclusive or even contradictory.

Firstly Trade among nations via the use of comparative advantage promotes growth, which is attributed to a strong correlation between the openness to trade flows and the affect on economic growth and economic performance. Additionally there is a strong positive relation between capital flows and their impact on economic growth. Secondly, Foreign Direct Investment's impact on economic growth has had a positive growth effect in wealthy countries and an increase in trade and FDI resulted in higher growth rates. Further evidence indicates that there is a positive growth-effect in countries which are sufficiently rich as are most of the developed nations. Thirdly, increased media coverage draws the attention of the world to human right violations. This leads to improvement in human rights.

Harmful Effects

Non-economists and the wide public expect the costs associated with globalization to outweigh the benefits, especially in the short-run. Less wealthy countries from those among the industrialized nations may not have the same highly-accentuated beneficial effect from globalization as more wealthy countries measured by GDP per capita etc. Free trade, although increases opportunities for international trade, it also increases the risk of failure for smaller companies that cannot compete globally. The World Bank reports that integration with global capital markets can lead to disastrous effects without sound domestic financial systems in place. Furthermore globalized countries have lower increases in government outlays, as well as taxes, and lower levels of corruption in their governments. One of the potential benefits of globalization is to provide opportunities for reducing macroeconomic volatility on output and consumption via diversification of risk. Additionally it may drive up production and labor costs including higher wages for more skilled workforce. Domestic industries in some countries may be endangered due to comparative or absolute advantage of other countries in specific industries. Another possible danger and harmful effect is the overuse and abuse of natural resources to meet the new higher demand in the production of goods. The increase in prices has reduced the government's ability to sustain social welfare schemes in developed countries. And the last thing which describes globalization in one statement is that rich are getting richer and poor are becoming poorer. Thus the effect of globalization is not universal.

Conclusion

As of Globalization, even its economic aspects have many dimensions. It embraces trade and a long term device 'foreign investment' by multinationals as well as flows of

short term portfolio capital whose rapidity and size have caused havoc in places ranging from Beijing to Cario. But it also should include now sizeable acquisitions legal and often illegal across borders. And it extends o the diffusion and transfer of technology among producing and consuming nations. Global production requires certain stability in politics and finance in order to expand. Global finance has the upper hand because its power over credit creation determines the future of production; but global finance is in a fragile condition. Many international bodies are formed in order to gel up these trades and also smoothing of financing system such as G8, BRIC, OCED, etc. Still lot of work has to be done on their part as making a secure scheme of regulation of global finance that could counter various global collapses. Thus there is a transnational process of consensus formation among the official caretakers of the global economy. This process generates consensual guidelines, underpinned by an ideology of globalization, that are transmitted into the policy- making channels of national governments and big corporations.

References

- Alessandrini, Mischelle and Michael E. Batuo. "The trade specialization of sane:evidence from manufacturing industries." 9 June 2011 <<http://www.cefims.ac.uk/documents/research-84.pdf>>.
- Baylis, John, Steve Smith and Patricia Owens, *The Globalization Of World Politics*. 5th Edition. New York: Oxford University Press, 2011.
- Dhar, Biswajit. *Brics: The developing giant*. 11 April 2011. 2011 June 06 <<http://www.livemint.com/2011/04/11221214/Brics-The-developing-giant.html>>.
- Kasekende, Louis A., et al. "Competitiveness and Investment Climate in SANE Economies." 4 July 2010 <<https://members.weforum.org/pdf/gcr/africa/1.3.pdf>>.
- Ravenhill, John, ed. *Global Political Economy*. 3rd Edition. New York: Oxford University Press, 2011.
- Roy, Sumit. "China And India- The 'Emerging Giants'- And Africa." *Journal Of International Relations X* (2005-2006).
- Stubbs, Richard and Geoffrey R.D Underhill, *Political Economy And The Changing Global Order*. 1st Edition. New York: St. Martin's Press, 1994.
- Vidyarthee, Kaushal K. "India's Trade Engagements with Africa: A comparison with China." The IIPM Think Tank.
- World Trade Organization. 23 may 2001. 4 june 2011 <http://www.wto.org/english/news_e/pres01_e/pr226_e.htm>.
- Stallings, Barbara. "Globalization and Liberalization: A View from the Developing Countries" 9 July 2011 <<http://www.mtholyoke.edu/acad/econ/stallings.pdf>>

Nalin Abeysekera

Senior Lecturer in Marketing
Department of Management
Studies
The Open University of Sri Lanka
Nugegoda

Buddhika Hewawasam

Manager
Sri Lankan Air lines
Sri Lanka

Dr.K.S.Chandrasekar

Professor and Head- IMK,
University of Kerala,
Trivandrum

Abstract

It is quite evident that practitioners, scholars as well as laypersons are debating, arguing as well as conducting research on marketing in contemporary management arena. Some researchers argued that the concept of marketing has solution for all problems faced by customers & other stakeholders. Buddhism is becoming popular in eastern as well as western countries for number of reasons; the first reason is that Buddhism has answers (solutions) to many of the problems in modern materialistic societies. Hence following research problem has been advanced in this study. "Is there any relationship between the philosophy of Buddhism and discipline of Marketing?". Content analysis as well as interview method were performed to link the philosophy and marketing management in terms of practice and faith. According to findings these two subjects are going inline with understanding needs and wants of the people. Marketing always focuses on understanding needs and wants of the customer and their satisfaction. Marketing activities and strategies result in making products available that satisfy customers while making profits for the companies that offer those products. Buddhism also includes a deep understanding of the human mind which prominent psychologists are now discovering to be very effective. A marketer can follow the eightfold path to perform well in the market.

Introduction

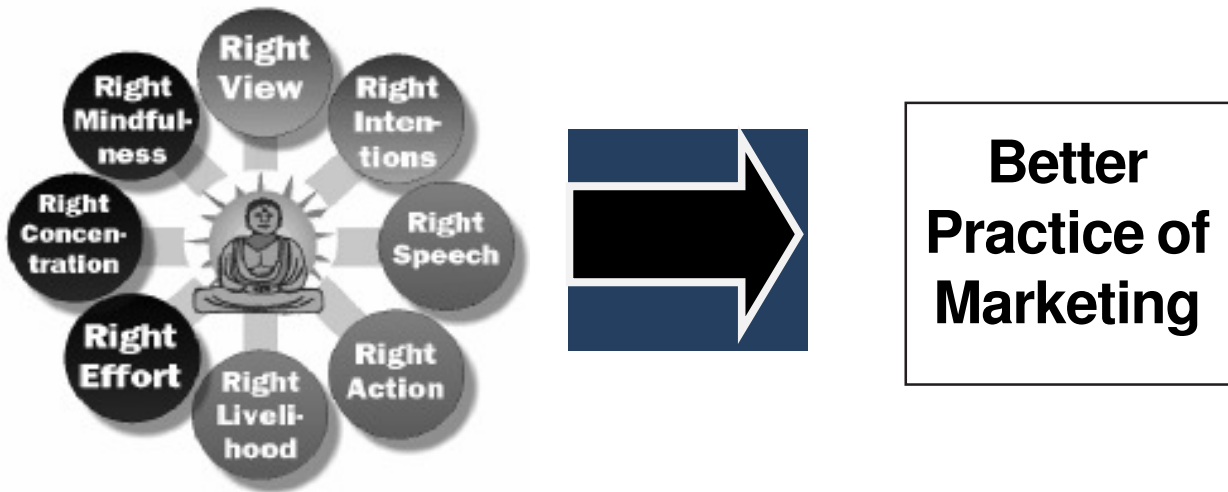
In contemporary management people are taking more on marketing which is must in the business world. On the other hand Buddhism is becoming popular in western countries for a number of reasons; The first good reason is Buddhism has answers to many of the problems in modern materialistic societies. Even it can be considered as fast grown religion in UK Jails. In 1997 there were only 226 Buddhists in prisons in England and Wales, but by the end of June 2008 that figure had risen by 669 per cent to reach 1,737 – 2 per cent of the 79,734 prison population. The vast majority, 1,194, was white and most was over 30. Only 78 were female (www.telegraph.co.uk).

Selling is paramount important in marketing and considered as a lifeblood in marketing The old saying that "selling is selling" echoes a broadly accepted notion that there is a set of sales basics that applies, more or less, to all selling situations. The conventional selling always concern on fundamental characteristics of successful salespeople. Accordingly excellent sales forces consist of smart, aggressive, outgoing personalities, with strong self-confidence, who can smoothly develop needs, present product benefits, and who have good customer-handling skills. On the other hand there is a question of poor sales forces – salespeople who are just order takers, who don't know how to sell benefits, or who don't know the product well enough to sell against competitors. For that you need different skills as well as competencies. This study is going to understand how the eightfold path can be used as strategy to build up the skills of a marketer(see the diagram one)

Keywords

*Buddhism, Marketing,
Eightfold path, Marketer*

Diagram one-Relationship between Eightfold Path and Marketing



Literature Review

The Noble Eightfold Path describes the way to the end of suffering, as it was laid out by Lord Buddha. It is a practical guideline to ethical and mental development with the goal of freeing the individual from attachments and delusions; and it finally leads to understanding the truth about all things. The eight aspects of the path are not to be understood as a sequence of single steps, instead they are highly interdependent principles that have to be seen in relationship with each other. (www.thebigview.com).

Following are the main ingredients of eightfold path.

Right View

Right view is the beginning and the end of the path, it simply means to see and to understand things as they really are and to realize the Four Noble Truths. Right view is not necessarily an intellectual capacity, just as wisdom is not just a matter of intelligence. Instead, right view is attained, sustained, and enhanced through all capacities of mind

Right Intention

While right view refers to the cognitive aspect of wisdom, right intention refers to the volitional aspect, i.e. the kind of mental energy that controls our actions. Right intention can be described best as *commitment* to ethical and mental self-improvement. Buddha distinguishes three types of right intentions: 1. the intention of renunciation, which means resistance to the pull of desire, 2. the intention of good will, meaning resistance to feelings of anger and aversion, and 3. the intention of harmlessness, meaning not to think or act cruelly, violently, or aggressively, and to develop compassion.

Right Speech

Right speech is the first principle of ethical conduct in the eightfold path. Ethical conduct is viewed as a guideline to *moral discipline*, which supports the other principles of the path. This aspect is not self-sufficient, however,

essential, because mental purification can only be achieved through the cultivation of ethical conduct. The importance of speech in the context of Buddhist ethics is obvious: words can break or save lives, make enemies or friends, start war or create peace. Buddha explained right speech as follows: 1. to abstain from false speech, especially not to tell deliberate lies and not to speak deceitfully, 2. to abstain from slanderous speech and not to use words maliciously against others, 3. to abstain from harsh words that offend or hurt others, and 4. to abstain from idle chatter that lacks purpose or depth. Positively phrased, this means to tell the truth, to speak friendly, warm, and gently and to talk only when necessary.

Right Action

The second ethical principle, right action, involves the body as natural means of expression, as it refers to deeds that involve bodily actions. Unwholesome actions lead to unsound states of mind, while wholesome actions lead to sound states of mind. Again, the principle is explained in terms of abstinence: right action means 1. to abstain from harming sentient beings, especially to abstain from taking life (including suicide) and doing harm intentionally or delinquently, 2. to abstain from taking what is not given, which includes stealing, robbery, fraud, deceitfulness, and dishonesty, and 3. to abstain from sexual misconduct. Positively formulated, right action means to act kindly and compassionately, to be honest, to respect the belongings of others, and to keep sexual relationships harmless to others. Further details regarding the concrete meaning of right action can be found in the Precepts.

Right Livelihood

Right livelihood means that one should earn one's living in a righteous way and that wealth should be gained legally and peacefully. The Buddha mentions four specific activities that harm other beings and that one should avoid for this reason: 1. dealing in weapons, 2. dealing in living beings (including raising animals for slaughter

as well as slave trade and prostitution), 3. working in meat production and butchery, and 4. selling intoxicants and poisons, such as alcohol and drugs. Furthermore any other occupation that would violate the principles of right speech and right action should be avoided.

Right Effort

Right effort can be seen as a prerequisite for the other principles of the path. Without effort, which is in itself an act of will, nothing can be achieved, whereas misguided effort distracts the mind from its task, and confusion will be the consequence. Mental energy is the force behind right effort; it can occur in either wholesome or unwholesome states. The same type of energy that fuels desire, envy, aggression, and violence can on the other side fuel self-discipline, honesty, benevolence, and kindness. Right effort is detailed in four types of endeavours that rank in ascending order of perfection: 1. to prevent the arising of unarisen unwholesome states, 2. to abandon unwholesome states that have already arisen, 3. to arouse wholesome states that have not yet arisen, and 4. to maintain and perfect wholesome states already arisen.

Right Mindfulness

Right mindfulness is the controlled and perfected faculty of cognition. It is the mental ability to see things as they are, with clear consciousness. Usually, the cognitive process begins with an impression induced by perception, or by a thought, but then it does not stay with the mere impression. Instead, we almost always conceptualise sense impressions and thoughts immediately. We interpret them and set them in relation to other thoughts and experiences, which naturally go beyond the facticity of the original impression. The mind then posits concepts, joins concepts into constructs, and weaves those constructs into complex interpretative schemes. All this happens only half consciously, and as a result we often see things obscured. Right mindfulness is anchored in clear perception and it penetrates impressions without getting carried away. Right mindfulness enables us to be aware of the process of conceptualisation in a way that we actively observe and control the way our thoughts go. Buddha accounted for this as the *four foundations of mindfulness*: 1. contemplation of the body, 2. contemplation of feeling (repulsive, attractive, or neutral), 3. contemplation of the state of mind, and 4. contemplation of the phenomena.

Right Concentration

The eighth principle of the path, right concentration, refers to the development of a mental force that occurs in natural consciousness, although at a relatively low level of intensity, namely concentration. Concentration in this context is described as one-pointedness of mind, meaning a state where all mental faculties are unified and directed onto one particular object. Right concentration for the purpose of the eightfold path means *wholesome concentration*, i.e. concentration on wholesome thoughts and actions. The Buddhist method

of choice to develop right concentration is through the practice of meditation. The meditating mind focuses on a selected object. It first directs itself onto it, then sustains concentration, and finally intensifies concentration step by step. Through this practice it becomes natural to apply elevated levels concentration also in everyday situations.

Research Methodology

Content analysis has been performed. Content analysis is a methodology in the social sciences for studying the content of communication. Earl Babbie defines it as “the study of recorded human communications, such as books, websites, paintings and laws.” It is most commonly used by researchers in the social sciences. For this purpose articles, web as well as publications used. Furthermore the interview method also has been used with selected experts in different industries.

Findings

In Content analysis it has drawn that marketing and Buddhism go-inline with understanding needs and wants of the people. Marketing always focus on customer satisfaction (Kotler and Amrsstraong,2008). Marketing activities and strategies result in making products available that satisfy customers while making profits for the companies that offer those products. To satisfy customers there is a need to understand their needs and wants. People should understand the minds of the customers. In Buddhism as well it includes a deep understanding of the human mind which prominent psychologists around the world are now discovering to be both very advanced and effective.

Buddhism teaches solutions to problems. In marketing also people defined it has total solution for customer problems. Understanding Consumer behavior is important in marketing (Fishbein,1970). In Buddhism too behavior of people always tested. And more interestingly it has found that marketer can learn a lot from Buddhism. If marketer wants to understand the mindset of their customers they should learn Buddhism. Buddhism is all about practice rather than belief. If marketer can follow the following eightfold path he can perform well in the market.

1. Right understanding –If marketer can understand the customer needs and wants in a correct way easily he can convince his idea to customer. In Sri Lanka Dialog Axiata offering new packages with low IDD rate by understanding the needs and wants of the customers expecting to offer more than the competitors are doing.
2. Right thinking –If marketer can think about the customer and his/her mindset properly then he/she can deliver the right product, in a right time and in a right way. The small business called Elcardo where they think that roller door market is going to perform well in Sri Lanka. Hence they went abroad and technical expertise has been taken. Now they are producing roller doors in Sri Lanka and rated as

number one in that market with profit as well as with ethics with corporate social responsibility.

3. Right speech-This is much important in marketing. Especially in sales management negotiation plays a vital role. If you speak correctly to your customer easily you can sell your product. For marketer these elements are important to negotiate with customers. Then only marketer can focus on relationship marketing.(building long term relationship with customers). The Siddhalepa group in Sri Lanka has a long history. They are doing well in Auyurvedic balms etc. The owner of the group Mr. Victor Hettigoda always talk about his success story as well as giving lessons for the people who want to start new businesses ethically etc.
4. Right action –In marketing people always talking about proactive marketing. In other words you have to do something before your competitor. Furthermore it can relate ethical marketing also in this regards. You have to do right things (ethical) to motivate your customers. As discuss earlier the owner of Siddhalepa group Mr. Victor Hettigoda always articulates “right action will lead right results” in business.
5. Right livelihood- Right livelihood means that one should earn one’s living in a righteous way and that wealth should be gained legally and peacefully. This is important especially once it concern about professionalism. Customer always concern about the organization, salesperson and behavior. Once you have a right livelihood only customer will trust you. And then he/she will commit with you too. The company of Dilmah can be considered as one example where customers also willing to be a part of it because of right livelihood of the company in past decades.
6. Right effort –Right effort can be seen as a prerequisite for the other principles of the path. Without effort, which is in itself an act of will, nothing can be achieved, whereas misguided effort distracts the mind from its task, and confusion will be the consequence. Basically some times marketers will go for unethical practices. Marketing ethics is the area of applied ethics which deals with the moral principles behind the operation and regulation of marketing. Some marketers are in competition to increase profits and extracting a few extra rupees from the consumer by using deceptive practices is an easy way. But right effort should be there. In Education business it can be seen some unethical business practices .But Auston Ceylon Limited is doing well under the General Manager Mr. Gamini Jayasooriya who always believing that right effort will lead right outcome.
7. Right mindfulness- Right mindfulness enables us to be aware of the process of conceptualization in a way that we actively observe and control the way our thoughts go. This is important in marketing because every time marketer should understand the market as well as consumer behavior. If marketer

can observe the behavior and the nature of the market easily he/she can understand his/her customer. As discussed earlier the General Manager Mr. Gamini Jayasooriya always believes not to be panic in the situation but to conceptualize the arena in broad mindset.

8. Right concentration - Concentration in this context is described as a state where all mental faculties are unified and directed onto one particular object. If a marketer can concentrate the object(customer) continuously he/she can perform well than competitors Because continuous observation and research in marketing is very much important to understand the behavior of customers.

Conclusion

To become a good marketer you need knowledge, practice as well as sound mindset. In eightfold path it always teaches that few important aspects with complete touch. Even the latest version of Marketing 3.0 (Kotler, Kartajaya, and Iwan, 2010) argues instead of treating people simply as consumers, marketers must approach them as whole human beings with minds, hearts and spirit. This is what the Buddhism always dictates. Dr. Mikio Matsuoka, Researcher, Institute of Oriental Philosophy discusses it in one article of “The Buddhist concept of a Human Being” (Published in The Journal of Oriental Studies, 2005) which explains how Shakyamuni Buddha’s religious movement attempted to realize a moralistic revolution of society by reforming the hearts and minds of the individuals in that society. Buddhism offers methods to clarify our mind, open our heart, and face the realities of human life Hence it can conclude that Buddhism is a universal subject and it can be used to develop the contemporary subjects like marketing.

References

- Fishbein, M. (1970) ‘The relationships between beliefs, attitudes and behaviour’ in Kollat, D. T., Blackwell, R. D. and Engel, J. F. (eds.) *Research in Consumer Behaviour*, Oxford, Elsevier.
- Kotler, P. and Armstrong, G. (2008) *Principles of Marketing* (12th edn), New Jersey, Pearson Education.
- Kotler, Philip; Kartajaya, Hermawan; Setiawan, Iwan (2010): *Marketing 3.0: From Products to Costumers to the Human Spirit*. Hoboken, New Jersey: John Wiley & Sons, p. 70-71.
- Matusoka, M(2005): “The Buddhist concept of the human being”, *The Journal of Oriental Studies*, Vol. 15
- www.thebigview.com/buddhism/eightfoldpath.html
- <http://www.telegraph.co.uk/news/newstoppers/religion/5977093/Buddhism-is-fastest-growing-religion-in-English-jails-over-past-decade.html>

Manish Yadav

Research Scholar
Faculty of Management Studies
Banaras Hindu University

Dr Rohan Rai

Assistant Registrar
Banaras Hindu University

Dr Alok Kumar Rai

Associate Professor
Faculty of Management Studies
Banaras Hindu University

Abstract

The banking sector in India has made remarkable progress ever since the economic reforms were introduced in the year 1991. New private sector banks have brought the necessary competition into the banking industry and spearheaded the movement towards higher utilization of technology, improved customer service and innovative products. Customers are now becoming increasingly aware of the options. Therefore expectation has increased and customers have become more critical of service quality. Keeping these in mind, an attempt has been made in this study to analyze the service quality gaps in selected public sector banks.

The aim of the study is to identify the service quality Gaps in Indian Public Sector Banks and suggest banks the areas required by them for superior customer satisfaction and subsequent business growth.

This study highlights service quality gap on the basis of service gaps model with special reference to public sector banks. It also explores service quality expectations and perceptions of the customers, management and frontline staff of select banks which if taken care of by banks can lead to better performance from the banks or indispensable tool for sustainable growth in dynamic banking environment.

Introduction

In the process of financial reforms a lot of challenges were faced by Indian banking sector during 1991. In 1969 and 1980, after nationalization of commercial banks the ownership of major commercial banks was taken over by the Government. Nationalization restricted competition and the banking sector was insulated from world financial markets. Over a period of time, the prevailing environment created a mindset, where one began to look for guidance for everything. There was a comfort among the bankers when approval, guidance or confirmation of actions taken was received from the higher authority. The banking personnel have completely lost their vigor and stopped thinking and operating like business organization.

A country without efficient and profitable financial markets suffers from multiple disadvantages in a more open world. India opened up its financial markets in the early 1990s. Banking sector reforms made possible entry of new generation tech-savvy private banks and the expansion of operations of foreign banks, the banking sector has become too competitive. To deal with the emerging situations, bankers have to shed a lot of old ideas, change in practices, develop customer loyalty programs, and adopt a distinct approach to meet the challenges ahead. In a fiercely competitive market, non-price factors like customer service become more important (Kotler, 2003). Hence, it was desirable for banks to develop a customer-centric approach for future survival and growth.

Immensely competitive Indian banking industry presented choices before the customers. Customers are increasingly aware of the options on offer in relation to the rising standards of service (Krishnaveni et al, 2004). In this context, expectations rise and presented challenges for customer service techniques as service quality, customer satisfaction, customer retention and delight.

Keywords

Service Quality, Public Sector Bank, Customer Expectation, Customer Perception, Management expectation, Management Perception, Service Quality Gaps

Review of Literature:

In the light of the research findings, interest in service quality is, thus, unarguably high. Poor quality places a firm at a competitive disadvantage. If customers perceive quality as unsatisfactory, they may be quick to take their businesses elsewhere. Thus, it is clear that service quality offers a way of achieving success among competing services, particularly in the case of firms that offer nearly identical services, such as banks, where establishing service quality may be the only way of differentiating oneself. Such differentiation can yield a higher proportion of consumers' choices and, hence, mean the difference between financial success and failure.

Delivering quality service to customers is a must for success and survival in today's competitive banking environment (Samli and Frohlich, 1992). Among others, provision of high quality services enhances customer retention rates, helps attract new customers through word of mouth advertising, increases productivity, leads to higher market shares, lowers staff turnover and operating costs, and improves employee morale, financial performance and profitability (Julian and Ramaseshan, 1994; Lewis, 1989; 1993). Partially owing to such proven and potential benefits, and partially fuelled by Parasuraman, Zeithaml and Berry's seminal works in the 1980s (Parasuraman *et al.*, 1985 and 1988), service quality issues have received growing attention from management and academic circles. Much of this focus, however, has been in developed countries (Herbig and Genestre, 1996) even though services are among the fastest growing sectors in emerging countries (Malhotra *et al.*, 1993). Perhaps due to the prevailing sellers' market conditions in the emerging economies, service quality issues have long been neglected (Firoz and Maghrabi, 1994; Kassem, 1989).

Studying Service Quality in Banking Industry has been of enormous interest in the recent times. Some studies have shown that commercial banks require continuous quality improvement and relationship building to be competitive and stay healthy. Brown & Swartz (1999) suggests that the measurement of service quality has increasingly created an interest among the service providers (banks) and scholars alike. It is so because service quality is being used to position the banks in the market place.

Bhattacharya (1990), in his study established that an unqualified assertion that customer orientation of the banking industry has deteriorated in the post nationalization era is empirically untenable. The banking industry itself in response to rising customer aspirations and has become increasingly aware of its own limitations and has taken several measures to become more customer-oriented. Service quality has been viewed as a significant issue in the banking industry by Stafford (1994). Since financial services are generally undifferentiated products, it becomes imperative for banks to strive for improved service quality if they want to distinguish themselves from the competition.

Kim, Seonmee & Kleiner, Brian, H. (1996) in their study, selected three US banks, Bank of America, Citi Bank

and One Valley Bank. They conducted personal telephone interviews besides researching banking journals and books. They found that the three banks shared the common elements of service excellence—a clear banking culture provided by committed management, employee empowerment by enhancing knowledge and skills, and improvement of operating processes with technological applications. The management recognized the definite needs to adapt itself to a changing environment and provide employees with vision for service quality.

Kangis, Peter., & Voukelatos, Vassilis (1997) in their study on reported the findings of a survey among customers of private and public sector banks in Greece on service quality perceptions and expectations. He found that quality expectations and evaluation of services received were marginally higher in the private than in the public sector in most of the dimensions measured.

Bahia and Nantel (2000) in their study developed a banking service quality model for retail banking extension of SERQUAL. In addition, Bahia and Nantel (2000) incorporated additional items for courtesy and access, as proposed by Carman (1990), and items representing the marketing mix of the '7 Ps' (product/service, place, process, participants, physical surroundings, price, and promotion) from Boom and Bitner's (1981) framework. After purification, the BSQ had 31 items of service quality relevant to the banking sector. These 31 items were distributed across six dimensions; effectiveness and assurance; access; price; tangibles; service portfolio; and reliability.

Verma and Israney (2001) measure the extent of market orientation in commercial banks. The overall market-orientation score of the sample was components, viz., intelligence generation, intelligence dissemination, and response design and response implementation. Sureshchandar, G.S., Rajendran, Chandrasekharan., Anantharaman, R.N., Kamalanabhan, T.J. (2002), in their study developed Total Quality Service (TQS) indices for the three group of banks (Public sector banks, private sector banks and foreign banks). Their study highlighted management's perception of quality in banking services in India.

They concluded that the TQS indices for the Indian banking industry as a whole have a mediocre performance. Therefore, there seems to be much scope for improvement when compared to the level of TQS implementation practiced by the best banks of the developed countries of the world.

Gani and Bhatt (2003) studied service quality in a commercial bank with a view to make it better. The result concludes that the service quality of foreign banks is much better than that of Indian banks and suggests heavy investment by Indian banks in tangibility dimension to improve the quality of service. Sureshchandar, G.S., Rajendran, Chandrasekharan., Anantharaman, R.N. (2003) critically examined the service-quality issues (from the perspective of customers) with respect to a developing economy-India. The three groups of banks in India (public sector, private sector and foreign banks)

have been compared with respect to the factors of service quality. They concluded that the technological factors (core service and systematization of the service delivery) appear to contribute more in differentiating the three sectors while the people-oriented factor (human element of service delivery) appears to contribute less to the discrimination. The results have also indicated that foreign banks seem to be performing well followed by private sector banks and public sector banks. Spathis, Charalambos; Eugenia, Petridou and Glaveli, Niki (2004) discussed the service quality of Greek banks on the basis of their customers' perceptions, and analyses how gender differences affect customers' perceptions of service quality dimensions such as effectiveness and assurance, access, price, tangibles, service portfolio, and reliability. The study supported the hypothesis that gender affects service quality perceptions and the relative importance attached to various banking service quality dimensions. Yavas, Ugur., Benkenstein, Martin., & Stuhldreier, Uwe (2004) examined the nature of relationships between service quality, background characteristics, and satisfaction and selected behavioral outcomes by using retail banking in Germany as its setting. Study results shown that service quality is at the root of customer satisfaction and is linked to such behavioral outcomes such as word of mouth, complaint, recommending and switching. The results indicate that tangible elements of service quality and being a female are more closely associated with positive word of mouth and commitment. On the other hand, 'timeliness' aspects of service delivery are more closely related to customer satisfaction, and complaint and switching behaviors.

Alka Sharma and Versha Mehta (2004) in their study on found that public sector banks enjoy a better quality perception among their customers. Joshua, A.J. & Koshi, Moli.P. (2005) observed that recognition of service quality as a competitive weapon is relatively a recent phenomenon in the Indian Banking sector. Prior to the liberalization era the banking sector in India was operating in a protected environment and was dominated by nationalized banks. Banks at that time did not feel the need to pay attention to service quality issues and they assigned very low priority to identification and satisfaction of customer needs. Nalini Prava Tripathy (2006) highlighted the facts of customer preferences towards the bank. It is the need of the hour for PSBs to inculcate marketing orientation in their work culture. The bankers should educate their front-end staff about the need to meet the customer expectations which alone can build the reputation and image of the bank.

Purohit, H.C. & Pathardikar, Avinash, D. (2007) covered the issues related with the measurement of service quality and recorded responses of the bank customers about the services of the Nationalized Banks in India. They identified key elements of strategies seen to be adopted by leading Indian banks include building a strong presence in India and international markets, customer-focused product innovation, financial resilience and a strong operating environment. They stressed the need that the policy decision makers should make multi-cornered efforts to have a new perception of quality.

Vijayakumar T. & Velu.R (2007) collected data from 325 customers of various retail banks to identify the determinants of customer satisfaction in terms of service quality, service feature, service problems, service recovery and product used and the intention of switch over to other banks. He found that in retail banking, core and relational features ought to be equally weighted when managers are interested in improving customer satisfaction. In contrast, when the focus is on reducing switching intentions, considerable emphasis should fall on core items, ensuring successful problem recovery. In this case, the influence of relational features is far less important. R K Mohanty (2008) observed that there are wide gaps exist between the expectations and views of customers on one hand and products and service delivery by banks on the other hand. Also, there exist many socio-cultural aspects quite specific and relevant from the viewpoint of customers as well as banks. Many of these issues are either not addressed so far or to a little extent. Customer satisfaction is not only applicable to external customers; but also equally applicable to internal customers (i.e. employees).

Hugan, S.S. & Vaz, Nancy. H. (2008) delves into the secondary data to evaluate the present customer orientation of Indian Public Sector Banks and thus take stock of their strengths and lacunae, before plunging into the open regime. They stressed that the need has arisen that Indian public sector banks equip themselves to face the competition squarely even with their social responsibilities. The economy has depended heavily on them in the past and so would it in the future. In the competitive scene, among various other factors, customer orientation occupies the place of prominence for success.

Service quality measurement scales:

There have been several scales developed by several experts for testing of service quality gaps in different industry. Following are few prominent scales widely used in service sectors:

SERVQUAL Scale:

The foundation for the SERVQUAL scale is the gap model proposed by Parasuraman, Zeithaml and Berry (1985, 1988). With roots in disconfirmation paradigm, the gap model maintains that satisfaction is related to the size and direction of disconfirmation of a person's experience *vis-à-vis* his/her initial expectations (Churchill and Surprenant, 1982; Parasuraman, Zeithaml and Berry, 1985; Smith and Houston, 1982). Based on their empirical work, they identified a set of 22 variables/items tapping five different dimensions (Reliability, Tangibles, Responsiveness, Assurance, and Empathy) of service quality construct. Since they operationalized service quality as being a gap between customer's expectations and perceptions of performance on these variables, their service quality measurement scale is comprised of a total of 44 items (22 for expectations and 22 for perceptions).

SERVPERF Scale:

Cronin and Taylor (1992) were amongst the researchers who leveled maximum attack on the SERVQUAL scale.

They questioned the conceptual basis of the SERVQUAL scale and found it confusing with service satisfaction. They, therefore, opined that expectation (E) component of SERVQUAL be discarded and instead performance (P) component alone be used. They proposed what is referred to as the 'SERVPERF' scale. Besides theoretical arguments, Cronin and Taylor (1992) provided empirical evidence across four industries (namely banks, pest control, dry cleaning, and fast food) to corroborate the superiority of their 'performance-only' instrument over disconfirmation-based SERVQUAL scale. Being a variant of the SERVQUAL scale and containing perceived performance component alone, 'performance only' scale is comprised of only 22 items. A higher perceived performance implies higher service quality. In equation form, it can be expressed as:

$$SQ = \sum_{j=1}^k P_{ij}$$

where: SQ_i = perceived service quality of individual 'i'

k = number of attributes/items

P = perception of individual 'i' with respect to performance of a service firm on attribute 'j'

Retail Service Quality Scale (RSQS):

Dabholkar et al. (1996) who developed and empirically validated a scale to measure retail service quality distinctively. In developing the instrument, the researchers conducted a triangulation of research techniques involving interviews with several retail customers, in-depth interviews with six customers and a qualitative study that monitored the thought process of three customers during an actual shopping experience. These three differing methods combined with a review of service quality related literature and some modification to the original SERVQUAL scale produced a hierarchical factor structure scale which Dabholkar et al. (1996) aptly named as the Retail Service Quality Scale (RSQS). According to Dabholkar et al. (1996), retail service quality had a hierarchical factor structure which comprised of five basic dimensions. The five dimensions proposed were: Physical aspect, Reliability, Personal interaction, Problem solving & Policy.

Banking Service Quality Scale (BSQs):

Quality is sought by all organizations; especially in the service sector. This is particularly true in the banking sector. However, banks had no recognized publicly available and standard scale to measure the perceived service quality of bank services. In general available instrument had included either scale contextually developed by specific to cope with occasional problems or instrument not specially designed for banking services but rather to measure service quality across a broad spectrum of services. Among such general instruments, the most popular was SERVQUAL, a well known scale developed by Parasuraman et al., which had been used

both original and adopted versions by a variety of banks. (Osman M. Karatepe, Ugur Yavas, Emin Babakus) has developed a reliable and valid scale for the measurement of perceived service quality in banking services, in general. The focus was not neither on services general nor on the services of a particular bank in a specific situation but rather on banking services.

In the banking sector, perceived service quality results from the difference between customers' perception for the service offered by the bank (received service) and their expectations vis a vis the bank offer such services (expected service).

Research Method: The research methodology adopted in the study is as follows:

Research Objective: The present study attempts to identify the gap at the stages of formation of service quality required by the customers & services delivered by the public banks. It aims at assisting the banks in assessment of their services by identifying the service gaps which create gaps in service quality and improving them thereby achieving superior satisfaction. The specific objectives of the study are as follows:

- i) To identify the customer's, Management & Frontline staff service expectation on select service parameters.
- ii) To identify the gaps of respective service quality dimensions.
- iii) To identify the areas which require special attention among Indian public sector banks in providing service quality.

Research Design: The research design descriptive as the research is intended to conclude and suggest measures to zero down on the service quality gaps in Indian public sector banks.

Sample: The study is conducted in Varanasi. The banks were selected on the basis of their active presence in Varanasi. These were State Bank of India, Punjab National Bank and Bank of Baroda. Data was collected from 50 customers, 10 managerial cadre officials and 20 frontline staff of SBI, Bank of Baroda and PNB each using structured questionnaire duly tested for validity and reliability. The study has used various suitable statistical techniques for objectivity in the finding and more categorical inferences.

Data Collection Tool: Data was collected through a close ended structured questionnaire. It was based on Questionnaire to assess Service Quality; SERVQUAL designed by *Parasuraman et al. (1988)* and later was customized after taking opinion of customers' responses, management & frontline staff.

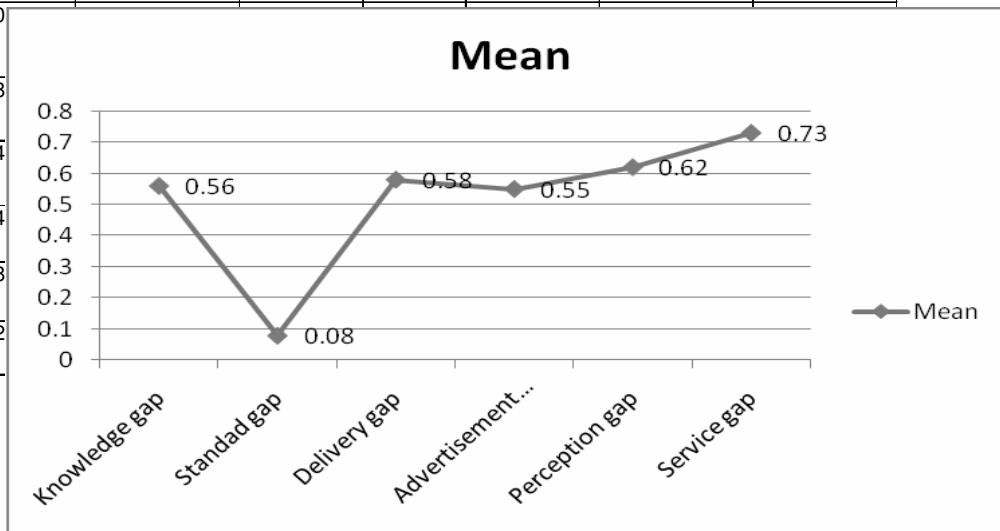
Sampling Method: Judgmental and Convenience sampling method is used for data collection.

Reliability Test: The Questionnaire was also tested for its reliability and the Cronbach alpha value came out to be .873 which proves the reliability of the Questionnaire.

FINDINGS :

Table - I : Mean responses of SBI

| Items | Customer Needs | Management Definition | Standard Installation | Actual Delivery | Customer perception of service | Gaps in percentage | Customer experience wrt expectation |
|---|----------------|-----------------------|-----------------------|-----------------|--------------------------------|--------------------|-------------------------------------|
| Knowledge gap | 4.56 | 5.00 | 5.00 | 4.00 | 2.96 | 3.32 | 2.89 |
| Standards gap | | | | | | 1.6 | |
| Delivery gaps | | | | | | 11.6 | |
| Advertisement interpretation gap | | | | | | 11 | |
| Perception gap | | | | | | 12.4 | |
| Service gap of services | 4.14 | 5.00 | 5.00 | 5.00 | 3.60 | 3.72 | 3.48 |
| Consistency with latest banking innovations | 4.08 | 5.00 | 5.00 | 5.00 | 3.36 | 3.74 | 3.38 |
| Modern equipment | 4.28 | 5.00 | 5.00 | 4.00 | 3.40 | 3.62 | 3.40 |
| Error free service delivery | 4.76 | 5.00 | 5.00 | 4.00 | 3.38 | 3.96 | 3.48 |
| Delivering when promised | 4.70 | | | | | | |
| Precision of account statement | 4.48 | | | | | | |
| Well-trained personnel | 4.44 | | | | | | |
| Sufficient no of ATMs | 4.64 | | | | | | |
| No Interruption of service | 4.58 | | | | | | |
| Employee courtesy | 4.42 | | | | | | |



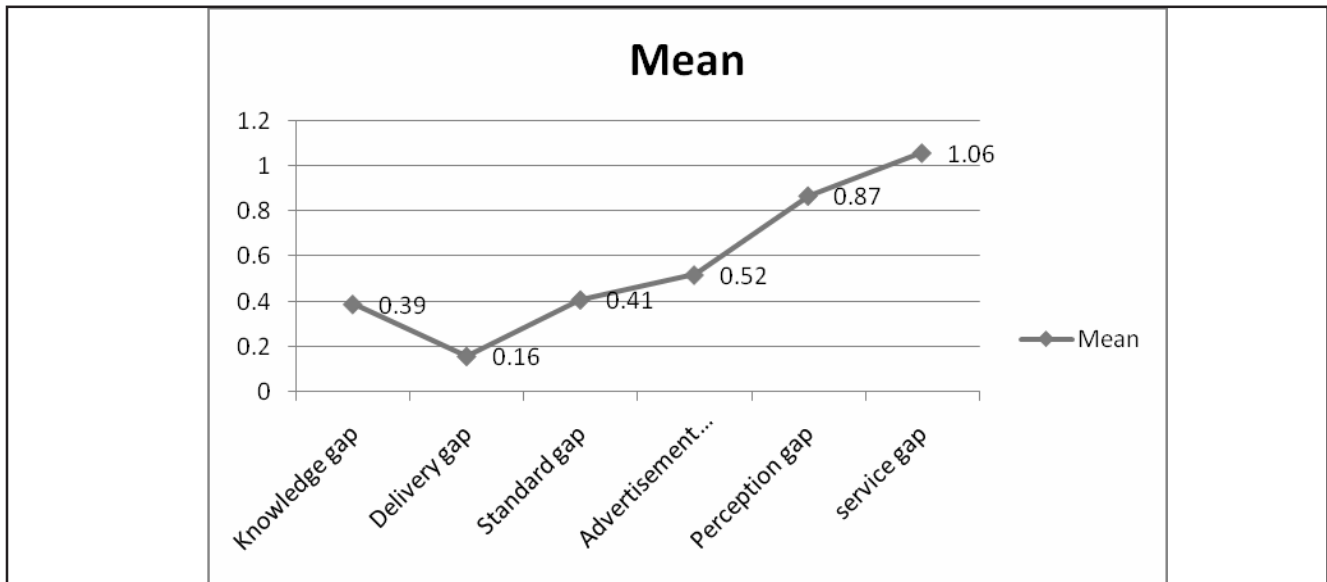
1. From the above graph, Knowledge gap is depicted 0.56 which signifies 11.2% gap between customer needs & expectations and management definition of respective needs.
2. Standard gap is 0.08 which signifies that there is 1.6% gap in translation the management definition into standard.
3. Delivery gap is 0.58 which signifies that there is 11.6% gap between frontline customer's actual delivery and what the standard is.
4. Advertisement gap is 0.55 which signifies that there is 11% gap between advertisement and interpretation by customers.
5. Perception gap is 0.62 which signify that 12.4% gap between actual service and customer perception about service.
Service gap is 0.73 which shows that there is 14.6% gap between customer expectation and customer perception about service.

Table-II : Mean responses of Bank of Baroda

| Sl. No. | Items | Customer Needs | Management Definition | Standard establishment | Actual Delivery | Customer perception of service | Customer interpretation | Customer experience wrt expectation |
|---------|---|----------------|-----------------------|------------------------|-----------------|--------------------------------|-------------------------|-------------------------------------|
| 1 | Less Waiting time | 4.84 | 5.00 | 5.00 | 5.00 | 3.04 | 3.62 | 3.14 |
| 2 | Sufficient number of teller counters | 4.24 | 5.00 | 5.00 | 4.00 | 2.92 | 3.38 | 3.00 |
| 3 | Complete range of services | 4.26 | 4.00 | 5.00 | 5.00 | 3.52 | 4.00 | 3.36 |
| 4 | Consistency with latest banking innovations | 4.42 | 5.00 | 5.00 | 5.00 | 3.56 | 3.82 | 3.52 |
| 5 | Modern equipment | 4.36 | 5.00 | 5.00 | 5.00 | 3.54 | 3.72 | 3.36 |
| 6 | Error free service delivery | 4.76 | 5.00 | 4.00 | 3.00 | 3.74 | 3.98 | 3.30 |
| 7 | Delivering when promised | 4.80 | 5.00 | 5.00 | 4.00 | 3.72 | 4.14 | 3.32 |
| 8 | Precision of account statement | 4.68 | 5.00 | 5.00 | 5.00 | 4.08 | 4.12 | 3.76 |
| 9 | Well-trained personnel | 4.48 | 5.00 | 4.00 | 4.00 | 3.56 | 3.74 | 3.34 |
| 10 | Sufficient no of ATMs | 4.48 | 5.00 | 5.00 | 5.00 | 3.68 | 3.84 | 3.28 |
| 11 | No Interruption of service | 4.42 | 5.00 | 4.00 | 3.00 | 3.14 | 3.70 | 3.10 |
| 12 | Employee courtesy | 4.58 | 5.00 | 5.00 | 4.00 | 3.08 | 3.66 | 3.24 |

Table-II (a) : Service Quality Gaps Of Bank Of Baroda

Here rate has been taken on the scale of 1- 5 where 1 is least and 5 is most.



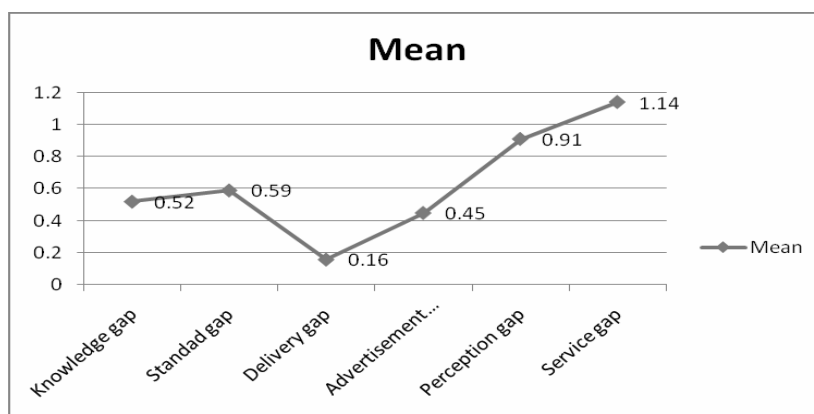
1. From the above graph, Knowledge gap is 0.39 which signifies that 7.8% gap between customer needs & expectation and management definition of respective needs.
2. Standard gap is 0.16 which signifies that 3.2% gap in translation the management definition into standard.
3. Delivery gap is 0.41 which signifies that 8.2% gap between frontline customer's actual delivery and what the standard is.
4. Advertisement gap is 0.52 which signifies that 10.4% gap between advertisement and interpretation by customers.
5. Perception gap is 0.87 which signifies that 17.4% gap between actual service and customer perception about service.
6. Service gap is 1.06 which shows that 21.2% gap between customer expectation and customer perception about service.

Table-III : Mean responses of Punjab National Bank

| Sl. No. | Items | Customer Needs | Management Definition | Standard establishment | Actual Delivery | Customer perception of service | Customer interpretation | Customer experience wrt expectation |
|---------|---|----------------|-----------------------|------------------------|-----------------|--------------------------------|-------------------------|-------------------------------------|
| 1 | Less Waiting time | 4.86 | 5.00 | 4.00 | 4.00 | 3.12 | 3.24 | 2.82 |
| 2 | Sufficient number of teller counters | 3.92 | 5.00 | 4.00 | 3.00 | 3.38 | 3.26 | 3.18 |
| 3 | Complete range of services | 4.56 | 5.00 | 5.00 | 5.00 | 3.66 | 3.88 | 3.34 |
| 4 | Consistency with latest banking innovations | 4.32 | 5.00 | 5.00 | 5.00 | 3.16 | 3.68 | 3.32 |
| 5 | Modern equipment | 4.34 | 5.00 | 5.00 | 5.00 | 3.36 | 3.54 | 3.28 |
| 6 | Error free service delivery | 4.36 | 5.00 | 4.00 | 4.00 | 3.40 | 3.94 | 2.92 |
| 7 | Delivering when promised | 4.40 | 5.00 | 3.00 | 3.00 | 3.50 | 4.14 | 3.54 |
| 8 | Precision of account statement | 4.56 | 5.00 | 4.00 | 5.00 | 4.12 | 4.06 | 3.50 |
| 9 | Well-trained personnel | 4.48 | 5.00 | 5.00 | 5.00 | 3.36 | 4.12 | 3.40 |
| 10 | Sufficient no of ATMs | 4.68 | 5.00 | 5.00 | 4.00 | 3.28 | 3.88 | 3.26 |
| 11 | No Interruption of service | 4.80 | 5.00 | 5.00 | 4.00 | 2.80 | 3.86 | 2.66 |
| 12 | Employee courtesy | 4.38 | 5.00 | 4.00 | 4.00 | 3.04 | 3.96 | 2.96 |

Table-III (a) : Service quality gaps Punjab National Bank
Here rate has been taken on the scale of 1- 5 where 1 is least and 5 is most.

| Gaps | Gaps Score(absolute) | Gaps in percentage |
|----------------------------------|----------------------|--------------------|
| Knowledge gap | -0.52 | 10.4% |
| Standards gap | 0.59 | 11.8% |
| Delivery gaps | 0.16 | 3.2% |
| Advertisement interpretation gap | 0.45 | 9 % |
| Perception gap | 0.91 | 18.2% |
| Service gap | 1.14 | 22.8% |



- From the above graph, Knowledge gap is 0.52 which signifies that 10.4% gap between customer needs & expectation and management definition of respective needs.
- Standard gap is 0.59 which signifies that 11.8% gap in translation the management definition into standard.
- Delivery gap is 0.16 which signifies that 3.2% gap between frontline customer's actual delivery and what the standard is.
- Advertisement gap is 0.45 which signifies that 9% gap between advertisement and interpretation by customers.
- Perception gap is 0.91 which signifies that 18.2% gap between actual service and customer perception about service.
- Service gap is 1.14 which shows that 22.8% gap between customer expectation and customer perception about service.

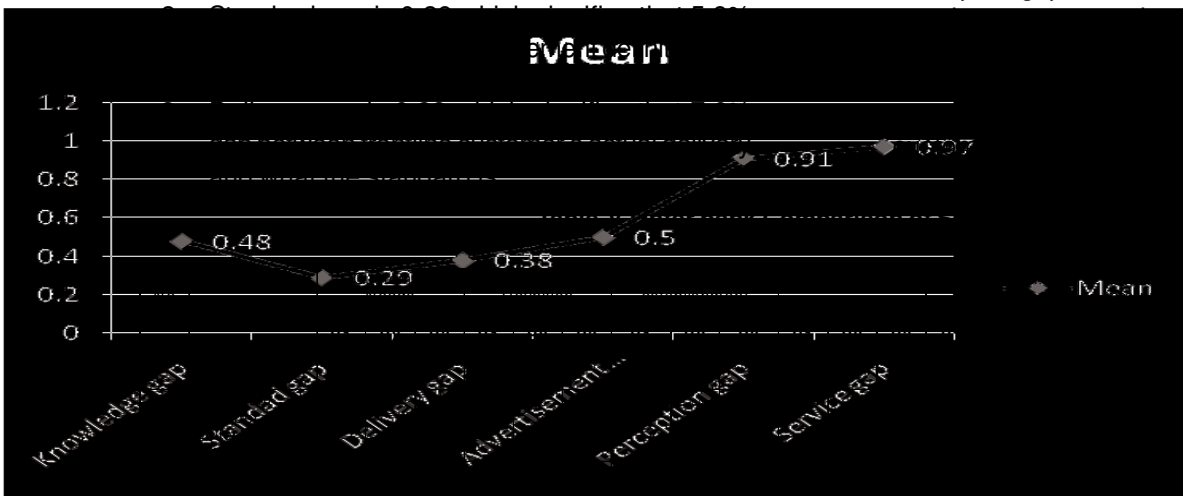
Table-IV : Mean responses of public sector bank

| Sl. No. | Items | Customer Needs | Management Definition | Standard establishment | Actual Delivery | Customer perception of service | Customer interpretation | Customer experience wrt expectation |
|---------|---|----------------|-----------------------|------------------------|-----------------|--------------------------------|-------------------------|-------------------------------------|
| 1 | Less Waiting time | 4.75 | 5.00 | 4.66 | 4.33 | 3.04 | 3.39 | 2.98 |
| 2 | Sufficient number of teller counters | 4.14 | 5.00 | 4.66 | 3.66 | 3.15 | 3.34 | 3.10 |
| 3 | Complete range of services | 4.32 | 4.66 | 5.00 | 5.00 | 3.59 | 3.86 | 3.39 |
| 4 | Consistency with latest banking innovations | 4.27 | 5.00 | 5.00 | 5.00 | 3.36 | 3.74 | 3.40 |
| 5 | Modern equipment | 4.32 | 5.00 | 5.00 | 4.66 | 3.43 | 3.62 | 3.34 |
| 6 | Error free service delivery | 4.62 | 5.00 | 4.30 | 3.66 | 3.50 | 3.96 | 3.23 |
| 7 | Delivering when promised | 4.63 | 5.00 | 4.33 | 3.66 | 3.56 | 4.02 | 3.37 |
| 8 | Precision of account statement | 4.57 | 5.00 | 4.66 | 4.66 | 3.98 | 4.05 | 3.70 |
| 9 | Well-trained personnel | 4.66 | 5.00 | 4.66 | 4.66 | 3.38 | 3.90 | 3.31 |
| 10 | Sufficient no of ATMs | 4.60 | 5.00 | 5.00 | 4.66 | 3.65 | 4.04 | 3.47 |
| 11 | No Interruption of service | 4.60 | 5.00 | 4.33 | 3.33 | 3.02 | 3.76 | 2.90 |
| 12 | Employee courtesy | 4.50 | 5.00 | 4.66 | 4.33 | 3.04 | 3.80 | 3.06 |

Table-IV (a) : Service quality gaps of public sector banks
 Here rate has been taken on the scale of 1- 5 where 1 is least and 5 is most.

| Gaps | Gaps Score(absolute) | Gaps in percentage |
|----------------------------------|----------------------|--------------------|
| Knowledge gap | 0.48 | 9.8% |
| Standards gap | 0.29 | 5.8% |
| Delivery gaps | 0.38 | 7.6% |
| Advertisement interpretation gap | 0.50 | 10% |
| Perception gap | 0.91 | 18.2% |
| Service gap | 0.97 | 19.4% |

- From the above graph, Knowledge gap is 0.48 which signifies that 9.8% gap between customer needs & expectation and management definition of respective needs.
- Standards gap is 0.29 which signifies that 5.8% gap between customer needs & expectation and management definition of respective needs.
- Delivery gap is 0.38 which signifies that 7.6% gap between customer needs & expectation and management definition of respective needs.
- Advertisement gap is 0.5 which signifies that 10% gap between advertisement and interpretation by customers.
- Perception gap is 0.91 which signifies that 18.2% gap between customer service and customer



which shows that 19.4% gap between customer service and customer expectation and management definition of respective needs.

| Sl. No. | Services | Customer experience w.r.t expectation | | | | | | | | | | | | | | | | | | | | | |
|---------|---|---------------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | | B3 | B1 | B2 | B3 | B3 | B1 | B2 | B3 | B3 | B1 | B2 | B3 | B3 | B1 | B2 | B3 | | | | | | |
| 4 | Consistency with latest banking innovations | 4.08 | 4.42 | 4.32 | 5.00 | 5.00 | 5.00 | 5.00 | 5.00 | 5.00 | 5.00 | 5.00 | 5.00 | 5.00 | 3.36 | 3.56 | 3.16 | 3.74 | 3.82 | 3.68 | 3.38 | 3.52 | 3.32 |
| 5 | Modern equipment | 4.28 | 4.36 | 4.34 | 5.00 | 5.00 | 5.00 | 5.00 | 5.00 | 5.00 | 4.00 | 5.00 | 5.00 | 3.40 | 3.54 | 3.36 | 3.62 | 3.72 | 3.54 | 3.40 | 3.36 | 3.28 | 3.28 |
| 6 | Error free service delivery | 4.76 | 4.76 | 4.36 | 5.00 | 5.00 | 5.00 | 5.00 | 4.00 | 4.00 | 4.00 | 3.00 | 4.00 | 3.38 | 3.74 | 3.40 | 3.96 | 3.98 | 3.94 | 3.48 | 3.30 | 2.92 | 2.92 |
| 7 | Delivering when promised | 4.70 | 4.80 | 4.40 | 5.00 | 5.00 | 5.00 | 5.00 | 5.00 | 3.00 | 4.00 | 4.00 | 3.00 | 3.48 | 3.72 | 3.50 | 3.80 | 4.14 | 4.14 | 3.26 | 3.32 | 3.54 | 3.54 |
| 8 | Precision of account statement | 4.48 | 4.68 | 4.56 | 5.00 | 5.00 | 5.00 | 5.00 | 5.00 | 4.00 | 4.00 | 5.00 | 5.00 | 3.74 | 4.08 | 4.12 | 3.98 | 4.12 | 4.06 | 3.86 | 3.76 | 3.50 | 3.50 |
| 9 | Well-trained personnel | 4.44 | 4.48 | 4.48 | 5.00 | 5.00 | 5.00 | 5.00 | 4.00 | 5.00 | 5.00 | 4.00 | 5.00 | 3.24 | 3.56 | 3.36 | 3.84 | 3.74 | 4.12 | 3.20 | 3.34 | 3.40 | 3.40 |
| 10 | Sufficient no of ATMs | 4.64 | 4.48 | 4.68 | 5.00 | 5.00 | 5.00 | 5.00 | 5.00 | 5.00 | 5.00 | 5.00 | 4.00 | 4.00 | 3.68 | 3.28 | 4.42 | 3.84 | 3.88 | 3.88 | 3.28 | 3.26 | 3.26 |
| 11 | No Interruption of service | 4.58 | 4.42 | 4.80 | 5.00 | 5.00 | 5.00 | 4.00 | 4.00 | 5.00 | 3.00 | 3.00 | 4.00 | 3.14 | 3.14 | 2.80 | 3.74 | 3.70 | 3.86 | 2.96 | 3.10 | 2.66 | 2.66 |
| 12 | Employee courtesy | 4.42 | 4.58 | 4.38 | 5.00 | 5.00 | 5.00 | 5.00 | 5.00 | 4.00 | 5.00 | 4.00 | 4.00 | 3.00 | 3.08 | 3.04 | 3.78 | 3.66 | 3.96 | 2.98 | 3.24 | 2.96 | 2.96 |

Where B1: State Bank of India
B2: Bank of Baroda
B3: Punjab National Bank

Conclusion:

The Knowledge Gap comes out to be negative which shows that the Indian Public Sector Banks perceive the needs and expectations of the customers to be much higher than the actual needs. The Standards Gap is also relatively high which shows that the standards established are not up to the mark. The Perception Gap comes out to be highest which shows that the customers are unable to accurately evaluate the services received; this is the biggest responsible factor for a large Service Quality Gap. The sum of Internal Communications Gap and Interpretation Gap is also quite large which shows that there is a problem with either creation of advertisements or then getting perceived by the customer or both of these.

Implication: The study of service quality gaps in Indian Public Sector Banks helped to identify the various gaps and helped identify areas for special attention. Indian Public Sector Banks should work on the service delivery (setting standards and delivering accordingly) because this gap has major contribution in widening the Service Quality Gap. Indian Public Sector Banks need to consider the advertising style and strategies adopted by them as the advertisements (creation and understanding) put the banks in a poor state as far as service quality is concerned. The banks have to take immediate action on diminishing the Perceptions Gap. They should work on reducing waiting time, ensuring minimum interruption of service and improving on the parameter of employee courtesy.

Scope for further study:

The present study is restricted to Varanasi only. A separate study may be conducted on wider geographical scale for more generalized findings. The survey in the current study was carried out on three banks only and 150 respondents. Another study can be conducted with increased no. of banks and larger sample size for a more meaningful & significant finding. More accurate result could be obtained with the use of probability sampling method.

References :

- Zeithaml, V A and Bitner, M J (2001). *Services Marketing: Integrating Customer Focus Across the Firms*, 2nd Edition, Boston: Tata-McGraw Hill.
- Bahia, K., Nantel, J. (2000), "A reliable and valid measurement scale for perceived service quality of banks", *International Journal of Bank Marketing*, Vol. 18 No.2, pp.84-91.
- Bitner, J. en Booms, B. "Marketing strategies and organizational structures for service firms", in Donnelly, J. en George, W. (1981) "Marketing of services", American Marketing Association, Chicago
- Carman, J.M. (1990), "Consumer perceptions of service quality: an assessment of the SERVQUAL dimensions", *Journal of Retailing*, Vol. 66 No.1, pp.35-55.
- Crosby, P.B(1979), *quality is free: the art of making quality certain*, McGraw-Hill, New York, NY.
- Dabholkar, P.A., Thorpe, D.I. & Rentz, J.O. (1996). A measure of service quality for retail stores: scale development and validation. *Journal of the Academy of Marketing Science*, Vol. 24, No.1, 3-16.
- Deming, W E (1982) *Out of the Crisis: Quality, Productivity and Competitive Position*, Cambridge University Press, New York
- Eleonora Karassavidou & Niki Glaveli (2007). Ethical Orientations of Future Greek Business People: Is Anomia Responsible for Deviant Ethical Attitudes? *Business Ethics* 16 (2):114–123.
- Emin Babakus, Sevgin Eroglu, Ugur Yavas, (2004) "Modeling consumers' choice behavior: an application in banking", *Journal of Services Marketing*, Vol. 18 Iss: 6, pp.462 – 470
- Feigenbaum AV. (1983). *Total quality control*: 3rd edition. McGraw Hill: NY, USA.
- Global competitiveness and productivity/ edited by B S Bhatia, Balram Dogra. 2005. xx,456p. 24cm. Rs.1450.00. Hb. EN64319.
- Nalini Prava Tripathy (2006), "Market Timing Abilities and Mutual Fund
- Parasuraman, A, Zeithaml, V A and Berry, L L (1988). "SERVQUAL: A Multiple Item Scale for Measuring Consumer Perceptions of Service Quality," *Journal of Retailing*, 64(1), 12-40.
- Parasuraman, A, Zeithaml, V A and Berry, L L (1994). "Reassessment of Expectations as a Comparison Standard in Measuring Service Quality: Implications for Further Research," *Journal of Marketing*, 58(January), 111-24.
- Parasuraman, A., Zeithaml, V.A. and Berry, L.L. (1985), "A conceptual model of service quality and its implication", *Journal of Marketing* , Vol. 49, Fall, pp. 41-50.
- Parasuraman, A., Zeithaml, V.A. and Berry, L.L. (1986), "SERVQUAL: a multiple-item scale for measuring customer perceptions of service quality", *Report No. 86-108*, Marketing Science Institute, Cambridge, MA.
- Parasuraman, A., Zeithaml, V.A., Berry, L.L., (1985), "A conceptual model of service quality and its implications for future research", *Journal of Marketing*, 49, 41-50.
- Sharma, Alka and Versha Mehta (2004). Service Quality in Financial Services – A case study of Banking Services," *Journal of Services Research*, 4 (2), 205-222
- Stafford, M., (1994) "How customers perceive SQ", *Journal of Retail Banking*; 17(2), 29-38.
- Ugur Yavas, Martin Benkenstein, Uwe Stuhldreier, (2004) "Relationships between service quality and behavioral outcomes: A study of private bank customers in Germany", *International Journal of Bank Marketing*, Vol. 22 Iss: 2, pp.144 – 157
- Zeithaml, V A and Parasuraman, A (1991). "The Nature and Determinants of Customer Expectation of Service," *Marketing Science Institute Working Paper No. 91-113*, Cambridge, MA: Marketing Science Institute.
- Zeithaml, V A and Parasuraman, A (1996). "The Behavioral Consequences of Service Quality," *Journal of Marketing*, 60(April), 31-46.
- Zeithaml, V A, Parasuraman, A and Berry, L L (1990). *Delivering Service Quality: Balancing Customer Perceptions and Expectations*, New York: The Free Press.

Dr. Alok Kumar Rai

Associate Professor
Faculty of Management Studies
Banaras Hindu University

Abstract

Sustained growth of service business hugely depends upon the level of satisfaction of its customers. Indian Banking Industry is no exception to this phenomenon. After Liberalisation of Indian Banking Industry, many New Private Sector Banks (NPSBs) changed their forms and became proactive. Their activity changed the market dynamics of the industry. The resultant was the empowerment of the customers and hence came the realization on part of the banks to give superior care for the satisfaction of the customer. It is worth mentioning that many of the initiatives taken by the banks did not result into what they had planned for (Rai, 2009). A stocktaking of the satisfaction of customers of the banks thus becomes imperative. The study uses Kano model to evaluate the level of Satisfaction of customers as it delivers greater significance to the bank over other commonly used scales as SERVQUAL, SERVPERF and Banking Service Quality Scale (BSQ). The study not just aims to identify the level of Satisfaction of the bank customers but also the relative significance of different parameters of satisfaction in terms of their contribution to overall satisfaction.

Introduction

The forces of globalization, liberalization and technology are fundamentally changing the global economic order. Technological advances have resulted in the death of distance, time and location and liberalization and globalization have led to reduce barriers to entry, shorter strategy and product cycles, commoditisation of products and increased competition. These factors have impacted financial services market considerably. The rapid evolution of the electronic world has led to easier production and global distribution of all financial services.

The Indian financial sector is also hugely impacted by these developments. The financial sector reforms over the past decade coupled with the impact of the above mentioned universal forces have resulted in a greater integration of the Indian financial markets with the global markets. As a result, the Indian financial sector participants are also seeking a new framework that has emerged across the globe that successfully addresses the needs of the highly competitive and rapidly changing environment. The nature of the banks changed from mere depositing and lending institutions to a one stop superstore of all financial needs more specifically a Universal Banking Model came into existence. This Universal banking Model would provide a clutch of services from retail and corporate banking to industrial lending, invest banking to insurance. Today's bank has grown tentacles that go beyond mere brick and mortar structures. It resides in one's computer, telephone, mobile, car dealers' showroom and in

Keywords

*Customer Satisfaction,
Service Quality Gap, Kano
Model, Satisfaction and
Dissatisfaction Coefficient,
Customer Satisfaction
Portfolio*

the briefcases of selling agents who hawk everything from loans to credit cards, mutual funds and Life Insurance policies.

State Bank of India: A Perspective

The State Bank of India, the country's oldest commercial bank and a premier in terms of balance sheet size, number of branches, market capitalization and profits has also been undergoing a momentous phase of Change and Transformation. To offer a complete banking solution to different sections of customers, SBI has entered into new businesses with strategic tie ups – Pension Funds, General Insurance, Custodial Services, Private Equity, Mobile Banking, Merchant Acquisition, Advisory Services, Structured Products etc – each one of these initiatives having a huge potential for growth.

SBI has claimed to have realized the importance of modern banking needs of building relationship with the customers and has taken several initiatives on the front. The Bank is forging ahead with cutting edge technology and innovative new banking models to expand its Rural Banking base, looking at the vast untapped potential in the hinterland and proposes to cover 100,000 villages by 2012. It is also focusing at the top end of the market, on whole sale banking capabilities to provide India's growing mid/large Corporate with a complete array of products and services. It is consolidating its global treasury operations and entering into structured products and derivative instruments.

The Bank has been changing outdated front and back end processes to modern customer friendly processes to help improve the total customer experience. With about 8500 of its own 10000 branches and another 5100 branches of its Associate Banks are already networked, it offers the largest banking network to the Indian customer. The Bank is also in the process of providing complete payment solution to its clientele with its 1000 branch and 10,000 ATMs and other electronic channels such as Internet banking, debit cards, mobile banking, etc. Besides working on making the physical changes, SBI also is attempting to changes the old mindsets, attitudes and taking employees along to the new path.

Review of Literature:

Increased competition at the market place has changed the marketing of many of the service industries in general and banking in particular. The most badly hit area of marketing of this process has been the customer loyalty. Hence the importance of satisfaction of customers came into picture. Organizations increasingly became interested in retaining existing customers as it is less expensive.

Customer Satisfaction: Customer satisfaction is a measure of how products and services supplied by a company meet or surpass customer expectation. It is seen as a key performance indicator within business. In a competitive marketplace where businesses compete

for customers, customer satisfaction is seen as a key differentiator and has increasingly become a key element of business strategy. Customer satisfaction is an ambiguous and abstract concept and the actual manifestation of the state of satisfaction will vary from person to person and product/service to product/service. The state of satisfaction depends on a number of both psychological and physical parameters which correlate with satisfaction behaviors such as return and recommend rate. The level of satisfaction can also vary depending on other options the customer may have and other products against which the customer can compare the organization's products.

Customer satisfaction has become a vital concern for companies and organizations in their efforts to improve product and service quality and maintain customer loyalty in a highly competitive marketplace. In the last decade, a number of national indicators have reflected that consumer satisfaction across a wide range of organizations (e.g. USA—American Customer Satisfaction Index (ACSI); Europe—European Customer Satisfaction Index (ECSI); etc.

Measuring Customer Satisfaction:

Measuring customer satisfaction provides an indication of how successful the organization is at providing products and/or services to the marketplace. Satisfaction is a psychological state hence care should be taken in the effort of quantitative measurement, although, a large quantity of research in this area has recently been developed. Work done by Berry, Brodeur between 1990 and 1998 defined ten 'Quality Values' which influence satisfaction behavior. This was further expanded by Berry in 2002 and called as the ten domains of satisfaction. These ten domains of satisfaction include: Quality, Value, Timeliness, Efficiency, Ease of Access, Environment, Interdepartmental Teamwork, Front line Service Behaviors, Commitment to the Customer and Innovation. These factors are emphasized for continuous improvement and organizational change measurement and are most often utilized to develop the architecture for satisfaction measurement as an integrated model. Work done by Parasuraman, Zeithaml and Berry between 1985 and 1988 provides the basis for the measurement of customer satisfaction with a service by using the gap between the customer's expectation of performance and their perceived experience of performance. This provides the measurer with a satisfaction "gap" which is objective and quantitative in nature. Work done by Cronin and Taylor proposed the "confirmation/disconfirmation" theory of combining the "gap" described by Parasuraman, Zeithaml and Berry as two different measures (perception and expectation of performance) into a single measurement of performance according to expectation. According to Rai (2008), customer satisfaction is the net result of Expectation and perception processed as per the customer's cognitive ability.

In its simplest form, a customer satisfaction research involves dividing the customers' overall experience into sublevels of standards or criteria, and then applying a rating scale to measure how satisfied these customers were with the services on the basis of these criteria. More sophisticated techniques for customer satisfaction research tend to focus on the relative importance that the customers attach to each of these criteria. The most widely accepted framework for researching service quality came from the premise of Zeithaml *et al.* (1990) that a customer's evaluation of service quality was a function of the magnitude and direction of the gap between the customer's expectations of service and his/her perception of the service actually delivered.

Customer Satisfaction Measurement Scale: There are variety of Scales and models used in evaluating Customer Satisfaction. Few of them are as follows:

Service Quality Scale (SERVQUAL): Parasuraman, Zeithaml and Berry (1988, 1991) conducted extensive studies in different industries and developed the SERVQUAL instrument: a 22-item scale with a set of service quality dimensions to quantify a customer's assessment of a company's service quality. Five key dimensions of service quality — *reliability, responsiveness, assurance, empathy* and *tangibles* — have been identified and form the foundation on which a lot of other studies on service quality have been built. SERVQUAL is widely recognized and used, and it is regarded as applicable to a number of industries, including the banking industry (Yavas, Bilgin, Shemuell, 1997). Several experts (e.g., Parasuraman *et al.*, 1994; Zeithaml, 2000) work on customers' expectations and perceptions of the service delivery suggested that customer satisfaction was a function of the difference between what they had expected to get from the service and what they perceived about the service that they had actually received. A group of researchers (Parasuraman *et al.*, 1994) developed a scale that measures the performance of the service received against their expectation levels, and also measures the customers' future intentions of purchasing the service. Razak *et al.* (2007) argued about customers' expectations, perceptions, satisfaction and loyalty through the service quality of a local Malaysian bank. The study confirmed the linkages between service quality and customer satisfaction, and between service quality and loyalty. Since its development, the SERVQUAL scale has been used in numerous studies, although not all of the empirical findings corresponded precisely to the five dimensions of the original design. For example, Li *et al.* (2004) empirically assessed university customers' satisfaction in the parcel delivery industry. The availability, responsiveness, reliability, completeness and professionalism of service were identified as the five critical factors affecting customer satisfaction in the parcel delivery industry.

Service Performance Scale (SERVPERF): This scale was developed by Cronin and Taylor (1992). They questioned the conceptual basis of the SERVQUAL scale and found it confusing with service satisfaction. They,

therefore, opined that expectation (E) component of SERVQUAL be discarded and instead performance (P) component alone be used. They proposed what is referred to as the 'SERVPERF' scale. Besides theoretical arguments, Cronin and Taylor (1992) provided empirical evidence across four industries (namely banks, pest control, dry cleaning, and fast food) to corroborate the superiority of their 'performance-only' instrument over disconfirmation-based SERVQUAL scale. This is 'performance-only' instrument and in some ways considered to be superior than SERVQUAL. The scale questioned the very existence of Customer Expectation. This Scale also had 22 parameters/items and 5 dimensions emerging out of Factor analysis of the items.

Kano Model: Another model proposed for study of satisfaction was Kano Model (Kano et al 1984). Unlike the previous models, this states the level of satisfaction with particular service quality parameter, Kano attempted to classify the service quality parameters into following types of product/ service requirements that is of different significance to the research:

- **Must-be Factors:** Non Fulfillment of these factors would lead to extreme dissatisfaction of the customer but their fulfillment would not lead to proportionate satisfaction. Hence Customer takes these requirements for granted.
- **One-dimensional Factors:** Level of fulfillment of these factors lead to proportionate increment in customer satisfaction.
- **Attractive Factors:** These factors are the product criteria which have the greatest influence on how satisfied a customer will be with a given product. Attractive requirements are neither explicitly expressed nor expected by the customer.
- **Indifferent Factors:** These are the factors that do not contribute significantly either to satisfaction or dissatisfaction.

This study sounded more significant to assess customer satisfaction as it states how important different factors are towards satisfying customers.

Research Methodology: The methodology of the study is as follows:

Research Questions: Increased competition at the market place forced public sector banks to bring in new and innovative customer satisfaction practices. But, there has always been a debate between the bank's initiatives and efforts of caring for the customers by making them happy and customer's complaints, grievances and the allegations of not being treated fairly. Thus it is important to find out the level of satisfaction of bank's customers.

Aim of the Research: An evaluation of customer satisfaction with the largest bank of India i.e. State Bank

of India and suggest what are the areas they need to work upon to make the customers more satisfied.

Research Objective: The primary objective was to assess quantitatively the level of customer satisfaction of the customers of State Bank of India on select parameters effecting customer satisfaction.

The secondary objectives include:

- i) To identify the relative significance of select parameters effecting customer satisfaction.
- ii) To find out the areas where SBI needs to improve upon to create superior customer satisfaction.

Research Design: The study is exploratory till the identification of the parameters effecting customer satisfaction of banks. Later the study becomes descriptive and quantitative evaluation of satisfaction of the customer is done.

Research Data Collection: In order to conduct this study both primary & secondary data have been accessed. The secondary data have been collected from published literature, journals, company information (web links), other related sources etc. The primary data have been obtained through Questionnaire filled through the respondents from Varanasi city using convenience sampling. The respondents were those owning saving account with SBI and different profession & age group.

Research Response Scale: Questionnaire Responses were obtained on a 7 point Likert Scale where 1 being the Highly Unsatisfactory and 7 being Excellent.

Reliability Test: Close ended structured Questionnaire was used to capture the customer responses. For selection of parameters, a pilot study was conducted. The Questionnaire was also tested for its reliability and the Cronbach alpha value came out to be .82 which proved the reliability of the Questionnaire.

Research Data Evaluation: Assessment of Customer Satisfaction in the study has been done using Kano Model of satisfaction. Must-be, one-dimensional and attractive requirements related factors are used in the questionnaire. For each product feature a pair of questions is formulated to which the customer can answer in one of five different ways. The first form of question concerns the reaction of the customer if the product has that feature (**functional form of the question**), the second concerns his reaction if the product does not have that feature (**dysfunctional form of the question**).

After having combined the answers to the functional and dysfunctional question in the evaluation table, the results of the individual product criteria are listed in the table of results which shows the overall distribution of the requirement categories.

Calculating Customer Satisfaction Coefficient (CS coefficient):

$$\text{Extent of satisfaction} = (A+O) / (A+O+M+I)$$

$$\text{Extent of dissatisfaction} = (O+M) / [(A+O+M+I) \times (-1)]$$

A minus sign is put in front of the CS-coefficient of customer dissatisfaction in order to emphasize its negative influence on customer satisfaction if this product quality is not fulfilled. The positive CS-coefficient ranges from 0 to 1; the closer the value is to 1, the higher the influence on customer satisfaction. A positive CS-coefficient which approaches 0 signifies that there is very little influence.

Sample: Two branches of Varanasi, Lanka and BHU Main Branch were the bank branches involving 50 respondents selected through convenience sampling.

Scope of the study: The study has been conducted in Varanasi city.

FINDINGS: Based on the parameters identified above, the

The Evaluation Table

| <u>Question 1.</u> Branch lighting/ Illumination | | Dysfunctional (Negative Question) | | | | |
|--|-----------------------|-----------------------------------|---------------|----------------|-----------------------|-----------------|
| | | 1. I like it | 2. It must be | 3. I'm Neutral | 4. I can live with it | 5. I dislike it |
| Functiona l (positive questions) | 1. I like it | 0 | 5 | 5 | 7 | 4 |
| | 2. It must be | 0 | 0 | 7 | 3 | 3 |
| | 3. I'm neutral | 0 | 0 | 5 | 3 | 4 |
| | 4. I can live with it | 1 | 0 | 1 | 0 | 0 |
| | 5. I dislike it | 2 | 0 | 0 | 0 | 0 |

(Above is the representation for question no.1 only. Similarly, fifteen more evaluation tables were drawn for the remaining questions, and the results are used as an

input to the next *table of results*. To avoid the repetitions and restrain the work from being extra long, the other tables have not been shown in this paper)

Table of Results of Questionnaire

