

ISSN 0975-3435

RVS Journal of Management

Volume 2

No. 1

January 2010

Chief Editor

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RVS Institute of Management Studies and Research
Sulur, Coimbatore-641402, India

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RVS Journal of Management

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RVS Journal of Management, the Journal of RVS Institute of Management Studies and Research, Sulur is published biannually (July and February).

Subscriptions as per rates shown below may be sent to:

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RVS Institute of Management Studies and Research,

Trichy Road, Sulur, Coimbatore 641402, Tamilnadu, India

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Typeset by

Excel Publishing Services, New Delhi-110067 • E-mail: prepress@excelpublish.com

Printed by

Excel Seminar Solutions, New Delhi-110067 • E-mail: seminarsolutions@excelpublish.com

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61/28, Dalpat Singh Building, Pratik Market, Munirka, New Delhi-110067

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Trichy Road, Sulur, Coimbatore-641402, Tamil Nadu, India

Editorial

It is a great pleasure to provide an introduction for, this second issue of the R.V.S. Journal of Management. Major advances in scientific knowledge come about when existing paradigms are subject to rigorous analysis and challenges. The R.V.S. Journal of Management seeks to provide an outlet for original high quality peer reviewed scholarly research in the increasingly important areas of management. High quality work in all areas of management will be welcomed by the Journal. We hope to publish theoretical, empirical, and experimental articles which will contribute to the development of the different areas of management. We hope and believe that our journal will be of interest to a wide range of researchers, in all areas of management. We are of the opinion that by publishing original, high quality, scholarly articles the Review will contribute significantly to our understanding of the minute details of management in the coming years. In this second issue, we have some outstanding papers which adopt different approaches to a range of issues within the area. We already have some more excellent papers to be published in later issues. We are certain that is only the beginning of the contribution which the RVS Journal of Management will make to knowledge in this relatively new and exciting area.

Coimbatore
15 January, 2010

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Challenges and Innovation in Indian Higher Education

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Abstract—*Education in India has evolved over the ages and continues to evolve, as witnessed from the progress of education right from ancient Indian times through the medieval period and pre-independence. A SWOT analysis of the present scenario of Indian education, along with the existing challenges depicts the importance of continued innovation in the education sector. The critical success factors for innovation and an organization framework for innovation along with different delivery models are discussed to provide a complete perspective.*

Keywords: *SWOT analysis, innovation, delivery models*

EDUCATION IN INDIA

Education in India has undergone many changes right from the ancient times. The evolution of education in India is presented below along with the present challenges. A SWOT analysis of the higher education system in India is also discussed.

Education in the Past

Ancient India

India has an interesting history of education, which could be traced to the ancient times (3rd century BC)^[1]. In the ancient times, education was imparted orally by sages^[2] and scholars. In the Gurukul system of education, the shishyas (students) and the guru (teacher) lived in proximity within the same house, irrespective of their social standing. Learning was imparted in community centers and schools. With the advent of development of letters of language, writing on palm leaves and barks of trees were used for education^[1]. This facilitated growth of written literature.

Subsequently, some world famous educational institutions were established, namely Nalanda, Vikramshila, and Takshshila. The Nalanda University was renowned for its excellence and prospered during 5th and 13th century AD. At one point of time, it had around 10,000 resident students and teachers. The student community comprised Chinese, Korean, Sri Lankan, and other international scholars^[1].

Medieval Period

After 11th century AD, some universities were established in major cities such as Delhi, Lucknow, and Allahabad. Knowledge interactions occurred in varied areas of specialization

such as theology, philosophy, mathematics, architecture, medicine, astronomy, painting and fine arts^[1].

Pre-Independence

Before the advent of the British in India, learning was disseminated in private. With the arrival of the British, higher education was granted in English and began to spread with the assistance of European missionaries^[1].

Present Scenario of Higher Education in India

Presently, India has hundreds of universities and thousands of colleges affiliated to them. A multitude of colleges have facility to focus on multiple disciplines. This has led to enhancement of the spread and quality of education in India.

Higher education in India is categorized into the following:

Undergraduate Programs

A student goes through higher education after schooling, and is completed in a college. The duration varies according to the subject pursued by the student. A simple graduate degree could be obtained in three years, while an engineering degree would require four years of study. A medical student needs to complete a course of four and a half years and then one year of mandatory internship.

Postgraduate Programs

On completion of graduation, a student could opt for postgraduation in his/her specialized area.

Doctoral and Post-doctoral Programs

Post-graduate students could also take up a research-based program leading to doctoral and post-doctoral degrees.

Challenges in Higher Education in India

Some of the challenges prevalent in higher education in India^[3] include:

- Need for a dynamic vision and strategy that is in tune with current and future needs
- Designing of a curriculum that is highly innovative, practice-oriented, flexible, and in tune with needs of the industry
- Existence of mechanisms to facilitate and enhance high-end research
- Establishment of the best possible model for funding higher education
- Scale and diversity of the nation
- Management of the issue of poverty amidst abundance
- Increase in the level of innovation and competitiveness

- Enhanced utilization of Information and Communication Technology for improved reach and quality of learning
- Availability and retention of faculty of high quality
- Availability of appropriate opportunities for faculty development
- Management of governance issues such as autonomy, funding, fee structure, and responsibility-related aspects
- Increase in the need for investment in education
- Improvement of infrastructure across the breadth of the country
- Formulation of policies and procedures that would help to sustain and nurture further development
- Flexibility in a rapidly changing environment
- Management of issues relating to Technology divide and Digital divide
- Handling of change management issues

Current Scenario of Higher Education in India: Strengths, Weaknesses, Opportunities and Threats

The current scenario of higher education in India^[4] is presented below with a SWOT analysis:

STRENGTHS	WEAKNESSES
<ul style="list-style-type: none"> • Initiatives from the private sector in addition to Government-led initiatives • A large resource pool of students aspiring to pursue higher education • A large number of universities and colleges across the country • Allocation of resources for upgrading higher education • Various schemes from bodies such as AICTE (All India Council for Technical education) to facilitate key work in thrust areas, and research and development programs in technical institutions • Deployment of quality improvement schemes in the conduct of higher education • Accreditation initiatives from institutions like the NBA to assess and help enhance quality of education • Collaboration of industry associations and professional bodies with educational institutions 	<ul style="list-style-type: none"> • Inadequate opportunities for continuing education and for learning throughout life • Inadequate facilities for student welfare and career guidance • Inadequate institutional capacity in meeting higher education needs • Reduced “research culture” • Inadequate library facilities • Less number of PhD holders among overall teaching staff • Non-existence of a highly systematic approach for periodical quality assurance

OPPORTUNITIES	THREATS
<ul style="list-style-type: none"> • Strategic partnerships and alliances • Enhancement of academic programs • Design of new academic programs and certifications that are in high demand • Methodologies such as distance education and flexible learning for enhanced access to learners • Leveraging of strengths to take part in initiatives at a global level 	<ul style="list-style-type: none"> • Higher education budget constraints and inadequate funding • Variations in the quality of higher education across institutions • Attrition among experienced staff (including movement of faculty to jobs in industry)

INNOVATION IN HIGHER EDUCATION

The aspect of innovation in higher education in India is discussed below in terms of the need, critical success factors, framework, benefits, and challenges.

Need for Innovation in Higher Education in India

Higher education in India needs increased innovation^[5] considering the following aspects:

- Higher education serves as the backbone for the future of a nation^[6]
- Tremendous growth in the need for higher education
- Educational sector challenges of today and the future cannot be resolved using yesterday's tools and techniques
- Inadequacy of the traditional mode of education (chalk-and-talk methodology) in meeting the increased educational needs
- Shift in trend from 'computer education' to 'computers in education'
- Increased demand for continuous learning by working professionals to enable them stay current in their professional lives
- Need to link learners and lecturers irrespective of distance and/or time
- Increased workloads for administration in the education sector
- To provide enhanced delivery of learning services to learners
- To improve interface with business and industry
- To empower learners with access to wide array of knowledge and information
- To increase effectiveness and efficiency of education processes and the education system

CRITICAL SUCCESS FACTORS FOR INNOVATION IN EDUCATION

The factors critical for success for innovation in the education sector include:

- Strong educational leadership
- Clarity of goals and objectives
- Utilization of technology

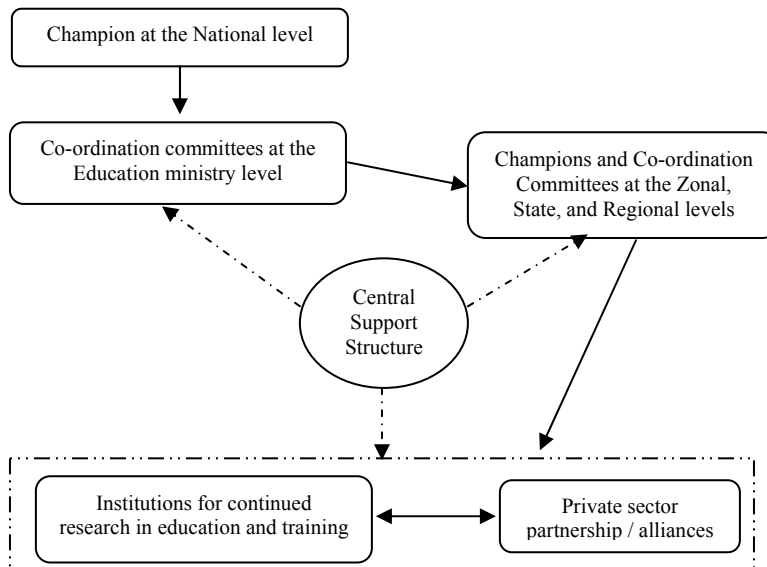
- Reengineering of processes
- Scalability (starting from a smaller scale)
- Establishment of standards and procedures
- Design, development, and implementation
- Adequate training
- Appropriate change management strategy

ORGANIZATION FRAMEWORK FOR INNOVATION IN EDUCATION

An ideal organization framework for continuing innovation in education could comprise the following entities:

- Champion at the National level
- Co-ordination committees at the education ministry level
- Champions and Co-ordination Committees at the Zonal, State, and Regional levels
- Institutions for continued research in education and training
- Private sector partnership/alliances
- A central support structure

The framework is provided below with a depiction of the entities and their inter-relationships:



DIFFERENT DELIVERY MODELS^[7]

There are various delivery models deployed in dissemination of education, which include:

- Face-to-face education delivery model
- Distance learning (offline) content delivery model

- Satellite-based education delivery model (e.g. UGC educational programmes on Television, advanced technical and management programmes from leading higher education institutions through HughesNet Global education having centres in the North, South, East, and West zones of India)
- Online education delivery model (web-based)
- Blended education delivery model (a blend of on-line interactions, face-to-face sessions, and independent study on the part of the learner)

BENEFITS OF INNOVATION IN THE EDUCATION SECTOR

The benefits that occur as a result of innovation in the education sector include:

- Increased transparency
- Enhanced convenience (24x7 access, learning at learner's pace, virtualization), thus compressing time and space requirements
- Improved productivity in the midst of globalization
- Facilitates meeting the needs of the higher education segment in the knowledge economy
- Easier knowledge sharing
- Overall cost reduction (cost of dissemination of education per learner)

CHALLENGES IN INNOVATIVE LEARNING MECHANISMS/MODELS IN INDIA^[8]

The following are a few of the key challenges in deploying innovative learning mechanisms/models in India:

- Large population
- Heterogeneous population with different languages, dialects, and cultures
- Providing technological access to rural areas (electricity, communication infrastructure)
- Affordability of education (population below poverty line)^[9]
- Children in poor families (especially in rural areas) being sent to work for earning their livelihood (thus truncating their learning at primary/secondary levels)^[9]
- Need for educational culture change across the nation
- Political influence

FUTURE PERSPECTIVE

The present trend in education in India is much different from those that existed in the past. A lot of innovation and changes have taken place in this segment.

In future, there could be a shift in educational trends such as:

- Establishment of eUniversities^[10].
- Proliferation of virtual libraries
- Mechanisms such as Podcasting for a 'mobile learning experience'

CONCLUSION

In various developing countries including India, innovation has come a long way in the education sector. This is evident in the virtualization mechanisms deployed in education and the shift in trend from ‘computer education’ to ‘computers in education’.

In the education sector of today’s knowledge economy, it becomes important to continuously innovate. The fact that ‘tools of yesterday cannot be used to fight the problems of today and tomorrow’ highlights the importance of innovation in education.

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Metamorphosis of Pension Funds in India

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"Old age is the most unexpected of all things that happen to man."

—Leon Trotsky

Abstract—*India has never had a pension system for the population across the country, as has been in existence in other parts of the world, even though we have had some schemes mainly directed at government employees. The Pension Fund system that exists in India suffers from the twin disabilities of not being able to provide an adequate security net for the old age population and at the same time exerting a huge pressure on government offers. According to the 1991 Census Reports, India has an estimated 314 million workers of which a mere 11% are covered by the formal pension system. The crumbling down of the joint family system and the increase in life expectancy has aggravated the extent of insecurity arising from inadequate income at an old age. On the other hand the existing pension system for a small amount of working population based on defined benefit formula adds on heavily to the state's fiscal deficit.*

In many parts of the world pension reforms have led to funding, not of the defined benefit (DB) kind but the defined contribution (DC) kind. All over the world there has been a tendency to switch over from DB to DC and this is not because DB is bad. The forces of globalization have caused a high flux of employees from one organization to another, from one country to another, making it almost impossible to run a DB system. Other reasons include the weakening of trade unions across the globe and the decreasing rate of interest which led to employers finding it increasingly difficult to sustain the funding required to build up the benefits on the DB system. However, this has also become the exit route for some employers to get out the liability of pensions.

India's pension sector is about to undergo a radical transformation. The government's controversial 'New Pension System' will usher in a whole new world for Indian savers – individual retirement accounts, a choice of savings and investment products, professional fund management and centralized administration that means pension rights can be taken from one job to another or from one fund manager to another. The new pension scheme is an attempt to move away from the defined benefit pension plans to defined contribution based schemes. During the last seven years, from 2000 to 2007, a marked shift in pension policy in India was witnessed which culminated in introduction of a new pension system. A High Level

Expert Group (HLEG) and the Old Age Social and Income Security (OASIS) Project commissioned by the government were the two initial milestones on the road to pension reforms for the Government employees and the unorganized sector respectively. These efforts culminated in setting up of the Pension Fund Regulatory and Development Authority (October 2003), introduction of a New Pension System (December 2003), and introduction of the PFRDA Bill in Parliament (March 2005). The key operational elements of the NPS are at least one Central Record-keeping Agency (CRA), a set of Pension Fund Managers (PFMS), and a large number of Point of Presence (PoPs) agencies. It is interesting to note that within 10 days of launching of NPS- on 1st May, 2009, IRDA has put a clause that no insurance company could act as a PoP for the New Pension Scheme. The present paper tries to analyze the changing structure of pension schemes in India.

Keywords: *New Pension Schemes, Defined Benefit and Defined Contribution Schemes, PFRDA..*

INTRODUCTION

The term pension has a different connotation for various segments of the population. For those in the financial services industry, it refers to all forms of institutionalized retirement savings plans and includes provident fund and public provident fund scheme. But, for most Indians ‘pension’ signifies monthly payments that government employees receive for the rest of their life post-retirement. If we are interested in the dictionary meaning then pension may be defined as a payment, not wages, made regularly to a person (or to his family) who has fulfilled certain conditions of service, reached a certain age, etc. a soldier’s pension, an old-age pension

Not only the pension funds provide social security for old age but it has also been argued that pension funds are also the growth drivers of financial markets in any economy. International experience shows that pension funds have indeed provided the much-needed boost to the development of corporate debt markets both in terms of demand and liquidity for corporate bonds. Pension funds have also been major stimulators of financial innovation as they have directly or indirectly supported product innovation by supporting the development of asset backed securities, structured finance, derivative products and so on.

Pension fund presence in the bond market is likely to increase the availability of long term funds in the market, which in turn will improve the asset liability mismatch that often arises in projects with long gestation periods. As a matter of fact, globally the pension industry has been a key component of the financial infrastructure of an economy. It is one of the few sources of long term funds, which have null, or least risk associated with maturity of assets and liabilities. Thus, its viability and strengths have far-reaching consequences for not only the money and capital markets but also for each and every facet of the economy. Funds raised from pension fund placements can specifically help infrastructure financing.

REVIEW OF LITERATURE

A lot of studies have been undertaken on the effectiveness and efficiency of the existing pension schemes both in developed and developing countries. Almost all the studies pointed out the need for reforms in the pension schemes. The reason for the required reforms is the change in the demographic profiles of the countries and also the change in the savings patterns. Snapshots of some of the prominent studies are given below:

Venti, Steven F., and David A. Wise. (1994) observed that one of the most controversial aspects of pensions is their impact on private and national savings. It was made clear that pensions, broadly defined to include social security as well as employer provided plans, comprise a significant component of total household resources. Gale and Sabelhaus (1999) also observed that at the aggregate level, reserves in pension funds have accounted for 20% of net worth in the household sector and represent a sizeable component of private savings.

Ferguson and Blackwell (1995), Willette (1995) have stated that in the last two decades there is a paradigm shift in pension fund schemes from defined benefit plans to defined contribution plans such as 401(k) plans. This fundamental shift in the nature of pension saving has concerned observers in the popular press and in academia. Some believe that defined contribution pension plans are a crisis waiting to happen when current generations, having made minimal (or no) contributions to their DC plan, retire with inadequate pension asset balances.

Visaria (1998) observed that India is the last major country in the world to experience the demographic transition; a sharp decline in TFRs only commenced in the late 1980s. In 2016, only 8.9% of the population is expected to be above 60; this fraction is expected to rise to 13.3% in 2026.

Palacios, Robert and Whitehouse, Edward (1998) have stated that a critical question in the transition to a funded, private pension system is whether the new private element is presented as a mandate or choice to current and future workers. The paper presented by them sets out the spectrum of available options and looks at policy in 13 reforming countries. It concludes that older workers are best excluded from reform, because the economic benefits are small and the political resistance is likely to be large if they are included. However, a defined cut-off age is arbitrary for reasons of intergenerational equity and heterogeneity of portfolio composition and risk preferences within cohorts. A voluntary switch is preferred. The main objection is the resulting uncertainty over the numbers switching. Analysis of reforming countries shows however, a consistent and rational pattern of switching. They concluded by discussing policy options for managing the switching process.

Aliev and Vitas (1999) observed that there are two aspects where an element of a DB system is attractive; both pertain to the extent to which exposure to risk factors is adopted. The first issue is the problem of the investment risk that has to be borne by participants in an individual account system. A DB system may offer a mechanism for risk sharing, thus reducing the risk borne by an individual. The second issue is about decision making in fund management. A DB system is likely to place decisions in the hands of finance professionals,

who would be less likely to avoid risk factors when compared to the decision-making of many individuals.

Iglesias and Palacios (1999) in their study stated that India's experience with the EPF program suggests that simply having defined contributions with an individual account does not suffice in obtaining sound governance. India's experience is a positive one in the sense that the long-term real return on EPF has not been negative, as compared with some other countries where extreme failures of governance of pension assets have generated sharply negative returns.

Shah and Fernandes (1999) suggested that equity investments, especially through index funds are a viable strategy for the pension sector.

Walliser (1999) suggested that the illiquidity of pension assets is a constraint, in the eyes of participants in a pension system, in an environment where credit is constrained. For many individuals who are potential participants in a pension system in India, credit markets are inaccessible when exposed to consumption shocks. If the pension system offers no possibility of premature withdrawals, then it becomes relatively unattractive.

Shah and Sivakumar (2000) have made a significant study on the relationship between the development of financial markets and the implementation of pension schemes. They observed that the equity market has made major gains in recent years. There is time-series evidence over 21 years suggesting that the equity premium has proved to be around 8 percentage points. There is a modern stock market index (Shah and Thomas 1998) with four index funds. Trading in index derivatives commenced in India in June 2000 and will start in Singapore in August 2000. The market capitalisation of the equity and bond markets are around Rs. 10 trillion each. The stock of assets of the pension sector today is around Rs.1 trillion; hence there is no short-run constraint in terms of the ability of the equity or bond markets to absorb pension investments.

Whitehouse (2000), Murthi, Orszag and Orszag (1999) have made a study on the effectiveness of individual accounts without defined benefits. The major issue that was identified was that in an individual account system, particularly when contributions or account balances are small, is the question of administrative overhead and transactions costs. These questions are particularly important in the Indian setting, where the average contribution and the average account balance would be amongst the smallest in the world. James, Smalhout & Vittas (1999) also suggested that the most important vehicles for keeping costs low are: (a) constrained portfolio choice, using passive management, and (b) reduced sales expenses.

Dyson (2002) demonstrated that there are considerable variations among regions and states in fertility rates, life expectancy, and patterns of internal migration. In general, the southern states will experience much more rapid population ageing than the states in the north. The major public policy implication is that pension reform policies and programmes should not be based on the averages for the country as a whole, but on the basis of empirical data of each state. This is particularly relevant in designing defined benefit schemes, whether based on social insurance or provided by employers; and for social assistance programs.

Predicting longevity trends and morbidity patterns is an inexact science. The actuarial assumptions should therefore reflect this, and permit flexibility in design parameters, if the schemes are to be sustainable over a long period.

Chakraborti (2004) observed that India is experiencing a demographic transition, leading to lower total fertility rate (the rate was 2.85 children per woman in 2004). There is considerable regional variation in fertility rates. The southern region of the country is experiencing fertility rates at or below replacement rates, while some of the highly populated northern states have high fertility rates, with the western region somewhere in between.

Dev and Mooij, (2005) concluded that design, structure and capacities concerning social safety nets differ considerably between urban and rural areas. Thus, social assistance type programs, which require fiscal resources and effective public delivery systems, are likely to play a greater role in rural than in urban areas.

Bhardwaj and Dave (2006) observed that the first and foremost goal of pension reforms is to increase the size of the covered sector. India is at a unique moment in the demographic transition, where large numbers of young people are coming into the labour force. If these individuals can be placed into a modern pension system, they will be able to accumulate pension assets for their old age, and India would then be able to avoid the crises associated with an ageing population that have been seen in myriad other countries. But in addition, there were structural problems with the EPFO and with the civil servant's pension which needed to be addressed. The EPS is supposed to be based on contributions and assets, but is actually underfunded. The expenditure on the civil servants pension was growing at double digit rates, and it was found that the implied pension debt of the GOI on account of civil servants alone is probably above 64% of GDP. Similarly, similar observation was also made by S.N. Mathur about the difficulties of the pension provisions in Indian Railways.

PENSION SCHEMES IN USA

The idea behind 401K pension plans arose in the late 1970s when the US Congress passed a Tax Reform Act in 1978, that allowed for any savings from earnings being put into a retirement financial plan could be exempt from taxes, until such time as the pension starts to be paid out or withdrawn. After being written into the statute books as Internal Revenue Code section 401, para (k) - hence the term *401K pension plans* - the first of these *401K private pension plans* began in 1982. The 401K pension plans allow for money from an American's salary to be transferred into their 401K account directly by the employer, before the person receives their monthly pay check; and can vary in value up to 15% of the annual salary. 401K accounts are mutual funds, which by a variety of devices, basically means the money put into a 401K account is invested into stocks and bonds. Some companies offer their employers special 401K account facilities that the employer also makes a contribution to. These employers usually then use at least a portion of the money in the 401K accounts to invest in the company that the employer owns. This has benefits and risks to it. The employer is, in effect, enhancing your remuneration package and the employee saving into the 401K pension account knows the company they're working for and the sort of investments he/she is making

through their pension fund. They are also incentivized to work to ensure the continuing success of the employer's company, thereby safeguarding their pension plan. The risk, of course, is that the person saving for their retirement could end up with all their savings reliant on the success of just one company.

PENSION SCHEMES ACROSS ASIA/PACIFIC REGION

Many of Asia's retirement-income systems are ill prepared for the rapid population ageing that will occur over the next two decades. The demographic transition – to fewer babies and longer lives – took a century in Europe and North America. In Asia, this transition will often occur in a single generation. Asia's pension systems need modernizing urgently to ensure that they are financially sustainable and provide adequate retirement incomes. Asia's ageing will be at its most rapid between 2010 and 2030.

In some countries – China, Vietnam, Pakistan, Chinese Taipei – pension levels are high relative to earnings. Early retirement ages, especially for women, provide additional financial pressure. These systems are unlikely to be sustainable as populations age and retirement-income provision matures. Yet many Asia/Pacific countries also face a problem of adequacy of retirement incomes. There are four reasons why current pension systems are unlikely to deliver a secure income in old age.

Coverage of formal pension systems is relatively low.

Withdrawal of savings before retirement is very common.

Pension savings are often taken as lump sums with the risk that people outlive their resources.

Pensions in payment are not automatically adjusted to reflect changes in the cost of living.

National pension provision in Asia/Pacific is very diverse. The schemes are operated either by public or private players. Further, the schemes may be classified as 'Defined-Benefit Schemes' or 'Defined-Contribution Scheme'. Under the first variant, the value of the pension is defined relative to individual's earnings and under the second variant the value of the pension depends on the amount contributed and the investment returns earned. New Zealand does not have compulsory pension contributions, but instead pays a flat-rate benefit to all retirees. This diversity makes it hard to compare pension systems between countries and evaluate their performance. Nevertheless, there are valuable lessons to be learned from different countries' pension-system design and their experience with reforming retirement-income regimes.

The word 'pension' to most people means a regular payment. In this sense, many Asian countries do not provide pensions. In Malaysia and Sri Lanka, benefits are paid as a lump sum at the time of retirement. Workers in Indonesia receive a mix of a single lump sum or an annual payment over five years. A certain minimum amount has to be taken as annual payments over 20 years in Singapore, but the rest can be taken as a lump sum. Workers in Hong Kong also have a lump-sum option. Most countries around the world, however, pay out

pensions in the form of ‘annuities’: regular payments until the death of individual members or of their survivors. An annuity is a kind of insurance against the risk of exhausting savings in old age.

CURRENT SCENARIO OF PENSION SCHEMES IN INDIA

Till recently India does not have a comprehensive old age income security system. Poverty and unemployment may have acted as deterrents to provide a tax financed state pension arrangement for each and every citizen attaining old age. Therefore, in the organized sector (excluding the Government servants) a pension policy has been adopted based on financing through employer and employee participation. This has, however, denied the vast majority of the workforce in the unorganized sector access to formal channels of old age economic support.

There were however, some mandatory schemes for employees of State and Central governments, employees of public sector banks, employees in firms with a staff of 20 or more and some others. In recent years, the insurance and the mutual fund industry in India has also started offering pension plans. In 2004, a new defined contribution individual account pension system was constituted for Central government employees recruited after January 1, 2004.

There are two major programs which are run by the EPFO: they are the Employee Provident Fund, based on legislation enacted in 1952, and the Employee Pension Scheme (EPS), based on legislation enacted in 1995. They are mandatory for establishments with more than twenty employees. Most of India’s labour force is in establishments with less than twenty employees. The fraction of the labour force in these programs has steadily risen from 1% of the labour force in 1953 to 5% in 1995.

Formal sector pensions in India can be divided into three categories; viz those schemes that come under an Act or Statute, Government pensions and voluntary pensions. Pensions under an Act - There are three defining Acts for pensions in India. These are the

Pensions under the EPF & MP Act 1952. These include:

Employees Provident Fund

Employees Pension Scheme

Employees Deposit Linked Insurance Scheme

Pensions under the Coal mines PF&MP Act 1948. These include

Coal Mines Provident Fund

Coal Mines Pension Scheme

Coal Mines Linked Insurance Scheme

Gratuity under the Payment of Gratuity Act, 1972.

There are other provident funds in India. These are: Assam Tea Plantations PF, J&K PF, Seamens PF.

Government Pensions

Government pensions in India are defined under the *Directive Principles of State Policy* and are therefore not under a Statute. The Government amended the regulations to put in place the

new pension system. The old scheme continues for the existing employees (i.e. those who joined service prior to January 1, 2004). Pensions for government employees would include employees of the central as well as the state governments.

Central Government Pensions

Civil servants pensions/Defence/Railways/Posts/State government pensions.

Bank Pensions

Reserve Bank of India (RBI)/Public sector banks/National Bank for Agriculture and Rural Development (NABARD)/Other banks pensions.

Voluntary Pensions

Superannuation schemes/Plans sold in the market. These are typically plans sold by Mutual funds/Insurance firms Life Insurance and Postal Life Insurance.

PENSION REFORMS IN INDIA

India initiated ‘open society, open economy’ paradigm in 1991. Since then, its macroeconomic performance has been fairly satisfactory. Positive developments have occurred in real GDP growth, saving and investment to GDP ratios, international trade, and foreign exchange reserves. The benefits of growth however should be distributed widely. It is in this context that successful reform of pensions and old age financing or what may be broadly termed as ‘social security system’ has become an essential element of managing globalization. This is recognized in India’s 11th five year plan which aims at “*faster and more inclusive growth*”. Globalization has made social safety nets more rather than less necessary.

It is said that reforms are condition to successful development. Yet, reforms can backfire if they are not well-conceived. The much-awaited New Pension Scheme (NPS) – throws open to the unorganized sector the possibility of organized retirement planning. The scheme is set to replace the philosophy of pension assets in India from a “Defined Benefit” mode to a superior mode of “Defined Contribution”. The change from “Defined Benefit” to “Defined Contribution” is no doubt a major shift and is sought to be justified on the ground that governments have on several occasions been unable to fund the pension liabilities.

Three reports have examined old age financial security for Indians and are now being studied for implementation by the government. These reports are:

- Project OASIS Committee Report, December 29, 1999 referred to as the OASIS Report)
- Pensions Reforms in the Unorganized Sector–A report prepared by the Insurance Regulatory and Development Authority, October 2001 (referred to as the IRDA Report)

- Report of the High Level Expert Group on New Pensions System, Government of India, February 2002 (referred to as the Bhattacharya Report named after its chairman).
- The IRDA report identifies the following reasons for reform in the pension sector
- The growing burden of civil services pensions
- Measures needed to meet pension liabilities of the state-owned enterprises
- Liberalization of the insurance sector and entry of potential players who can offer pension products.
- Recognition of the need for reforms in the functioning of EPFO

The OASIS Report first brought out the possibility of pension reform in India. Providing for income security of the aged populations is an issue that has in India old age seems to be most unanticipated and consequently groundwork for it is quite inadequate. The hangover of the “welfare state” ideology has resulted in government sponsorship of a large part of pensions, which are a major part of government expenditure. As of now, payment of pensions constitutes a large part of the government’s expenditure. This is expected to increase more so in the future as the improvements in health have resulted in an increased life span of the elderly.

The OASIS report itself draws heavily upon the World Bank’s recommended multipillar system to provide for old age financial security. The three pillars are:

1. A mandatory, publicly managed, tax-financed pillar for social insurance
2. A mandatory, privately managed, fully funded pillar for old age savings.
3. A voluntary pillar for those who want more protection in their old age

The first pillar resembles public pension plans, providing a social security net for the old and poor, particularly for those whose lifetime income was low or who cannot afford to pay for building a reasonable retirement income. These are based on the principles of social insurance and are wholly financed by the state either out of general tax revenue or by some kind of special tax or cess. The United States, for example, levies a social security tax on all working people to finance this pillar. The second pillar requires that people save mandatorily for old age and benefits are actuarially linked to contributions. It should preferably be privately managed, fully funded, and managed competitively. The third pillar, voluntary savings and annuities, is meant to provide supplemental retirement income for people who want more generous old age pensions. The World Bank suggests that the first pillar providing basic security needs must be publicly managed, and only the second and third pillars are to be privately managed.

In India, the first pillar is almost non-existent. The government does have some poverty alleviation programmes but they are too insignificant compared to the country’s needs and their implementation is mostly political in nature. In case of need, old people generally rely on immediate family members and private charities. With the breaking of the joint family system, it has become inevitable that people plan for their old age financial security while they are young and working.

All the three reports have extensively referred to the first pillar of social security but none contains any recommendations to provide for it. Some mistakenly believe that pensions paid by the government to its employees constitute the first pillar since they are paid on 'pay as you go basis' (PAYG) from current tax revenue. Pension to civil servants are more akin to deferred wages paid by the employer and according to the World Bank's guidelines should be included in the second pillar of the multipillar pension system. The second pillar is found mostly in the organized sector and is in the form of employment-linked schemes.

The deficiencies of the current pension system in India are as follows:

- Low coverage
- Under performance of schemes such as provident funds.
- Investment restrictions
- Administrative difficulties
- Underdeveloped private annuity market

Increase in the informal workforce is further widening the skewness in the existing structure of pensions, which in turn introduces distortions into the labour market.

The differences in pensions between public and private sector employees as compared to the public sector are wide.

The pension system in India is mostly in the form of schemes for government employees, mandated pension and provident fund schemes for private sector employees, employer sponsored pension scheme, voluntary retirement savings, targeted social assistance schemes and welfare funds. The reform in the *Pension* system and the adoption of a system based on funded defined-contribution Individual Retirement accounts will have a multi-pronged advantageous effect on the Indian economy.

The government's burden of administering pensions will certainly decrease.

With the entry of private pension fund managers, pension assets will be invested wisely thus providing a larger amount to individuals at the time of retirement.

Pensions, as an issue will be de-politicised and will become more of an economic issue.

The development of the pension sector will create a symbiotic relationship with the insurance sector.

The element of forced saving inbuilt into the system of mandatory contributions will go a long way in increasing the rate of savings of the household sector which constitutes the largest part of savers in India. The effective mobilisation of these will go a long way to aid capital formation and economic growth.

The issue of pension reforms has attracted enormous interest not just in the developing world but also in countries of the developed world. The issue gains importance on account of the wide ranging social implications that pension reforms can deliver and the impact it can have on the structure of financial markets. Aging populations, lower mortality rates, dynamic and often unpredictable interest rate markets have all combined to make the business of managing pensions difficult. Developing countries face a bigger challenge. Typically these countries lack a social security framework, having largely depended on extended families and

other informal means to provide old age social security. The problem is further compounded by the absence of a vibrant financial market, which can provide instruments and investment opportunities for the investment of long term contractual savings. This circular logic can lead to a virtuous cycle if the pension system is reformed in a sustainable manner. Long-term investments by pension funds can provide much needed resources for the 'infrastructure and other long gestation projects. Insurance companies can play a critical role in this process of reform.

Countries which have implemented pension reform have witnessed a sharp rise in contribution to GDP. While the increase in GDP cannot be directly attributed to the development of a private pension system, nevertheless there are some linkages due to the introduction of private pensions. The obvious link between pension reforms and GDP growth is through the accumulation of savings. However, a greater savings level only begins to appear years after the introduction of pension reforms. At the beginning of the pension reform, costs of the pension system are high and the apparent benefits not easily identifiable. As long term savings grow structural changes become more evident. In a country like India with a high rate of savings, the economic impact will be more discernible with wide spread social security and deployment of resources in building much required infrastructure. Another significant factor affecting savings level is the decrease in the extent of budgetary support for government managed pension funds. This causes indirect financial effects in the economy as a result of more efficient use of capital. New financial institutions appear, offering new instruments, making financial markets more competitive and ultimately lowering the cost of funds.

The ever-increasing longevity makes any retirement provision based on inter-generational income transfers faces difficult to sustain. Defined benefit schemes are giving way to defined contributory schemes. While India makes up about 16.3 per cent of the world population, its elderly population is only about 12.5 per cent of the world's elderly population. India's population is currently relatively young but this will change as health and other social initiatives lead to continuous improvement in birth and death rates. There are currently 70 million people over the age of 60 in India and fewer than 10 per cent of them have their pension; the others have to work or rely on transfers, mainly from their children. Hence the potential or the development of pension fund industry and its benevolent effects on the debt market are immense.

The reform in the pension sector is also closely connected with the insurance sector. The common ground between the two arises from the following considerations:

1. On retirement, pension assets may be invested with annuity providers, who form an important component of the insurance sector.
2. Moreover, both pension fund management and insurance deal with similar kinds of investments, i.e. long term. Hence a reform carried out in one of them will necessarily have a positive external effect on the other and as such both share a symbiotic relationship.

In India, one area where insurance companies have already started to make an impact is in managing superannuation and gratuity funds of corporates. Current regulations provide for life insurance companies to provide fund management and administration services to

companies for their superannuation and gratuity funds. The investment pattern mandated for insurance companies in this activity creates an opportunity that corporates can benefit from. For instance insurance companies can invest upto 60% in corporate bonds. The comparable allocation to corporate bonds for self managed superannuation funds is upto 10%. In addition insurance companies can also invest in equities to the extent of 30% within the overall allocation to corporate bonds. Self-managed funds are not permitted this investment option. This gives rise to the possibility that insurance companies can deliver higher rates of return on these funds.

Some life insurance companies have started to offer unit linked funds to which employees can make regular defined contributions. On the vesting date, the accumulated balance is used to purchase an annuity. Further employees can chose between funds of varying risk - return profiles, ranging from funds investing only in government bonds to funds having exposure to equities. This affords employees the opportunity to accumulate capital in a manner, which appeals to their risk appetite. The practice is similar to what is being envisaged under the OASIS. Recommendations for the individual investors, especially the self-- employed section of the working population.

Insurance companies have been at the forefront of pensions reforms in countries like Poland and in Latin America. In India too, life insurance firms can play a pioneering role in offering pension products to individuals. Widespread distribution network, fund management skills and understanding of mortality rates of populations make life insurance companies uniquely positioned to offer pension products. While in the longer term, composite players and asset management companies can complement the structure of the industry, it is essential that a start is made with the existing life insurance companies.

NEW PENSION SCHEME (NPS)

The GOI has introduced the NPS in two stages. The first being in 2004 and the latest on May 1st, 2009. The NPS-2009 throws open the facility of pension to all the citizens of India. Many feel that this is the major step forward taken by Government of India, on the social security front. Now effective May 1, even those outside government service can have access to regulated pension benefits. The biggest beneficiary from the extended NPS will evidently be those working in the private and unorganized sectors.

It was the previous government, the National Democratic Alliance, which in 2002 decided to implement the NPS for all civil servants (except armed forces) employed by the central government beginning Jan. 1, 2004. The current government, United Progressive Alliance, has been inclined to continue the initiative, but has been constrained by its dependence on left-wing parties for its political survival.

In January 2004 the Union Government took the first steps towards establishing a much overdue broad based retirement pensions system in India when it truncated unfunded pensions for the country's civil servants in favour of a contributory scheme in the form of the New Pension System (NPS). In the wings were plans to quickly extend the arrangements on a

voluntary basis to India's wider workforce of over 400 million workers who, with few exceptions, have little to fall back on in old age apart from whatever savings they are able to marshal during their active working life and an increasingly fragile family support system

The New Pension System (NPS) introduced by the Government of India is South Asia's first DC pension scheme with individual retirement accounts, product choices, professional fund management by competing private fund managers and portability through centralised recordkeeping and administration. Participation in this scheme is mandatory for all new employees of the Central Government (excluding armed forces). This scheme will be offered to other employers and workers including State Governments and informal sector workers after a few months. The Department of Economic Affairs (DEA) under the Ministry of Finance has been charged with the responsibility of setting up the Pension Fund Regulatory and Development Authority (PFRDA) and implementing the legislative, policy, regulatory and institutional framework for the NPS.

In parallel, almost all State Governments are becoming increasingly conscious about questions of design and fiscal sustainability of the retirement benefits for their own employees and pensioners. 16 Indian states have already decided to adopt the NPS for their own new employees while several other States are actively considering this option. A number of State Governments are also considering wider reforms and improvements to retirement provisions for their existing employees. However, a majority of States are waiting for the regulatory and institutional capacity of the new Central Government pension system to be in place before they formally announce a strategy for their own civil servants.

CONCLUSION

India's pension sector is about to undergo a radical transformation. The government's controversial 'New Pension System' will usher in a whole new world for Indian savers – individual retirement accounts, a choice of savings and investment products, professional fund management and centralised administration that means pension rights can be taken from one job to another or from one fund manager to another.

India's open economy, open society paradigm requires inclusive growth to manage globalization in a sustainable manner. A well functioning social security system, with increasing coverage of the population and types of risks addressed is an important element of inclusive growth. Demographic trends, with large number of young coming into the labor force, need for fiscal consolidation and flexibility and need for greater labor market mobility are also adding urgency to social security reforms in India. The analysis in this paper suggests that the social security system which has evolved since independence is fairly complex, but suffers from severe limitations.

First, the core functions are not being performed by the existing provident and pension fund organizations in both private and public sectors with requisite degree of professionalism. This will also require revamping of social security laws, and regulations as well as organizational structures.

Second, there is a lack of systematic perspective reflected in lack of coherence and capabilities of those regulating different components of the social security system. The New Pension Scheme (NPS) initiated in January 2004, representing a decentralized and scalable approach, is still to be made fully functional. In particular, the current coalition government has been unable to persuade some of its own partners to pass the PFRDA Bill introduced in the Parliament in 2005. This delay is acting as a constraint on the development of a pension system in which general public can have high degree of confidence, and thereby affecting their interest. The government is planning a separate Bill for those who want to voluntarily join the NPS, and to enable PFRDA to regulate occupational pension funds.

Third, the level of financial economics in general and pension economics in particular, remains low, even among trustees of provident and pension funds. The developmental role of PFRDA, in terms of financial education, needs to be undertaken with much greater urgency.

Fourth, the social assistance programs for the elderly suffer from lack of funds resulting in low level of assistance and coverage provided. Thus fiscal reforms at all levels of government and improvement in government delivery systems are essential to provide minimum old age support.

Finally, robust database, pension research capabilities and empirical evidence based policies required to enhance effectiveness of current policies and to reform them, are in short supply. Analytically rigorous and policy relevant research is essential for building a modern social security system in India.

Pension reforms would not occur overnight. Thus, the focus should be on improving existing systems rather than replace them with new ones. Efforts should be made to find ways of supporting new systems that may supplement existing systems. Since the tax-paying population is small, an exclusive focus on tax incentives as a vehicle to encourage savings is misplaced. Proper estimate of the “tax expenditure” (that is, forgone revenues) that results from current tax preferences for retirement savings and explicit decisions about the appropriate size and progressivity of these preferences need to be made. Government’s contingent liabilities on account of minimum pension guarantee also need to be taken into account before any change in policy is made. Participants’ interests and associated government costs in the form of government grants, administrative costs by its agencies (EPFO, post office, bank branches, etc.), and funds required to guarantee minimum pension should all be taken into account in recommending any institutional arrangement.

More reforms are also in the offing – something that will help India’s financial sector expand further. There are plans to relax restrictions on foreign ownership of life insurance companies while India’s new pension regulator – the Pension Fund Regulatory and Development Authority – has said it wants the government to lift tax obligations from the NPS, arguing that other state-sponsored schemes are already tax-free.

Hope the second innings in life of the senior citizens in India and worldwide will be a smooth journey by the initiatives taken up by the regulatory bodies and the government.

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An Exploratory Study on Effect of Behavioural Interventions on Managerial Styles

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INTRODUCTION

Background

How are the attributes like quality, delivery, etc developed or evolved in an organisation and how are these practiced in reality? Are these managed by only one person in an organisation or several persons take charge? How are these attributes understood by various employees, how do they orient themselves towards these attributes? Can the organisational systems (processes, procedures, etc) alone decide these? If someone does not follow these attributes will that person be punished or alienated? How do people hold on to these attributes continually? - are questions that arise. Once these questions are answered and understood we get to know of the “managerial style” of an organisation.

Some of these attributes are created consciously and some of them unconsciously. The managerial styles of various employees combine together and form the culture or values of an organisation. Organisations evolve. The way an organisation evolves is similar to that of a human being. The attributes or characteristics with which an organisation develops can be based on different “approaches” or “styles”. The field of management science is evolving making appropriate use of technology and through multi-disciplinary research. However, there is no management without “man” or the human being. While there have been periodic and major contributions to management thought by the “behavioural scientists” one question that has not been completely addressed is the area of “managerial styles”. While shape of organisations are understood today by organisation structure or organogram, is there a way by which organisation styles can be understood, *is there a way by which we can establish or plot in a diagram “managerial styles” of organisations? is one major question.*

Management is a product of human thinking. It is not just managerial “systems” (consisting of organisation charts, job descriptions, information technology, management information systems, etc oriented towards processes of management) that alone contribute for the achievement of the organizational objectives. Even if systems are in place it requires a human being to undertake the “actual delivery”. In any structured organisation the problem is not related to systems but to people. The way or the “style” in which a person performs his job decides the success. Hence the entire organisation process can be in a simple way explained with a simple diagram as shown in Fig.1.

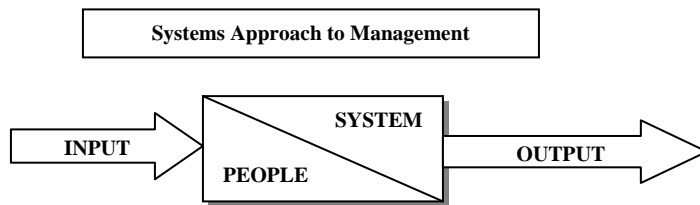


Fig. 1: Systems Approach to Management

The “people” who are actually involved in day to day decision making and running of an organisation shape the way in which the organisation performs and they determine the “managerial style”. These persons who decide the managerial style of the organisation do so making use of their mental capacity and their emotions to take such decisions. In a given situation the employees make use of both their intelligence and their emotions and take decisions within the framework of their “managerial style”. This involves their psyche. Hence running an organisation is deeply related to the psychology of the persons who run them. “Can the managerial style of the persons in an organisation be modified by proper behavioural interventions?” is the second question that needs to be addressed to understand the complete phenomenon of managerial styles.

Objectives of the Study

The Objectives of the Study:

- To examine whether Managerial Style Diagram can show visually, the impact of behavioural interventions;
- To examine whether behavioural interventions significantly influence the Managerial Styles of an Organisation on overall basis (to be statistically tested);
- To examine whether behavioural interventions significantly influence individual elements constituting the Managerial Styles of an Organisation (to be statistically tested);
- To examine whether behavioural interventions significantly influence the Managerial Styles of the individual subjects (persons under study) in an Organisation, (to be statistically tested).

This exploratory study is based on the pioneering work by Joseph A. Petrick and John F. Quinn (1997), *Management Ethics – Integrity at Work*. It is based on the theoretical foundation of the Competing Values Framework (CVF) originally proposed by Robert E. Quinn. These authors, in this study developed a Management Assessment Style questionnaire that was used to evaluate the managerial style of an organisation through its executives. The focus of the study was on the competing values – that is how values, in relation to ethics, economics and management, influence the managerial style of an organisation. The study looked at four basic theories in management: open systems theory, rational goal theory, internal process theory and human relations theory. Based on these concepts eight managerial styles have been evolved *Innovator/Broker* based on open systems theory, *Producer/Director* based on rational goal theory, *Coordinator/Monitor* based on internal systems theory and

Facilitator /Mentor based on Human relations theory. Based on a 36 response questionnaire (Managerial Style Assessment Questionnaire) the managerial style pattern can be plotted on a seven point scale. Hence based on the four theories and the competing values propagated by them eight managerial styles evolve.

The study in the recent times was further extended to compare the competing values of the executives of two different continents: America and Europe. This study done by Annemette Kruse Jensen¹ (2002) “Handling Competing Values in Ethics, Economics and Management - A Cross-Cultural Empirical Study of American and Danish Managerial Attitudes”² looked at the CVF from a different perspective. In the study the author completed a cross-cultural, comparative empirical survey of American and Danish managers and confirmed four hypotheses. According to hypothesis one it was found that a strong correlation exists between ethics, economics and management for American managers. Further, hypothesis two demonstrated that American managers emphasize control in ethics, economics and management, while hypothesis three illustrated that Danish managers tend to focus on a more flexible approach or attitude. Finally, the fourth hypothesis illustrated that some smaller countries might emphasize extreme managerial attitudes to be externally competitive.

The original and the subsequent studies looked at the CVF and studied the behavior of various sets of executives from ethical, economic and management perspective. This current study, however, looks at the CVF and Managerial Style Assessment instrument from a different perspective. The instrument used in these studies basically plots the managerial style followed by an organisation. In this study a pioneering attempt has been made to use the MSA diagram to plot the shape of the managerial style of an organisation. It is believed that this would highlight the managerial “imbalances” of an organisation. Based on the analysis of existing managerial style, an attempt is made to provide certain behavioural modification inputs to correct the observed imbalances, if any, and the impact of such behavioural interventions is then studied. The instrument is used to study the change in managerial style of a Consultancy Organization when Organizational Behaviour Modification techniques are used.

CV FRAMEWORK AND BEHAVIOURAL MODIFICATION

Managerial Style

The Competing Values Framework³ takes into account four basic management theories: human relations theory, open systems theory, internal process theory and rational goal theory. Based on these four approaches the authors have identified four dimensions that influence an organisation: flexibility – control – internal – external.

¹ Department of Economics, Wright State University

² Jensen Annemette Kruse (2002), “Handling competing values in ethics, economics and management: a cross-cultural empirical study of American and Danish managerial attitudes” (a report submitted in partial fulfillment of the requirements for the degree of Master of Science in Applied and Social Economics), Wright State University

³ Joseph A Petrick & John F Quinn, (1997), *ibid*

The interaction between the four theories and the directions result in eight managerial styles: Innovator – Broker – Producer – Director – Coordinator – Monitor – Facilitator – Mentor. These managerial styles reflect the values and define the culture of the organisation from scientific management viewpoint.

The rational goal theory, which Frederick Taylor introduced at the beginning of the 20th century, stresses the **director** and **producer** role responsibilities of setting goals, taking initiative, increasing productivity, and maximizing output by emphasizing goal clarification, rational analysis, and action taking⁴.

The internal process theory, which Max Weber and Henri Fayol developed in the first quarter of the 20th century, stresses the **monitor** and **coordinator** role responsibilities of information management, documentation control, efficient processing, and consolidated continuity by emphasizing process measurement, smooth functioning of organisational operations, and structural order⁵.

The human relations theory, which was made famous by Elton Mayo and Hawthorne studies in the second quarter of the 20th century, stresses the **facilitator** and **mentor** role responsibilities of fostering openness, participation, team morale building, and commitment by employee involvement, humane conflict resolution, and consensus building⁶.

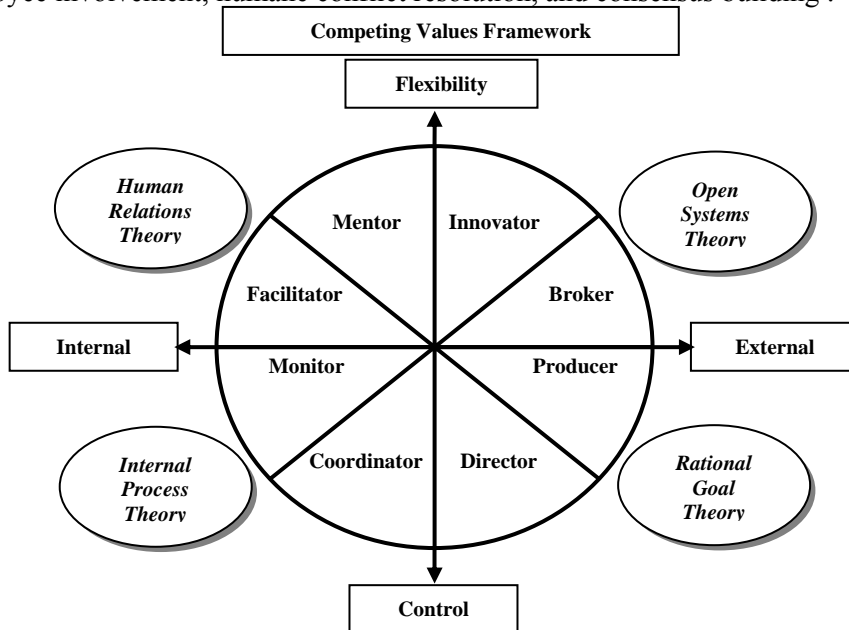


Fig. 2: Competing Values.

The opens systems theory, which was advocated by Paul Lawrence and Jay Lorsch in the third quarter of the 20th century, stresses the **innovator** and **broker** role responsibilities of cultivating organisational learning capabilities and developing the competitive power of

⁴ Taylor F.W. (1911), *The Principles of Scientific Management*, Harper & Brothers, New York

⁵ Weber M. (1921), *Theory of Social and Economic Organisation*, Oxford University Press, London

⁶ Mayo E. (1933), *The Human Problems of Industrial Civilization*, Macmillan, New York

continual creativity, political adaptation, and negotiated external resource acquisition by emphasizing external trend scanning, creative system change and development, and negotiated contractual agreements and networking⁷.

For a well run organisation these eight roles need to be properly balanced. It is proposed to examine how in any organisation these roles are exhibited. This is evaluated through Management Style Assessment Questionnaire.

Behavioural Modification through Positive Reinforcements

Organizational Behaviour Modification is the application of the principles of behavioural modification, which evolved from the work of B.F. Skinner⁸. The OB Mod approaches provide perspectives on the dynamics by which employees can be motivated to change their behaviour in order to bring the desired results for the organization. The OB Mod uses four alternative consequences based on the manager’s use of modification techniques and the arising nature of consequences commonly referred to as “law of effect”.

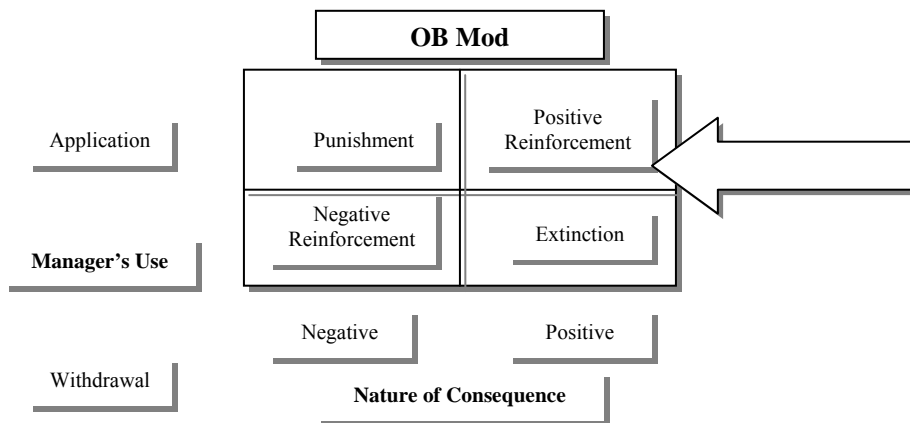


Fig. 3: The OB Modification Model.

In this study, the use of OB Mod⁹ by Manager for providing positive behaviour towards organizational work has been considered. This is called positive reinforcement. “Thus in attempting to help an individual or group develop – to get them to take more and more responsibility for performing a specific task – a leader must first tell and show the follower(s) what to do; second, delegate *some* responsibility (not too much or failure might result); and third, reward as soon as possible any behaviour in desired direction. This process should continue as the individual’s behaviour comes closer and closer to the leader’s expectations of good performance.... Relationship behaviour would involve providing “positive strokes” and reinforcements. Positive reinforcement strokes are anything that is desired or needed by an individual whose behaviour is being reinforced... **This three step process of (1) initiating**

⁷ Lawrence P.R. & Lorsch J.W. (1967), Organisation and Environment, Harvard University Press, Cambridge

⁸ Skinner B.F. (1953), Science and Human Behaviour, New York Macmillan (Free Press).

⁹ Newstrom J.W, Davis Keith (2002), Organisational Behaviour – Human Behaviour at Work, Tata McGraw Hill Publishing Company Limited, pp 112

structure or providing direction (task behaviour), (2) reducing the amount of direction and support (relationship behaviour) is known as *positively reinforcing successive approximations*. This concept is associated with behaviour modification and reinforcement theory, and more recently, in industrial circles it has been called performance management¹⁰.

Reinforcement versus Motivation: It is important to differentiate reinforcement from the concept of employee motivation. Motivation represents a primary psychological process that is largely cognitive in nature. Thus, motivation is largely internal, it is experienced by the employee, and we can see only subsequent manifestations of it in actual behavior. Reinforcement, on the other hand, is typically observable and most often externally administered. A supervisor may reinforce what he or she considers desirable behavior without knowing anything about the underlying motives that prompted it. This distinction should be kept in mind when we examine behavior modification and behavioral self-management.

In order for a positive reinforcement to be effective in facilitating the repetition of desired behavior, several conditions must be met. First, the reinforcer itself (praise) must be valued by the employee. It would prove ineffective in shaping behavior if employees were indifferent to it. Second, reinforcer must be strongly tied to the desired behavior. Receipt of the reinforcer by the employee must be directly contingent upon performing the desired behavior. "Rewards must result from performance, and the greater the degree of performance by an employee, the greater should be his reward." It is important to keep in mind here that 'desired behavior' represents behavior defined by the supervisor, not the employee. Third, there must be ample occasion for the reinforcer to be administered following desired behavior. If the reinforcer is tied to certain behavior that seldom occurs, such as very high performance, then individuals will seldom be reinforced and will probably associate this behavior with a reward. It is important that the performance-reward contingencies be structured so that they are easily attainable¹¹.

Behavioural Interventions

The behavioural interventions supposed is based on the concept of "successive approximations". No one learns how to do anything all at once. A little bit is learnt every time. Hence if a Manager wants to change the behaviour (in this present study "managerial style") then the Manager should reward the slightest progress the person makes for creating positive reinforcements. Such reinforcements make them move to the next stage of betterment and again the needed positive intervention is given. Such successive attempts enable "successive approximations" in the person and move him to the desired level of behaviour.

The behavioural interventions that were taken up in this study were:

- Providing structure and direction by giving specific job responsibility, clarity in work by introduction of daily reporting;

¹⁰ Hersey Paul, Blanchard H. Kenneth (1990), Management of Organizational Behaviour – Utilizing Human Resources", Prentice Hall of India Private Limited, pp-239-240

¹¹ Richard M Steers (1991), "Introduction to Organisational Behavior", pp- 96-97

- Reducing Supervisions and Direction by providing the person with more responsibility;
- Review of work on periodic basis and providing socio emotional support by increased personnel contacts and counseling.

TABLE 1: SCHEDULES OF REINFORCEMENT

Schedule of Reinforcement	Nature of Reinforcement	Effects on Behavior When Applied	Effects on behavior When Terminated	Example
1. Fixed interval	Reward on fixed time basis	Leads to average and irregular performance	Quick extinction of behavior	Weekly paycheck
2. Fixed ratio	Reward consistently tied to output	Leads quickly to very high and stable performance	Quick extinction of behavior	Piece-rate pay system
3. Variable interval	Reward given at variable intervals around some average time	Leads to moderately high and stable performance	Slow extinction of behavior	Monthly performance appraisal and reward at random times each month
4. Variable ratio	Reward given at variable output levels around some average output	Leads to very high performance	Slow extinction of behavior	Sales bonus tied to selling X accounts, but X constantly changes around some mean

Source: Richard M Steers (1991), "Introduction to Organizational Behavior", pp- 101

The successive approximations taken up are based on the reinforcements given at variable interval during the study.

METHODOLOGY

Statement of the Problem

This study seeks to look at the way in which Managerial Style patterns in organizations could be mapped and examine if behavioural interventions can influence Managerial Styles.

Hence the Hypotheses for the study have been framed as under:

H₁: Behavioural interventions cannot influence the *overall managerial styles* of an organization

H₂: Behavioural interventions cannot influence the *individual elements of managerial styles* of an organization

H₃: Behavioural interventions cannot influence the *managerial styles of individuals* (subjects) in an organization

Research Design

The research design for the study is exploratory/formulative research, which can be classified as quasi experimental. The overall design is explorative in order to provide opportunity for considering different aspects of the problem. The research design is explorative (purposive sample) with regard to sample design and statistical design (with no preplanned design for analysis) and is experimental (descriptive/diagnostic) to the extent of the observational design (through structured questionnaires for collection of data) and operational design (as it uses well laid out operational procedures).

Sample

The sample for the design has been selected from a Consultancy Company specializing in Management Consultancy. The sample size is 32 and consists of employees at three levels: Senior (Consultant), Middle (Executive) and Operational (Trainees). The sample includes males and females, married and unmarried, professionally qualified, post graduates and graduates, experienced and inexperienced and from families with different backgrounds.

Since the study is of quasi-experimental or explorative nature, purposive sampling method has been used.

Research Instrument

The primary tool used for the study is a questionnaire developed and tested in several countries. This tool was developed by Joseph A Petrick and John F Quinn as part of their work on Management Ethics¹². The tool is basically a questionnaire containing 36 questions on various aspects of Managerial Style. Based on the response the organizational Managerial Style can be mapped in a Map consisting of 8 different axes.

While it is claimed that the tool has been used in many places and found to be effective, no specific information was available regarding the reliability of the questionnaire. Hence an attempt was made to verify the reliability as a part of the project. The test retest reliability index was found to be 0.877 and the Kuder Richardson test results show a reliability index of 0.857.

Procedure

Step A: identification of sample

The sample for the study was selected based on convenience sampling method from a single organisation. The organisation consists of three levels of employees: Consultants at the senior level, Executives at the middle level and Trainees at the junior level. There are totally 32 persons in the sample belonging to the age group 20 years to 29 years. Considering organizations in professions this is considered a homogenous group. The samples contain a mix of males (20) and females (12) who are either married (5) or unmarried (29). In the sample all are graduates, 11 possess post graduation degrees, of which 6 are professional qualifications. 6 of the other employees were pursuing post graduate courses.

Step B: administering of the questionnaire – stage 1 – preliminary assessment

In the stage 1 i.e. at the beginning of the study, the MSA questionnaire and team survey questionnaires were administered during the month of January. In this questionnaire, the

¹² Joseph A Petrick & John F Quinn, (1997), Management Ethics – Integrity at Work, Response Books – Sage Publications, pp 327-331

subjects were asked to respond to the 36 questions of the MSA assessment questionnaire. The MSA plot was made and observations noted for the approach to be followed in the behavioural modifications to be given as described in step-D.

Step C: administering of the questionnaires – stage 2 (for reliability/validity test¹³)

The main reason for administering the questionnaire in stage 2 was to test the reliability and validity of the questionnaire. In about a gap of 15 to 18 days the MSA instrument was again administered on the sample.

Step D: various behavioural interventions

The behavioural modification programme was implemented in five stages as given in the following schematic diagram.

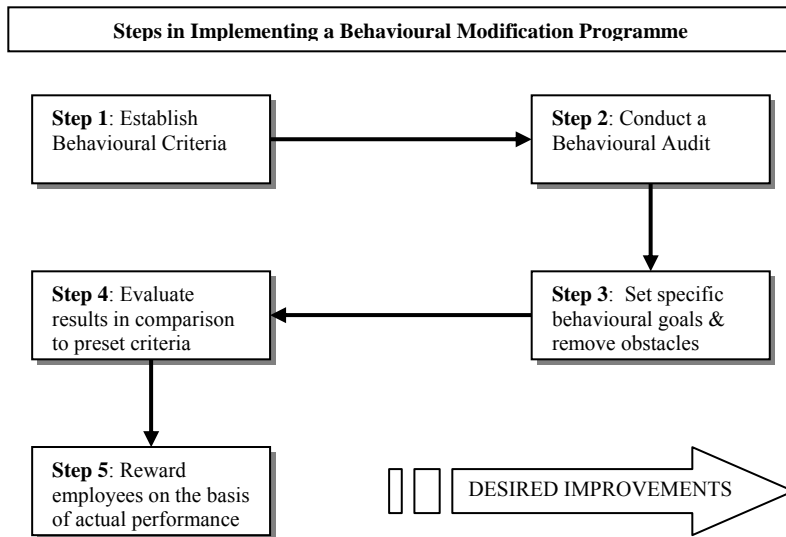


Fig. 4: Steps in Implementing Behavioural Modification Programme¹⁴.

This five step model was used as the base for providing behavioural modification programme.

Step 1

Establishing behavioural criteria

The behavioral criteria were established based on the eight managerial styles as per CVF model. Ideally all the average scores in each of the 8 managerial styles should be above 5.00.

¹³ Arun Kumar Singh (1998) “Tests, Measurements and Research Methods in Behavioural Sciences”, Bharati Bhawan – pp- 58:“In computing retest reliability the investigator is often faced with the problem of determining a reasonable time between two administrations of the test.... The most appropriate and convenient time gap between two administrations is fortnight, which is considered neither too short nor too long”

¹⁴ Based on Richard M Steers (1991), “Introduction to Organisational Behavior”, pp- 105

This would provide a balanced model and the MSA plot will also appear symmetric. This “ideal score” of 5.00 was based on the fact that out of a 7 point scale 5 and plus would indicate a positive position. However, there is no scientific support for this argument. Moreover anything around 4.000 would indicate an average performance in a scale of 1 to 7;

Step 2

Conducting a behavioural audit

In order to conduct the behavioral audit, the MSA instrument was used. The actual responses of all the 32 samples for all the 36 questions were tabulated. Based on the average score made by all 32 respondents and grouping the scores as per the rules of scoring (**given by the Model**) the scores for all the 8 managerial styles were calculated and the MSA Plot made. Out of the 8 managerial styles two were found to be relatively low scoring: the “producer” (rational goal theory) score was marginally higher than the 5.000 mark at 5.063 and the “broker” (open systems theory) score was at 4.852. This imbalance was shown very clearly in the shape of the MSA plot (discussed in detail in the next section);

Step 3

Set specific behavioural goals and remove obstacles

The behavioural goals set were to increase the “producer” and “broker” aspects of the managerial style. The “Producer” related aspects of the MSA were covered by the question Nos.3, 13,19,29,33 and those related to “Broker” style were covered by question Nos.2, 20, 28, and 34.

TABLE 2: SPECIFIC MANAGERIAL QUALITIES IN PRODUCER AND BROKER STYLES

Producer	Managerial Qualities Contributing for the Style
3	Ignore the need to achieve unit goals.
13	Push the unit to meet objectives.
19	Seek to improve the work group’s technical capacity.
29	See that the unit delivers on stated goals.
33	Maintain a “results” orientation in the unit.
Broker	Managerial Qualities Contributing for the Style
2	Exert upward influence in the organization.
20	Get access to people at higher levels.
28	Persuasively sell new ideas to higher-ups.
34	Influence decisions made at higher levels.

The Producer qualities required are basically related to orienting the organisation towards achieving the goals of the organisation and also improving the technical ability of the organisation to achieve results. *This was done by providing clarity in the work, increasing the discussions, and providing training to the employees on specific technical issues relating to the work.*

The Broker qualities are oriented towards exerting influence over higher levels in an organisation. In a typical consultancy organisation where the design of the consultancy is made in agreement with the clients and are generally related to both concept and practice

aspects of “technical” needs of organisations, and employees at various levels may not be involved. Similarly the employees are generally provided clear step by step approach for attending to a client. Hence upward influence in such organisations is generally less. However, based on this analysis, *group discussions were introduced and ideas of employees were discussed democratically to be considered by the higher authorities.*

While these were done to tackle the issues of producer and broker related aspects, the **three step** approach specifically discussed before were followed:

1. Initiating structure or providing direction (task behaviour): *the employees were given clear cut tasks,*
2. Reducing the amount of direction and supervision: *persons belonging to each of the projects and sub modules were treated as a group where particular individual may not feel that he is being supervised. The group (not individuals) would be given tasks and depending on their interest / commitment they would take up the delivery of the same so that individual directions are avoided,* and
3. After adequate performance follows increasing socio-emotional support (relationship behaviour). *This was a very vital aspect of the intervention. Informal meetings with individual and groups were held. Necessary encouragement by positively praising them, sending them personally addressed emails encouraging their work, in certain deserving cases providing financial compensations and increments, making them directly take up responsibilities including dealing with the client to enable them take responsibilities and feel important were taken.*

There were also other niceties like calling the persons for informal discussions and encouraging them on their “extra achievements” in histrionics like music, etc. Such sessions of positive inputs and encouragements were administered at infrequent intervals.

Step 4

Evaluate the results in comparison to the present criteria

Approximately 3 months after the preliminary analysis and introduction of various behavioural interventions, the MSA instrument was again administered on the population.

Step 5

Reward employees on the basis of actual performance

There are two aspects in this regard. One, based on the results given in this study further intervention will be given. Second, even during the study (even before making post intervention analysis) rewarding of the employees was undertaken.

Step E

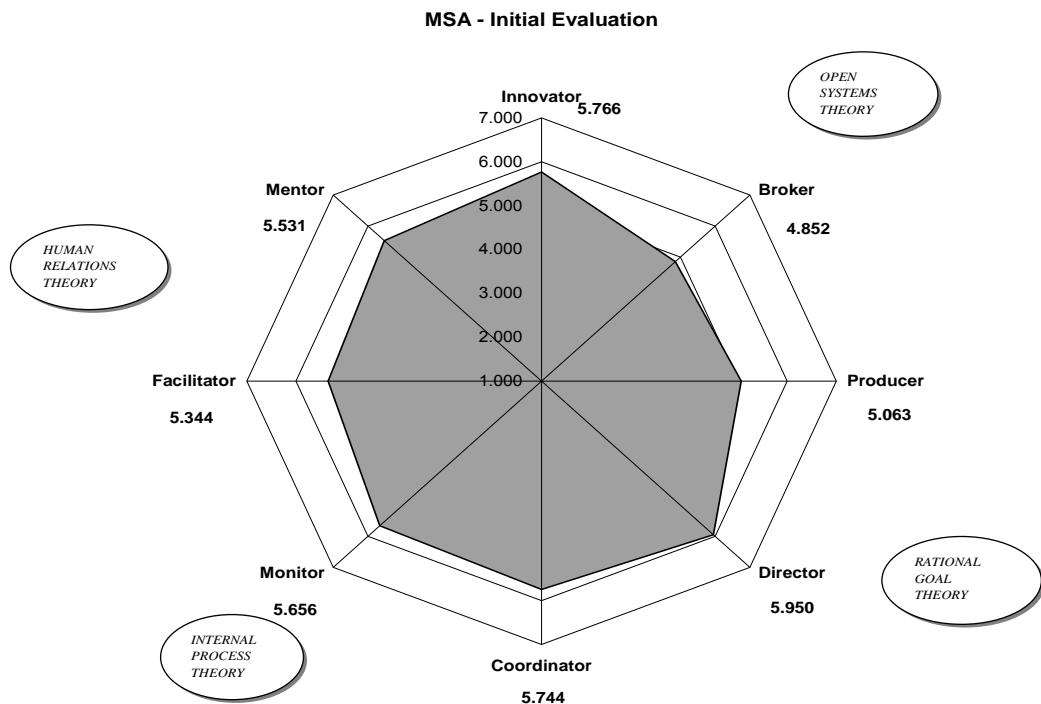
Administering of the Questionnaire – Post intervention – measurement of impact of the behavioural interventions

As mentioned earlier, the MSA questionnaire was again administered on the population. The results are discussed in the next chapter.

RESULTS AND DISCUSSION

Managerial Style before Behavioural Interventions

Before the commencement of the behavioral interventions, the managerial style status of the organisation was assessed. The results are given in **Annex D**. Based on the response to the questionnaire, the average score of each of the questionnaire were grouped as per key resulting in scores for the eight managerial styles. The results of the same are plotted in Graph #1.



Observations

Graph #1 shows the Managerial Style Map of the company as a whole. The analysis of this graph, brings to light the following:

- The octagon is not symmetric, indicating some imbalances in the overall managerial style;
- The managerial styles predominant in the organisation are:

- **Director** (5.950): the employees get good direction and also are able to give directions to others;
- **Innovator** (5.766): the employees have full freedom to use their creative approach;
- **Coordinator** (5.744): the employees have good rapport with other employees in coordinating their work;
- **Monitor** (5.656): the employees are able to monitor their work properly;
- **Mentor** (5.531): the mentor or guidance support is also well established in the organisation;
- **Facilitator** (5.344): the role of providing various support is also well understood by the employees;
- The managerial styles that are found to be relatively weak in the organisation are:
- **Producer** (5.063): the producer role or “production” or output related role is found to be weak;
- **Broker** (4.852): is the weakest aspect of managerial style in this organisation.
- Based on the CV framework of the theories the ranking is as follows:

TABLE 3: CV FRAMEWORK: RANKING BASED ON PRELIMINARY FINDINGS

C V Framework	Managerial Style / Score	Managerial Style / Score	Total Score	Rank
Internal Process	Monitor 5.656	Coordinator 5.744	11.400	1
Rational Goal	Producer 5.063	Director 5.950	11.013	2
Human Relations	Mentor 5.531	Facilitator 5.344	10.875	3
Open Systems	Innovator 5.766	Broker 4.852	10.618	4

Analysis

The organization is a management consultancy company where the focus is on providing value added services in the field of management to various organisations. The organisation focuses on improving the managerial systems and processes of client organisations. Based on the various observations, the status of the organisation before commencement of the behavioral interventions is as follows:

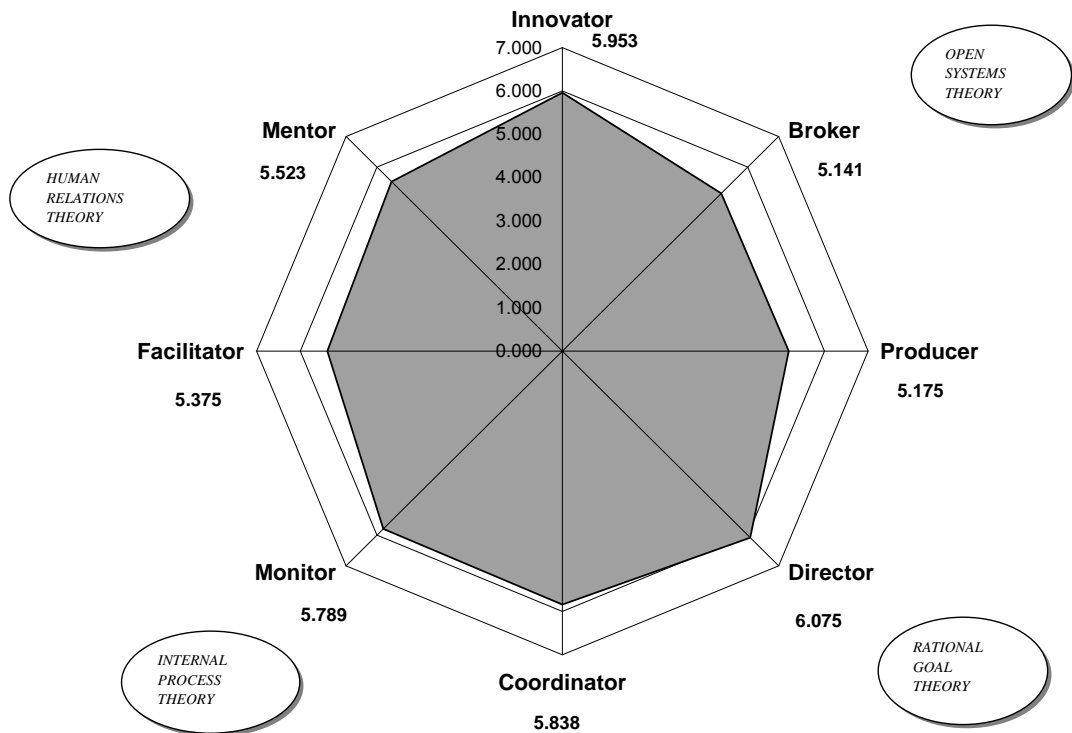
- The above average performance in the six managerial style aspects shows the general strength of the organisation;
- The relatively weak “producer” role could be due to the fact that the company is not involved in production related activity like manufacture of goods and the like;
- The weak “broker” role could be due to the lack of “negotiated external source acquisition” for employees at various levels;
- CV framework aspects:
- The “internal process” aspects seems to rank top with the monitor and coordinator roles well defined. This indicates that internal systems are well set;
- The “rational goal” of having clarified goals is also high ranking in spite of low score on the role of producer. This could mean that the organisation could have low productivity;

- The “human relations” aspect though ranking third seems to be well balanced;
- The “open systems” aspects rank the fourth in spite of high scores for “innovator” role. The low “broker” score could indicate that employees have gap in an understanding of the negotiations with the external agencies and client. This could prove a weakness when they grow up and need to deal with external entities.

Managerial Style after Behavioural Interventions

Graph # 2 shows the MSA Plot –post interventions.

MSA Analysis - Post Intervention



Graph # 2: MSA Post Interventions.

Observations

Based on the Graph#2 are:

- In general, there has been an overall development in the overall managerial style based on the increased symmetry of the MSA map;
- The scores have increased for all the managerial styles except for Mentor, for which the score has very marginally reduced;

- In the case of **Broker** there have been improvement from 4.852 to 5.141 and in the case of **Producer** from 5.063 to 5.175 indicating that there have been improvements in the desired direction based on the interventions.;

The results of the post intervention data have been tabulated in Table 4 based on CV framework and is comparable to Table 3.

TABLE 4: CV FRAMEWORK: RANKING BASED POST INTERVENTION DATA

CV Framework	Managerial Style / Score	Managerial Style / Score	Total Score	Rank
Internal Process	Monitor 5.789	Coordinator 5.838	11.400	1
Rational Goal	Producer 5.175	Director 6.075	11.250	2
Human Relations	Mentor 5.523	Facilitator 5.375	10.898	4
Open Systems	Innovator 5.953	Broker 5.141	11.094	3

Table 4 indicates the following:

- There has been an overall increase in the total scores per CV framework, in general showing the positive trend;
- All the managerial styles have scores above 5.000 after the interventions;
- The overall ranking position has changed for human relations and open systems.

Analysis

- Basically the behavioural interventions seem to help in enabling changes in the required directions.
- It may also be a case that there are certain areas in which there could some reduction in the scores (post interventions) as it was observed in the case of Mentor managerial style, where the score marginally shifted down from 5.531 to 5.523 post intervention;
- Though the interventions were aimed at improving specific characteristics (in this case towards the Producer and Broker styles), the effect was overall. This could have been because of the general nature of the intervention.

Statistical Significance of the Influence after Behavioural Interventions

The prima facie results show that there seem to be some evidence of change visualized through the MSA Diagram and the MSA scores. Are these changes statistically valid? In this regard all the three hypotheses taken up for investigation were examined. The examinations were as per the research design using both T paired sample test and ANOVA using F test.

INVESTIGATION OF OBJECTIVE 1

H₁: Behavioural interventions cannot influence the *overall managerial styles* of an organization

The objective was to examine whether the behavioural interventions have had any influence on the managerial styles of the organisation, considering all the 32 subjects each responding to 36 items of enquiry. The examination here was on an overall basis where the scores of all the subjects per question was averaged.

Observation

- The calculated value of t at **-1.534** is less than the table value of **2.041** at 95 % confident level and hence the hypothesis that there is no significant difference between the pre and post data is **accepted** indicating that the behavioural interventions have not had any significant influence on the managerial styles.

Analysis of Variance – F Test

The analysis of variance of the pre-intervention and post intervention situations were studied. The following table – 6 shows the tabulation and computation of the F statistics.

Observation

- The calculated value of F at 0.4135 is less than the table value of **4.170** at 95 % confident level and hence the hypothesis that there is no significant difference between the pre and post data is **accepted** indicating that the behavioural interventions have not had any significant influence on the overall managerial styles.
- The paired T test and ANOVA – F test accepted the hypothesis that there was no significant difference observed based on the interventions. ***Due to this reason further analysis based on demographic variables was not performed.*** However, the MSA scores showed certain positive trends

Investigation of Objective 2

H₂: Behavioural Interventions Cannot Influence the Individual Elements of Managerial Styles of an Organization

The objective here was to examine whether the behavioural interventions had any influence on any one of the 36 elements constituting 8 different managerial styles. Under this analysis, paired t test and ANOVA were performed for all the 36 questions considering the pre and post test data for these questions from 32 subjects. Hence 36 such tests were performed. The results are tabulated below in table-8:

Observations

- F Test: Out of the 36 questions only for two questions: No 25 (of Innovator Style) and No. 4 (of Director Style) the variance between groups are more than the variance within the groups. The F value in these two cases are relatively high but still within the acceptance region. Hence there is no significant influence of the behavioural interventions on the managerial styles of the Organisation.
- Paired T test: In the case of paired t test, the same two questions have t values beyond the acceptance region Q 25 (2.7899) and Q 4(2.6969), indicating that in these two cases the hypothesis is rejected, as these values are greater than the table value of 2.041. This means in these two cases there has been significant influence of the interventions on the managerial style. The managerial styles influenced are respectively Director and Innovator styles.

Investigation of Objective 3

H₃: Behavioural Interventions Cannot Influence the Managerial Styles of Individuals (subjects) in an Organization

The Objective here was to examine the influence of the behavioural interventions on any of the specific individuals (subjects) taken up for the study.

Under this analysis, paired t test and ANOVA was performed for all the 32 samples (subjects) under study. This was done by taking responses to all the 36 questions considering the pre and post test data from 32 subjects. Hence 32 such tests were performed. The results are tabulated below in table 9:

Observations

- F Test: For some of the samples the variance between the groups is indicated to be higher than the variance within the group. This indicates some impact of the interventions on these subjects. In the case of Subject Nos. 2,8,12, 14, 16,17, 19,20, 24 and 32 such a pattern has been noticed;
- The F test scores that have been found higher than the table score of 4.021 (95% confidence level) are for subject Nos: 12 (4.3528), 19 (6.4868), 20 (14.9120) and 24 (4.5123). In these cases significant changes have been noticed. This means that there has been significant influence of the behavioural interventions on the managerial styles of some of the subjects;
- T test: In the case of two subjects. Nos 8 (2.1081) and 19 (2.0080), t scores are beyond the table value in the case of former and very near the table value of 2.041(95% confidence level) in the case of the latter. This indicates that there has been some influence of the behavioural interventions on the managerial styles of some of the subjects.

Analysis

- In the overall analysis there have been no significant differences pre and post interventions due to averaging of scores. The question wise analysis also confirms this because the averaging out of responses of various persons does not show significant improvements.
- The analysis shows that even though there is no significant overall impact of the interventions, the impact could be felt subject wise. This is a very important finding because in certain cases (particularly for persons who are already well balanced) there may not be significant improvement because of the interventions. However, in certain individual cases there could be more impact which due to generalizations does not come out. This takes care of individual differences in people. In real life situations, the managerial style of individual could be examined and behavioural interventions prescribed as per needs.

CONCLUSION

Based on the summary of various activities that took place for this study, various observations were made; and based on the observations and analysis conclusions were also made. These are discussed below.

1. Can the managerial styles of organisations be plotted in a meaningful diagram?
 - a. This was the first question that was taken up and this question has been answered in **affirmative**. While it is always possible to plot some diagram with certain variables, the exercise here was different. The diagram could prima facie show “imbalances” as in this case with regard to “producer” and “broker” managerial styles. Hence managerial styles of organisations can be plotted in a graph.
 - b. The diagram also brought to light as mentioned the weak areas which after the interventions showed improvement. This is visibly noticeable in the MSA diagram. Thus the MSA diagram can visually provide proof of changes in managerial style.
2. Effect of behavioral interventions on managerial style: This is the second question and the major theme taken up in this study. In this regard the following observations were made:
 - a. **Overall tests:** There has not been a significant impact of the behavioural interventions on the managerial style as evidenced by the t score of -1.534 and F score of 0.4135 and the hypothesis that the behavioural interventions impact management style has been rejected. However this need not be a conclusive evidence of this concept due to certain limitations in the study:
 - i. *The time period of interventions was less.* Three months is too short a period within which behavioral changes can be expected to take place;
 - ii. *The averaging of the score:* The averaging of the score of all the samples could have also affected the study of impact of interventions.
 - b. **The analysis of individual questions** pre and post interventions showed some positive results about the behavioural interventions on the managerial style. Two questions No.4 and 25 did not show sensitivity to F test (and the hypothesis was accepted). However t score obtained was sensitive to reject the hypothesis and establish that in the case of the two questions 4 and 25, there has been impact because of the behavioural interventions. This has the following implications:
 - i. Question wise examination of managerial style could throw better lights on variable level changes;
 - ii. However here also the danger of averaging of the scores of all the subjects has impact.
 - c. **The analysis of individual subjects** pre and post interventions showed some positive results about the behavioural interventions on the managerial style. In the

case of t test two subjects and in the case of F tests four subjects were found to have been impacted by behavioural interventions. The t tests rejected the hypothesis that there is no significance difference pre and post interventions. These subjects were Nos 8 and 19. The F test showed positive impact on the subjects 12, 19, 20 and 24. In the case of subject 8 though the F score was high it was not significant. This has following implications:

- i. Managerial Style analysis shows more sensitive results if it is examined subject wise. Logically also unless there is change at individual level aggregate changes cannot be felt.
 - ii. An overall analysis should be followed by individual (subject wise) Managerial Style analysis to get better understanding of the problem. This will also help in designing interventions.
- The Managerial Style Diagram is able to visually show the impact of behavioural interventions on managerial styles;
 - There was no significant influence of the behavioural interventions on the overall managerial style (organisation as a whole);
 - There was no significant influence of the behavioural interventions on the individual elements of managerial style; though there is a positive trend;
 - There was a significant influence of the behavioural interventions on managerial styles of some of the individuals; the individual differences have been addressed by the model.

An Analysis of Credit Risk Management in Lakshmi Vilas Bank

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INTRODUCTION

As the financial markets are growing exponentially so have the related complexities leading to higher risk. With the advent of liberalization and globalization there has been tremendous growth but at the same time numerous risks have crept into the system.

Managing risk in this complex environment has become very difficult. Financial intermediaries are exposed to the maximum amount of risk in the financial markets. There have been so many red flags and financial debacles that made managing credit risk as the need of the hour. Credit risk or default risk involves inability or unwillingness of a customer or counter party to meet commitments in relation to lending, trading, lending, settlement and other financial transactions.

Credit risks management is extremely important as the pricing of a portfolio or a transaction is dependent on the risk factor built in it. This study will assist the bank in identifying the categories of risk and prioritizing them and mapping them against business process to understand their impact. This can be done identifying the risk and implementing controls with appropriate measures methods and tools. In this study enhancement of credit analysis as a structural process, is used to improve credit decision. This will organize and raise the quality of credit assessment with better risk management; contribution can be made towards increasing the value of business. Risk management practices contribute to the enhancement of client's value, which help in generating a business environment, which is more conducive. It will minimize the impact of risk occurrences that could decrease the client's value and exploit opportunities to create value when they arise. The Study encompasses on analysis of the credit risk management of Lakshmi Vilas Bank. The study would also evaluate the financial performance with the scope of measuring the firms operating efficiency.

REVIEW OF THE LITERATURE

Chritine M. Cumming and Beverly in their paper "Challenges of risk management in Diversified institutions (Federal Economic Policy review March 2005) state that the economic rationale for managing credit risk on a firm wide, consolidated basis is important. Although the benefits of a consolidated risk management are widely accepted, firms have taken a more segmented approach. The cost of integrating information across business lines and the existence of regulatory barriers to moving capital and liquidity has discouraged firms to have a proper credit risk management .In addition to this, technical difficulties are also there.

Karl Borden in his paper *Managing Accounts Payable* has explained about the critical Contents of a cash cycle. A temporary cash shortfall can be a death sentence for a small business. The small-business owner's limited access to capital leaves little room for error. This article will examine the role that payables can play in providing a source of financing for the firm. It will start with an explanation of the significance of payables management and demonstrate how a combination of automatic financing and a multiplier effect act to free up a significant amount of cash as a result of even relatively minor adjustments in payment policies. It will then examine in detail, how the payment decision can be made to maximize the cash benefits available and at the same time, balance the need to treat one's vendor relationships with care and honesty.

Patrica Jackson and Iliac Perraudin in their article “Regulatory implications of credit Risk Modeling” explains why credit risk modeling has become such important for practitioners and financiers. Even though current modeling technologies have significant weaknesses they offer the possibility that the major changes in the way the companies are being managed.

Yen-Ting Hu and William Perraudin, Birkbeck College and Bank of England, in his paper, Feb 2002- Most banking practitioners intuitively understand that the likelihood of a default on a loan is also connected to how much the bank is likely to recover if such a default does indeed occur. But, as the authors of this paper point out, standard ratings-based models for analyzing credit portfolios and pricing credit derivatives assume that defaults and recoveries are statistically independent.

Industry solutions SS & C has presented a paper on “Using a Credit Scoring Model to know potential extend credit limit.” Some items to analyze are, if there is any hidden risk, whether the company can pay you on time and how much time you can afford to spend to determine the risk. Credit scores have been developed specifically for small businesses which helps them to grow business base while at the same time protecting them from delinquency. The process begins with careful analysis of the business and primary owner(s) and associating them with poor payment behavior. The relationships are then turned into statistical probabilities that rank order small businesses with respect to possible delinquent behavior. The most important factor when using any credit scoring model is to make sure that it is consistently scaled and optimized for the data that is used. The best small business prediction is derived from models that blend commercial and principal owner information.

OBJECTIVES OF THE STUDY

- The objective is to study the effectiveness of Credit risk management in Lakshmi Vilas Bank, Coimbatore.
- To assess the liquidity and solvency of clients using Credit risk assessment method
- To measure the credit eligibility of clients using Credit Scoring Model.
- To find out the credit bandwidth using Average payment period

METHODOLOGY

The study aims at analyzing the Credit Risk Management of selected companies. As the study describes the existing facts and figures that are taken from the Clients' financial statement, the research design followed is analytical in nature. The study was conducted in the Credit risk management of Lakshmi Vilas Bank, Ganapathy, Coimbatore. To analyze the various risks of the clients the study period taken was from 2005-2008. The data required for the study has been collected from the secondary sources. The major secondary sources used are annual Reports and websites. For the purpose of analysis Stratified sampling technique has been adopted. Ten companies were selected and they are as the following.

S. No.	Company Name
1	Sanjay Engineering
2	Prashanth Engg Works
3	Mano Auto Foams
4	Priya Associates
5	Antony & Company
6	MNK Hardwares
7	Victory Pattern Works
8	KM Hospital
9	Raja Constructions
10	Vijay Enterprise

The tools used for the analysis are

Credit Scoring Model

Credit scoring model is based on financial ratio and was systematically presented by Bearer by using sophisticated statistical techniques. Using a statistical program, creditors compare this information to the credit performance of consumers with similar profiles. A credit scoring system awards points for each factor and the total number of points a credit score helps to predict how creditworthy the clients are, that is, how likely it is that they will repay a loan and make the payments when due.

This model is systematically presented using the following ratios

- Fixed asset – turnover ratio
- Return on investment
- Gross Profit Ratio
- Current ratio
- Finished goods inventory turnover ratio
- Receivables turnover ratio
- Creditors turnover ratio

Credit Risk Assessment Model

Factors weight heavily the credit worthiness of business customers. This procedure allows most factors to inform companies their clients regarding potential credit issues and this can certainly help them to avoid future loss.

The credit assessment system collects qualitative as well as quantitative data from the clients and is rated to assess the relative strength and capacity of the client's company.

Average Purchase Period

In the course of business operations a firm has to make credit purchases and incur short-term liabilities. The supplier of goods i.e. the creditor is naturally interested in finding out how much time the firm is likely to take in repaying its trade creditors.

$$\text{Average payment period} = \frac{\text{Trade Creditors}}{\text{Net Annual Purchase}}$$

ANALYSIS AND FINDINGS

Credit Scoring Model

Ratio is divided into two heads they are operating management and financial management. The first ratio contains three ratio and second has seven ratio number of ratio coming under each head is in no way reflective of importance attained to any one of the group two groups are equally important.

The ratio arranged in an order and moving average (MA) is calculated to explore the trend of particular ratio. Moving average I (MAI) is taken for first two year (2003-2005). Moving average II (MA II) is then calculated by dropping the first year 2003 – 2004 and including the last year 2005 – 2006. These ratios are helpful in developing objectives analysis of credit scoring model. Each individual ratio score is multiplied by assigned weight given in column 1 to drive the weighted score as appearing in column 4 of weighted average scores for each group. Operating management and financial management are calculated in columns by dividing the group score with the total weighted score that group as appearing in column. Adding the weighted average score of the two groups and then dividing it by 2 calculate final credit score of the company.

TABLE SHOWING ANALYSIS OF CREDIT SCORING MODEL

SS Clients Eligible for OBTAS. No	Clients Eligible for Obtaining Credit	Clients not Eligible for Obtaining Credit
1	Sanjay Engineering	Mano Auto Foams
2	Prashanth Engg Works	Antony & Company
3	Priya Associates	
4	MNK Hardwares	
5	Victory Pattern Works	
6	KM Hospital	
7	Raja Constructions	
8	Vijay Enterprise	

Credit Risk Assessment Model: is rated to assess the relative strength and capacity of the client's company. The Quantitative Parameters used are

- Current ratio
- Debt gearing ratio
- Interest coverage ratio
- Return on Capital Employed
- PAT/ Sales
- Inventory turnover ratio

TABLE SHOWING ANALYSIS OF OVERALL CREDIT RISK ASSESSMENT RESULT

S. No.	Company with Score More Than Standard	Company with Score less Than Standard
1.	Sanjay Engineering	Mano Auto Foams
2.	Prashanth Eng.	Antony & Company
3.	Priya Associates	KM Hospital
4.	MNK Hardwares	Raja Constructions
5.	Victory Pattern Works	
6	Vijay Enterprise	

Average payment period of various clients of the company is calculated and then the credit bandwidth is found out. The bandwidth is the period, which the company normally takes to pay off their creditors.

TABLE SHOWING RESULTS OF AVERAGE PAYMENT PERIOD

S. No.	Company Name	Band Width
1	Sanjay Engineering	80days - 110days
2	Prashanth Engg Works	70days - 90days
3	Manu Auto Foams	158days - 197days
4	Priya Associates	38days - 70days
5	Antony & Company	404days - 430days
6	MNK Hardwares	73days - 91days
7	Victory Pattern Works	105days - 145days
8	KM Hospital	292days - 302days
9	Raja Constructions	93 days - 120days
10	Vijay Enterprise	72days - 112days

Credit Scoring Model

The Clients which are eligible for obtaining trade credit as per the Credit scoring model are Sanjay Engineering, Prashanth Engg Works, Priya Associates, MNK Hardwares, Victory Pattern Works, KM Hospital, Raja Constructions and Vijay Enterprise. According to this model companies become eligible for trade credit if they have a score more than 0.7. There are 80% percentage of the companies that are eligible for credit according to the analysis.

Credit Risk Assessment Model

The clients of Lakshmi Vilas Bank having a score more than the standard are Sanjay Engineering, Prashanth Engg Works, Priya Associates, MNK Hardwares, Victory Pattern

Works and Vijay Enterprise. This shows that the above listed clients have a strong solvency and liquidity position. 60 % of the companies have liquid assets to meet the current liability and is strong to pay the credit given to them.

Average Payment Period Model

The clients which pay off to their creditors within a shorter period are Priya Associates, Prashanth Engg Works and MKN Hardwares are the top three in the rank. These companies take less than 3 months to pay off. The position is fairly good and the payment period has an average of 120 days.

LIMITATIONS OF THE STUDY

- The study on credit risk management was done by taking only selected clients of the Bank.
- The project depends on secondary sources and hence limitation of secondary sources also applies to the study
- The analysis is done on the basis of current Government rules and policies, which is bound to change in future.

SUGGESTIONS AND RECOMMENDATIONS

1. The bank has 80% of their clients proved to be eligible for trade credit according to the credit-scoring model. The bank can concentrate on strong companies rather than having clients prone to credit risk and gradually enhance the composition to 85 % and keep up the strict standard of the loan proposals that is being sanctioned.
2. Majority of the clients have proved to be more than the standard, which makes it safe in terms of credit risk. But only 60% of the clients are in this zone and the rest 40% do not have sufficient liquid cash to meet the credit. This makes the bank to have a close note on the payment terms and conditions made with the clients. They have to secure themselves rather than being liberal to clients with less liquidity. In future the bank should be more cautious to select clients with a better liquidity position.
3. According to the Average payment model 50% of the clients of Lakshmi Vilas Bank are having longer payment period. The bank can improve on it by having productive negotiations with the clients as many of the clients have proved to be financially sound and liquid.

The bank can strengthen the collateral security of the borrowers, which are having the less satisfactory liquidity and solvency positions.

By adopting these suggestions, the bank can maximize profitability and minimize the overall risk in future.

CONCLUSION

Every banker knows that credit risk management is a very critical component in today's highly competitive lending market. Collateral based lending seems to be the safest option. But, banks need to strive to get legislation in place to recover debt from Defaulters.

The above study on the analysis of credit risk management of Lakshmi Vilas Bank studies the credit risk of the bank with respect to its clients. A holistic view to the study shows that the bank has a good credit risk management. In total, 65% of the clients of the bank have shown a positive result to all the tests. These clients are financially strong and have a good percentage of assets for covering up the credit that they have taken. They are strong in management of both current and long term assets. Liquidity of the clients has been measured using the credit risk assessment method and 75% of the clients can meet the credit with liquid assets. Credit scoring model has helped to find out the clients eligibility for obtaining trade credit. The Average Payment Period model alone was indicating higher repayment period

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APPENDIX

TABLE 1: SHOWING THE CREDIT SCORING FROM FINANCIAL RATIOS OF SANJAY ENGINEERING

Sl. No & Weight (1)	Name of the Ratio (2)	Score (3)	Weighted Score (4)	Weighted Average(5)
	Operating Management			
1.	Fixed Asset Turnover ratio	1.845	1.845	
2.	Return on Investment	0.1300	0.260	
3.	Gross profit ratio	0.1475	0.442	
				0.849
	Financial Management			
4.	Current ratio	0.606	2.424	
5.	Finished goods Turnover ratio	1.094	5.470	
6.	Receivables Turnover Ratio	1.290	7.74	
7.	Creditors Turn over Ratio	0.123	0.861	
				0.589
	Total Weighted Average Score			1.438

TABLE 2: SHOWING THE CREDIT SCORING FROM FINANCIAL RATIOS OF PRASHANTH ENGINEERING WORKS

Sl.No & Weight (1)	Name of the Ratio (2)	Score (3)	Weighted Score (4)	Weighted Average(5)
	Operating Management			
1.	Fixed Asset Turnover ratio	7.6055	7.6056	
2.	Return on Investment	0.2816	0.563	
3.	Gross profit ratio	0.104	0.327	
				1.4159
	Financial Management			
3.	Current ratio	0.5858	1.7574	
4.	Finished goods Turnover ratio	-0.76	-3.04	
6.	Receivables Turnover Ratio	0.5267	3.16	
7.	Creditors Turn over Ratio	-0.10168	-0.7118	
				6.4929
	Total Weighted Average Score			7.9088

TABLE 3: SHOWING THE CREDIT SCORING FROM FINANCIAL RATIOS OF PRIYA ASSOCIATES

Sl. No & Weight (1)	Name of the Ratio (2)	Score (3)	Weighted Score (4)	Weighted Average(5)
	Operating Management			
1.	Fixed Asset Turnover ratio	-1.358	-1.358	
2.	Return on Investment	7.1288	7.1288	
3.	Gross profit ratio	-3.8532	-3.8532	
				1.9476
	Financial Management			
3.	Current ratio	-0.707	-2.121	
4.	Finished goods Turnover ratio	0.120	0.480	
6.	Receivables Turnover Ratio	0.8336	5.0016	
7.	Creditors Turn over Ratio	-1.1719	-8.2033	
				-0.172
	Total Weighted Average Score			1.7756

TABLE 4: SHOWING THE CREDIT RISK ASSESSMENT VALUATION OF MNK HARDWARES

Sl. No.	Parameters	Average Ratio from 2003-2006	Maximum Marks Awarded	Marks Awarded
1.	Current Ratio	8.73	10	8
2.	Debt Gearing Ratio	0.359	10	7.5
3.	Interest Coverage Ratio	1.61	10	6
4.	ROCE	4.74	10	6
5.	PAT/Sales	0.081	10	6
6.	Inventory Turn over ratio	3.612	10	8
Total			60	41.5
Marks in Percentage			100	69%

TABLE 5: SHOWING THE CREDIT RISK ASSESSMENT VALUATION OF VICTORY PATTERN WORKS

Sl. No.	Parameters	Average Ratio From 2005-2008	Maximum Marks Awarded	Marks Awarded
1.	Current Ratio	6.490	10	10
2.	Debt Gearing Ratio	1.352	10	8
3.	Interest Coverage Ratio	0	10	0
4.	ROCE	19.62	10	9
5.	PAT/Sales	0.069	10	7.5
6.	Inventory Turn over ratio	65.18	10	9
Total			60	43.5
Marks in Percentage			100	73%

TABLE 6: SHOWING THE CREDIT RISK ASSESSMENT VALUATION OF VIJAY ENTERPRISE

Sl. No.	Parameters	Average Ratio from 2005-2008	Maximum Marks Awarded	Marks Awarded
1.	Current Ratio	4.16	10	10
2.	Debt Gearing Ratio	0.109	10	6
3.	Interest Coverage Ratio	0	10	0
4.	ROCE	95.06	10	10
5.	PAT/Sales	0.137	10	7.5
6.	Inventory Turn over ratio	43.87	10	9
Total			60	42.5
Marks in Percentage			100	70.8%

TABLE 7: SHOWING THE AVERAGE PAYMENT PERIOD OF MANO AUTO FOAMS

Year	Trade Creditors`	Net Annual Purchases	Average Payment Period (APP) in Days
2005-2006	175000	3167100	176.5
2006-2007	200000	3419800	101.34
2007-2008	150000	5322900	197.032
Average APP			158.290

TABLE 8: SHOWING THE AVERAGE PAYMENT PERIOD OF ANTONY & COMPANY

Year	Trade Creditors`	Net Annual Purchases	Average Payment Period (App) in Days
2005-2006	106156	54070	716
2006-2007	80595	120112	245
2007-2008	71264	103611	251
Average APP			404

TABLE 9: SHOWING THE AVERAGE PAYMENT PERIOD OF KM HOSPITAL

Year	Trade Creditors`	Net Annual Purchases	Average Payment Period (App) in Days
2005-2006	182847	223377	299
2006-2007	169904	222803	278
2007-2008	171774	207881	302
Average app			292

TABLE 10: SHOWING THE AVERAGE PAYMENT PERIOD OF RAJA CONSTRUCTIONS

Year	Trade Creditors`	Net Annual Purchases	Average Payment Period (APP) in Days
2005-2006	103677	404820	94
2006-2007	102921	407504	92
2007-2008	128420	495774	95
Average APP			93

Customers Satisfaction on Share Broking Services

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Abstract—*The customers delight is the key for success of any business only delighted customers stay with the service instructions when the economy is in downturn. In this connection measuring the customer's satisfaction will give an out look to the share brokers to understand their customer's prerequisites. The research is aimed to study the customer's satisfaction on various services provided by the share broking institutions. Primary data has been collected from 500 investors in Coimbatore-India with the help of a well structured questionnaire consisting of all appropriate questions for the research. The sampling plan for the study is stratified proportionate systematic sampling plan for selecting investors. List of investors are obtained from the share brokers, from the list 40 investors from each share brokers has been selected for the research. Statistical tools for the research are correlation analysis, weighted average to rank the factors and factor analysis. The research revels the investor's satisfaction is not reached excellent level. The share broking institutions need to understand the customers and their changing needs.*

Keywords: *Customer satisfaction, Factor analysis, Investor's, preference, Share brokers.*

INTRODUCTION

Introduction of communication and network technologies has created paradigm shifts in the share market operations. Technology has enabled organizations to bring about innovations in products and services. Stock Exchanges all over the world has moved to electronic trading systems which are cheaper, convenient, wider reach and provide a better mechanism for trade and post trade operations. Financial sector including banking and insurance, and mutual funds and share broking business are beginning to reap the benefits of a good closure for 2008-09. In 2008-09, the Indian economy is estimated to have grown by 6.7 per cent. According to the latest Central Statistical Organization (CSO) data, financial services and real estate sector rose by 9.5 per cent in the first quarter of 2009-10. The non banking financial services in India have growing continuously over a period of time, in terms of number, deposit and so on. Indian financial sector has reviving of its positive sentiments, formation of a stable newly elected government, has the ripple effect on all the financial services in India.

Indian Capital Market

The Indian Capital market reforms during 90s has been changed the outlook of the Indian share market and is the important factor for the overall economic reforms in India. A series of measures that had announced in Union Budgets beginning FY92 laid the road map for the growth and a new phase of securities market regulation in India. The Securities and Exchange Board of India has been announced to regulate the capital market operations during 1992. The SEBI has brought several changes in the way securities markets are organized and conducted in India.

The major developments in the India's stock markets are: Corporate memberships, product offerings, Greater reliance on research, Accessing equity capital markets, Specialized services/niche broking, Online broking, Compliance oriented, Focus on training and skill sets, From owners to traders, Fragmentation, Capital Adequacy, Global Opportunities, Opportunities from regional finance, Product Dynamics, Competition from foreign firms, Investor Protection, Customer retention, Wealth maximization, Customer satisfaction, Services quality, and Speed in communication and service execution.

India's current m-cap has been increased to 2.79 per cent. India's market capitalization (m-cap) has touched US\$ 1.04 trillion making it the ninth largest in the world. According to global consultancy firm, Deloitte Haskins & Sells, the Indian economy and capital markets are expected to witness a turnaround within six to nine months. Fund raising by India Inc. through initial public offers (IPOs) rose by a whopping 62 per cent since the beginning of 2008 to May 29. According to Goldman Sachs, Indian companies may raise US\$ 4 billion-6 billion from IPOs in the fiscal year ending March 31, 2010.

Share Brokers

Share brokers are providing marvelous services to the investors by multiplying their investment by identifying and investing their money in to a suitable investment option. The market intermediaries play an important role in the development of securities market by providing different types of services. The major intermediaries in the securities market regulated by SEBI are brokers, sub-brokers, portfolio managers, merchant bankers, depository participants, bankers to an issue and share transfer agents. During 2007-08, there was an increase in the number of intermediaries registered. As on March 31, 2008, the highest increase in absolute terms, was observed in case of depository participants (DPs) of CDSL (52) followed by portfolio managers (47). Indian stock market has essentially three categories of participants, the *issuer* of securities the *investors* in the securities and the *intermediaries*. The issuers are the borrowers, who issue securities to raise funds. The investors, who are surplus savers, deploy their savings by subscribing to these securities. The intermediaries' are the agents who match the needs of users and suppliers of funds for a commission. These intermediaries perform functions to help both the issuers and investors to achieve their respective goals.

Electronic Trading

IT revelation has changed the traditional trading system in to electronically. With the help of information technology buyers and sellers are brought together through electronic media to create a virtual market place. It is believed reliable than older methods of trade processing in the stock exchanges. Electronic trading system reduces cost of transactions, greater liquidity, and greater competition increased transparency, tighter spreads, convenience, and speed.

SIGNIFICANCE OF THE STUDY

Share broking service institutions are playing a vital role both in national economy construction and individual wealth creation but the investors are facing number of problems and uncertainties, to name a few: Regularity norms, Capital market trends, International financial market trends, Economic issues, Share market volatiles, Money market trends, Brokerages, Ineffective service facilities provided by the share brokers, Reliability of information, Market rumors, Loss of capital and so on.

TABLE 2.1: GRIEVANCES RECEIVED FROM THE INVESTORS

Year	No. of Grievances Received
1991-92	18794
1992-93	110317
1993-94	584662
1994-95	516080
1995-96	376478
1996-97	217394
1997-98	511507
1998-99	99132
1999-00	98605
2000-01	96913
2001-02	81600
2002-03	37434
2003-04	36744
2004-05	54435
2005-06	40485
2006-07	26473
2007-08	54933

Source: *Hand book of statistics on Indian securities market 2008.*

According to Hand book of statistics on Indian securities market 2008, Securities & Exchange Board of India had been received about 33, 76,888 compliant from investors during the period 1991-92 to 2007-08. This is about an average of 1, 98,640 Compliant per year which is about 800 compliant per trading day. This statistics is about the compliant reported by the investors in fact the real number could be more than 4 to 5 times of dissatisfactions reported.

Share broking firms are also struggles to provide effective service to their customers because of Difficulties in understanding investor's needs, complicated service standards,

Service satisfaction measurement issues, non availability of defined service models for different type of customers, categorization of investors, difficult to distinguish investor's behavior, customer's satisfaction and so on.

The study "*Customers satisfaction on Share Broking Services*" has made an effort to define the problems faced by the share brokers and investors. It is proposed to suggest ways and means of improving the level of investor's satisfaction and investors and service provider's coordination.

RESEARCH METHODOLOGY

The **objectives** of this research are to study the level of customer's satisfaction about various services provided by the share broking institutions and to study the investment preference of the investors. **Primary data** has been collected from 500 investors in Coimbatore, India. **Secondary data** has been collected from various sources like journals, magazines, previous researches, books and websites. A **well-structured questionnaire** is developed to collect primary data from the investors. The **sampling plan** for the study is stratified proportionate systematic sampling plan for selecting investors. List of investors are obtained from the share brokers, from the list 40 investors from each share brokers has been selected for the research. Primary data has been collected from the selected investors.

In order to measure the customer satisfaction the researcher has identified 20 **important services** namely; Research reports, Live news, Securities News, Intraday calls, Daily Technical review, Morning corporate news, Weekly Technical Report, Sectoral Reports, SMS Alerts, Trinity Account, Call and Trade, Trading software, M-Trade, Stock Ideas, Derivative Reports, Portfolio Advice, Report on Company Fundamentals, Technical Company Charts, IPOs, After Market Orders and Market exposure for the analysis.

The following are the **share breaking institutions** identified for the research they are; ICICI Direct, Kotak Securities, India info line, Karvy, Reliance Money, Indi bull financial, Angal broking ltd, Giojit Securities, Mothilal Oswal, Emkay Global Financial Services, Stock holding Corporation of India Ltd, and Others. The others include some regional brokers.

RESULTS AND DISCUSSION

Stock Brokers

Share Brokers (individuals or firms) are registered agents of stock exchange(s) who act as intermediary between buyers and sellers of shares and in return charge a commission for doing the same. They buy or sell share on behalf of their clients.

The above data demonstrate the number of share brokers during 2007 and 2008. The total number of registered stock brokers as on March 31, 2008, was 9,487 as compared to 9,443 in 2006-07. The share of corporate brokers to the total stock brokers increased marginally to 44.1 per cent in 2007- 08 from 43.5 per cent in 2006-07.

TABLE 4.1.1: EXCHANGE-WISE STOCK BROKERS REGISTERED WITH SEBI

Stock Exchange	As on March 2007		As on March 2008	
	Total Number of Stock Brokers	Number of Corporate Brokers	Total Number of Stock Brokers	Number of Corporate Brokers
Ahmadabad	317	153	321	157
Bangalore	256	125	256	124
BSE	901	722	946	767
Bhubaneswar	216	19	214	19
Calcutta	960	204	957	204
Cochin	432	80	435	80
Coimbatore	135	48	135	48
Delhi	374	213	374	213
Gauhati	104	3	103	3
ISE	925	336	935	245
Tripura	492	18	488	18
Ludhiana	293	85	297	85
MPSE	174	35	174	34
Madras	181	71	181	71
NSE	1077	988	1129	1039
OTCEI	752	574	714	551
Pune	188	55	188	55
UPSE	384	82	354	78
Vadodara	311	64	311	64

Source: Source: Hand book of statistics on Indian securities market 2008

NSE had the highest number of 1,129 registered stock brokers, followed by the Calcutta Stock Exchange (957), Bombay Stock Exchange Ltd. (946) and Inter-connected Stock Exchange (ISE) (935). NSE had also the highest number of corporate brokers (1,039), constituting 92.0 per cent of the total stock brokers of NSE. The proportion of corporate brokers at BSE and OTCEI was 81.1 per cent and 76.6 per cent, respectively. In Coimbatore stock exchange the registered share brokers and corporate brokers are constant 135 and 48 respectively for the year 2007 and 2008. It seems that Coimbatore stock exchange is not very active and business activities are restricted for the last two years.

Registered Intermediaries

The various intermediaries involved in share market operations are Registrar to issue, share Transfer Agent, Banker to an issue, Debenture Trustee, Merchant banker, Portfolio Manager, Underwriter, DPs-NSDL, DPs-CDSL and Credit Rating Agency.

The registered numbers of portfolio managers are increased to 158 to 205 ie 30% during 2007 and 2008. The data reveals that investors expect expert's opinions while choosing a stock or sector or anything regarding investments. DPs-CDSL number also increased from 363 during 2007 and 415 during 2008 ie 14% increase. The numbers of sub-brokers are increased in BSE 13,482 during 2007 and 20,616 in 2008. The growth of sub-brokers in Bombay stock exchange is 53%. and National stock exchange is 74% this is due to SEBI's new norms. The figure remains constant in Coimbatore.

TABLE 4.2: REGISTERED INTERMEDIARIES

Type of Intermediaries	As on March 2007	As on March 2008
Registrar to issue and share Transfer Agent	82	76
Banker to an issue	47	50
Debenture Trustee	30	28
Merchant banker	152	155
Portfolio Manager	158	205
Underwriter	45	35
DPs-NSDL	230	239
DPs-CDSL	363	415
Credit Rating Agency	4	5

Source: Source: Hand book of statistics on Indian securities market 2008

Customers Profile

The customers profile includes information relating to the average number of family members, their monthly income, number of family members, dependents and earning members, investment preference and investment amount. The analysis reveals that there is a positive correlation between monthly income and investment amount ($r=0.79$). It is found there is a perfect correlation between the investment option and the average monthly income ($r=0.96$).

Investment Preference

There is a wide verity of investment opportunities available to the investors while they like to invest. The investment options considered for the research is Bank, Gold, Mutual, Fund, Small savings, Share market, Real Estate, Insurance, Commodity Market, Currency Market, Others (others include EPF schemes, Government bonds, and all other kind of investments).

INVESTMENT PREFERENCE

Income	Bank	Gold	Mutual Fund	Small savings	Share market	Real Estate	Insurance	Commodity Market	Currency Market	Others
Below 10000	32	28	12	15	8	12	41	0	0	1
10001-20000	42	39	18	19	18	17	57	2	2	3
20001-30000	87	78	29	21	48	29	98	7	6	7
30001-40000	97	84	43	36	65	38	136	12	8	8
40001-50000	42	38	30	15	52	24	67	10	9	4
Above 50000	50	39	15	19	38	20	48	8	7	6
Average	58.33	51	24.5	20.83	38.16	23.33	74.5	6.5	5.33	4.83
Median	46	39	23.5	19	43	22	62	7.5	6.5	5
SD	26.88	23.68	11.67	7.80	21.56	9.24	36.11	4.637	3.55	2.63
Variance	722.66	560.8	136.3	60.96	464.97	85.46	1304.3	21.5	12.66	6.96

Source: Primary data

The various service products offering of brokerage firms today goes much beyond the traditional trading of equities. The investors preferences also changed to a great extent. A typical brokerage firm today offers trading in equities, derivatives, commodities futures, exchange traded funds, distributes mutual funds and insurance and so on. It is found from the research that an average of 58 investors prefers to invest in bank, 51 in Gold and 74 in insurance. Currency market and commodity market are not very popular among the Indian investors.

Investor Profession and Investment Preference

It has been found that there is a close correlation between investor's profession and their investment pattern($r = 0.87$) the investors mostly like to invest in Gold and bank since both are very safe investment. It is found that all the investors are invested in insurance; this is for the security of their life and it gives moderate return also.

Investment Preference on Share Marker

Investors prefer to invest in Nifty fifty, Bank Nifty, Nifty IT, Nifty Junior, Nifty mid cap, BSE, and others. The research reveals that an average of 24% investors prefer to invest their money in Nifty fifty and 22% investors prefer to invest in Nifty mid-cap. The study also reveals the closeness of income and investment in share market.

Investmen

Investment of an individual is primarily depends on their earning capacity and their disposable income. Researches reveals that the money invested in share market is very less compared to other types of investments.

TABLE 4.3.5: INVESTMENT AMOUNT (RS. AVERAGE PER MONTH)

Income	Bank	Gold	Mutual Fund	Small Savings	Share Market	Real Estate	Insurance	Commodity Market	Currency Market	Others
Below 10000	1864	1624	689	784	582	540	621	0	0	500
10001-20000	2089	1950	748	854	739	600	700	350	320	521
20001-30000	2850	2415	954	987	1124	800	921	500	514	321
30001-40000	2800	2200	1230	1000	1400	1240	1230	425	542	452
40001-50000	4210	3125	1500	2000	3450	3200	2140	625	687	514
Above 50000	5200	4012	3200	1800	4812	4125	2560	900	1120	1500
r	1	0.99	0.93	0.73	0.92	0.99	0.99	0.87	0.98	0.73

Source: primary data

The analysis discloses the average money saved by the investors and their monthly income. SEBI-NCAER Survey of Indian Investors, March 2003 reveals that only 0.4% of the investors invest in equity market. The research proves that there is a perfect correlation between income and investment in various investment opportunities. SEBI-NCAER Survey of Indian Investors, June 2000 shows that 76.2% of the house hold investors invest in bank deposit. The present study also proves that the investor's first preference is investment in bank.

Factors Considered for Selection of a Specific Share Broker

Service quality is a concept that has aroused considerable interest in the share broking institutions in both defining it and measuring it. Institutions striving hard to formulate a definite service quality measurement models so that institutions and investors could understand each other. The investors also give first preference to service quality.

TABLE 4.4.6.1: FACTORS CONSIDERED FOR SELECTION OF A SPECIFIC SHARE BROKER

Factors	Rank				
	1	2	3	4	5
	No. of Respondents				
Service quality	216	126	84	27	31
Popularity of the share brokers	48	98	34	87	46
Service providers	27	42	42	45	54
Service facility	12	33	41	42	63
Technology	49	51	48	55	54
Price	15	9	24	42	21
Service products offered	26	12	27	54	32
Communication	9	7	24	25	24
Advertisement	6	7	21	14	41
Investment advises	21	24	31	19	42
Promotion schemes	7	9	27	17	21
Customer care	24	42	43	15	15
Service delivery process	12	15	27	31	24
Service standards	28	25	27	27	32

Source: Primary data

Issues of investor interest and Customer care will assume centre stage. The present study reveals that the customers are note very much satisfied with the customer care taken by the share brokers. It is important for brokerage firms to establish strong and streamlined systems and procedures for ensuring investor safety and protection. Retaining the investor is the most challenging situation for any share broking service institution. It is very important to match the customer's expectation and institutions objectives in this regard. Share broking firms must take utmost care to understand investor's short term as well as long term requirement to frame a definite plan of action in the stock market considering internal and external market environment.

One thing which is certain in the uncertain Share Markets is the need for speed. Response time is of extreme importance and every second can be an opportunity or a failure. This need for speed coupled with technology escalating market data volumes across all asset classes have forced to re-look at their service provider. The investors evaluate share brokers ability to adopt the latest information technology by their broker and the one who could convert the best possible information service to their customer is well appreciated.

Investor's Satisfaction towards their Service Providers

The rank analysis reveals that the customers' satisfaction level is high in India Info Line and Low in Emkay Global financial services. Client advising in India has graduated from personal insights, market tips to becoming extensively research oriented and governed by fundamentals and technical factors.

Survival of any service institution is purely based on the customer's satisfaction. There are number of services offered by the share brokers the most important services are analysed. The customers are very much satisfied about IPO facilities offered by the service providers. The customers are also happy with the research report and trading software. Most of the customers are having problems with their service providers relating to their market exposure. They were also not very happy with mobile trading facilities offered and derivatives report. The ranks express the view that the modern services are not reaching properly and customer's satisfaction is also poor.

TABLE 4.2.1: INVESTOR'S SATISFACTION

Factors	WA Score	Rank
Research report	374.25	2
Security news	335	7
Intraday call	322.75	10
Daily technical View	330.5	9
Morning Corporate News	311.5	15
Weekly tech Report	337.5	7
Sectorial report	317.75	14
SMA Alerts	292.5	16
Trinity Acc	344.25	6
Call & trade	368.75	4
Trading software	372.5	3
M-trade	261.5	19
Stock ideas	274.25	17
Derivative Report	265.25	18
Portfolio Advice	318	13
Com rep	321.25	12
Tech	323.75	11
IPO	397.5	1
After Market Orders	360.25	5
Market Exposure	251.5	20

Source: primary data

Investor's Satisfaction on Service Provider and their Services.

Several brokers are extending benefits of online trading through creation of separate windows to satisfy the customers. The researcher has made factor analysis to know the relationship between variables.

Correlation Matrix

The above table explains the relationship between the various share brokers and the customer's satisfaction towards their service offerings. The tables explain the customers are having a positive opinion towards their service providers since the correlation matrix revels in positive values.

Share Brokers	ICICI Direct	Kotak Sec.	India info line	karvy	Reliance money	Indi bull financial	Angal broking ltd	Giojit Sec.	Mothilal Oswal	E G F S	SHCI	Others
ICICI Direct	1.00	0.63	0.15	0.04	0.51	0.40	0.35	0.52	0.48	0.58	0.57	0.46
Kotak Sec.	0.63	1.00	0.39	0.22	0.51	0.64	0.68	0.76	0.79	0.80	0.68	0.68
India Info.	0.15	0.39	1.00	0.58	0.53	0.43	0.47	0.51	0.38	0.50	0.32	0.22
karvy	0.04	0.22	0.58	1.00	0.44	0.36	0.46	0.47	0.38	0.47	0.33	0.32
Reliance	0.51	0.51	0.53	0.44	1.00	0.38	0.44	0.46	0.40	0.43	0.29	0.35
Indi bulls	0.40	0.64	0.43	0.36	0.38	1.00	0.83	0.77	0.79	0.85	0.65	0.68
Angel	0.35	0.68	0.47	0.46	0.44	0.83	1.00	0.91	0.87	0.81	0.66	0.67
Giojit Sec.	0.52	0.76	0.51	0.47	0.46	0.77	0.91	1.00	0.91	0.87	0.79	0.75
Mothilal	0.48	0.79	0.50	0.38	0.40	0.79	0.87	0.91	1.00	0.89	0.81	0.75
Emkay	0.58	0.80	0.50	0.47	0.43	0.85	0.81	0.87	0.89	1.00	0.87	0.85
SHC ltd	0.57	0.68	0.32	0.33	0.29	0.65	0.66	0.81	0.79	0.87	1.00	0.91
Others	0.46	0.68	0.22	0.32	0.35	0.68	0.67	0.75	0.75	0.85	0.91	1.00

Factor Importance

Minimum allowed eigenvalue = 0.50000

Number of factors retained = 1

The above table shows the relative and cumulative amount of variance explained by each factor. The analysis reveals that the variance for the factor 1 (Service Quality) has the high degree of variance when it has been compared with other factors.

Factor	Eigen Value	Variance %	Cumulative %
1	7.38309	61.526	61.526
2	1.02454	8.538	70.064
3	0.48974	4.081	74.145
4	0.29050	2.421	76.566
5	0.08761	0.730	77.296
6	0.07966	61.526	77.959
7	7.38309	8.538	61.526
8	1.02454	4.081	70.064
9	0.48974	2.421	74.145
10	0.29050	0.730	76.566

Stop when cumulative explained variance = 80%

Communalities

Communality is the percent of variance in a variable that is accounted for by the retained factors. The study reveals that communality variance higher for Emkay Financial Services (95%) and for ICICI Direct it is less (36.5).

	Initial	Final	Common Var. %	Unique Var. %
ICICI Direct	0.6364	0.365	36.503	63.49
Kotak Securities	0.8026	0.6903	69.027	30.9
India Info line	0.5894	0.7345	73.445	6.55
Karvy	0.5894	0.4860	48.600	51.40
Reliance Money	0.5301	0.3641	336.413	63.58
Indi Bull Fin.	0.8566	0.682	68.817	31.18
Angal Bro. Ltd	0.9196	0.7693	76.933	23.06
Giojit Securities	90.9196	0.892	89.919	10.08
Mothilal Oswal	0.9138	0.8669	86.692	1.30
Emkay Fin.Se	0.8905	0.9525	95.246	4.75
SHI ltd	0.9162	0.8091	80.909	19.09
Others	0.9162	0.7826	78.258	21.74

Communalities converged after 36 iterations.

Rotated Factor Matrix

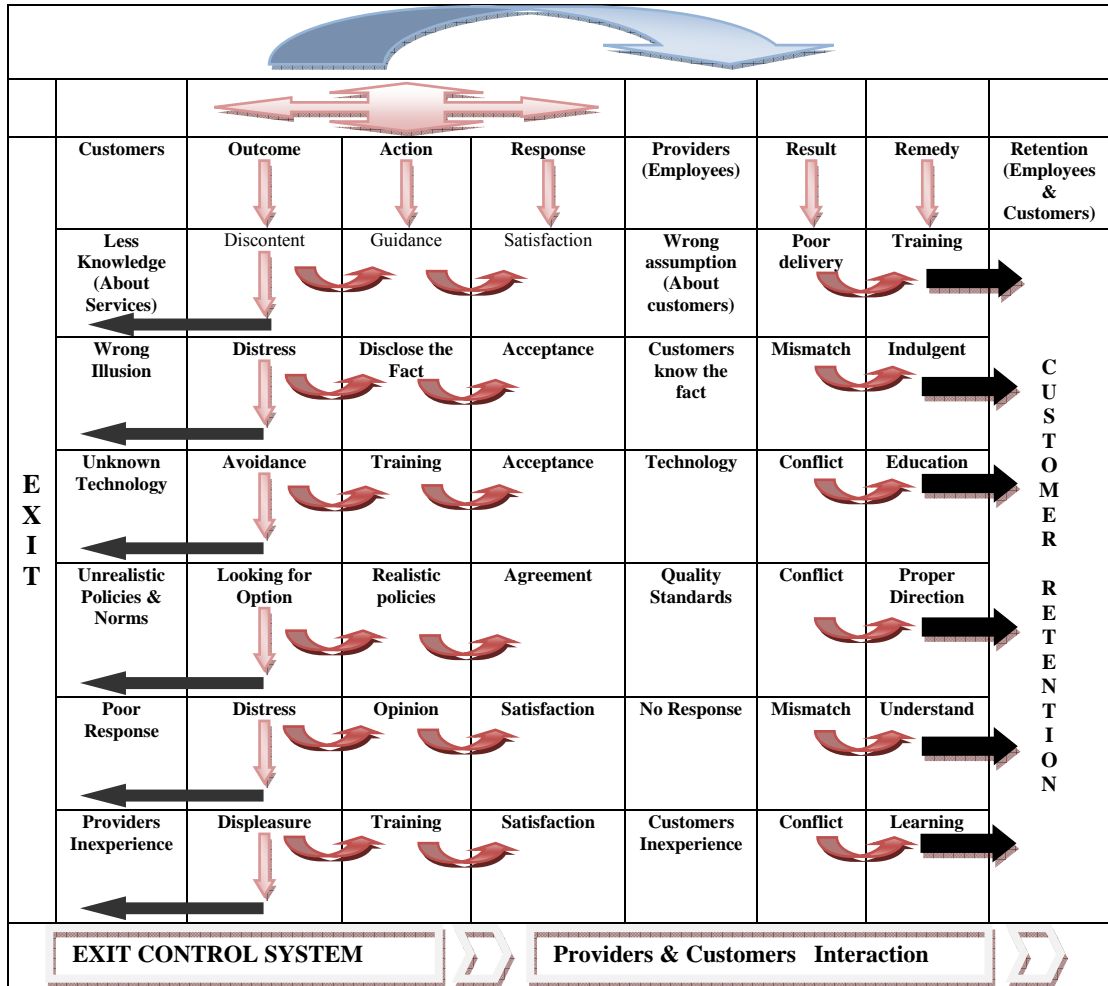
The factor matrix presented above is the result of rotating the factor matrix. In this case Varimax rotation was used. The research reveals that the customers satisfaction towards various services provided by the share brokers. The level of customer satisfaction is high for the share brokers like Kotak Securities (0.8197) India bull Financial Services (0.8925) Angel Broking Ltd (0.8732), Giojit Securities (0.9481), Mothilal Oswal (0.9301) Emkay Services (0.9733) Stock Holding (0.8540) and others (0.8315). The customer's satisfaction is low in the case of ICICI Direct (0.5630) India Info Line (0.5512) Karvy (0.4774), Reliance money (0.5293).

	Fac1
ICICI Direct	0.5630
Kotak Securities	0.8197 *
India Info Line	0.5512
karvy	0.4774
Reliance money	0.5293
India Bull Financial	0.8295 *
Angel Broking Ltd	0.8732 *
Giojit Securities	0.9481 *
Mothilal Oswal	0.9301 *
Emkay Services	0.9733 *
Stock Holding	0.8540 *
Others	0.8315 *
Var.	7.383

Service Conflicts and Retentions of Customers

Customer satisfaction is influenced by specific product or service features and by perception of quality. Satisfaction is also influenced by customer's emotional response, their emotional response, their attributions, and their perceptions of equity. Service conflicts arise very frequently between service providers and customers. This is true especially in the case of share broking institutions. The service conflict is the big thread for all the share broking institutions. The investor's expectations have been changed due to the changing scenario in the world economy especially during economic recession. The following is the Customer Retention model which has been derived from the research data.

Customers Retention Model



Customer’s retention model suggests the following retention strategies.

- Share brokers may introduce Membership cards and membership programs and loyalty points may provided depend on their association with the business
- Communication plays very important role in share broking services they can have Welcome and thank you communications on a regular basis.
- Regular satisfaction surveys, followed up by phone calls and letters.
- The service employees must be Beefed up customer service, empowered to solve problems
- Enhanced technical support with follow up satisfaction calls
- Frequent investors meet which permit customers to build up equity

- Service based communications that are meaningful to the customers' lives
- Proper and regular maintenance of customer databases that keep track of customer's investment, preferences, complements and complaints, which are used to carry out loyalty building services and dialogs.
- The share brokers has to maintain integrated marketing programs where the advertising, direct communications, customer service, database marketing and sales programs are all coordinated together and designed to build investors loyalty.
- The investor's segmentation based on lifetime value groups, and different marketing programs designed for each customers segment.

CONCLUDING REMARKS

Excellent investor's service is the lifeblood of any service institutions. The sales promotion and low price strategies will not give much gain to the share brokers because every broker is doing the same. Good customer service is not all about bringing customers back but to retain the customers. The essence of good customer service is forming a relationship with customers – a relationship that that individual customer feels that he would like to pursue.

- The share of corporate brokers to the total stock brokers increased marginally to 44.1 per cent in 2007- 08 from 43.5 per cent in 2006-07.
- Service quality is a concept that has aroused considerable interest in the share broking institutions in both defining it and measuring it.
- An average of 58 investors prefers to invest in the bank, 51 in Gold and 74 in insurance. Currency market and commodity market are not very popular among the Indian investors.
- The customers are very much satisfied about IPO facilities offered by the service providers.
- The level of customer satisfaction is high for the share brokers like Kotak Securities (0.8197), India bull Financial Services(0.8925), Angel Broking Ltd (0.8732), Giojit Securities(0.9481), Mothilal Oswal (0.9301) Emkay Services (0.9733), Stock Holding (0.8540) and Others (0.8315).
- The customer's satisfaction is low in the case of ICICI Direct (0.5630) India Info Line (0.5512) Karvy (0.4774), Reliance money (0.5293).

The investor's complaints about the service are a fine yardstick to measure the service satisfaction. But complaints are a completely inadequate measure of good customer service. There are a whole lot of people out there who aren't going to complaint about the service. Dissatisfied customers are just going to go away and not come back - and probably tell several other people what a bad customer service experience they experienced.

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Exploring Employee Motivation through Herzberg's Theory

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INTRODUCTION

At one time, employees were considered just another input into the production of goods and services. What perhaps changed this way of thinking about employees was research, referred to as the Hawthorne Studies, conducted by Elton Mayo from 1924 to 1932 (Dickson, 1973). This study found employees are not motivated solely by money and employee behavior is linked to their attitudes (Dickson, 1973). The Hawthorne Studies began the human relations approach to management, whereby the needs and motivation of employees become the primary focus of managers (Bedeian, 1993).

REVIEW OF LITERATURE

Many contemporary authors have also defined the concept of motivation. Motivation has been defined as: the psychological process that gives behavior purpose and direction (Kreitner, 1995); a predisposition to behave in a purposive manner to achieve specific, unmet needs (Buford, Bedeian, & Lindner, 1995); an internal drive to satisfy an unsatisfied need (Higgins, 1994); and the will to achieve (Bedeian, 1993). For this paper, motivation is operationally defined as the inner force that drives individuals to accomplish personal and organizational goals.

Employees should be motivated for survival of organizations (Smith, 1994). Motivated employees are more productive. To be effective, managers need to understand what motivates employees within the context of the roles they perform. Of all the functions a manager performs, motivating employees is arguably the most complex. This is due, in part, to the fact that what motivates employees changes constantly (Bowen & Radhakrishna, 1991). For example, research suggests that as employees' income increases, money becomes less of a motivator (Kovach, 1987). Also, as employees get older, interesting work becomes more of a motivator.

Understanding what motivated employees and how they were motivated was the focus of many researchers following the publication of the Hawthorne Study results (Terpstra, 1979). According to Maslow, employees have five levels of needs (Maslow, 1943): physiological, safety, social, ego, and self-actualizing. Maslow argued that lower level needs had to be satisfied before the next higher level need would motivate employees. Vroom's theory is based on the belief that employee effort will lead to performance and performance will lead to rewards (Vroom, 1964). Rewards may be either positive or negative. The more positive the reward the more likely the employee will be highly motivated. Conversely, the more negative the reward the less likely the employee will be motivated. Adams' theory states that

employees strive for equity between themselves and other workers. Equity is achieved when the ratio of employee outcomes over inputs is equal to other employee outcomes over inputs (Adams, 1965). Skinner's theory simply states those employees' behaviors that lead to positive outcomes will be repeated and behaviors that lead to negative outcomes will not be repeated (Skinner, 1953). Managers should positively reinforce employee behaviors that lead to positive outcomes. Managers should negatively reinforce employee behavior that leads to negative outcomes.

Herzberg's work categorized motivation into two factors: motivators and hygienes (Herzberg, Mausner, & Snyderman, 1959). He theorized that satisfaction on the job depends on two issues: hygiene issues and motivators. Motivator or intrinsic factors, such as achievement, reward, responsibility, advancement and recognition, produce job satisfaction. Hygiene or extrinsic factors, such as pay and job security, salary, working conditions produce job dissatisfaction.

According to Herzberg's theory, "Hygiene issues cannot motivate employees but can minimize dissatisfaction, if handled properly". These issues are directly related to the employee's environment. On the contrary, motivators create satisfaction by fulfilling individual's needs for meaning and personal growth (Syptak, Marshland and Ulmer, 1999). However it would be of interest to find answers to questions related to Herzberg's theory. Will there be differences in the two factors of motivation between genders? Will income level play a role in the motivational factors? To answer these questions This study was undertaken to analyze the motivation executives based on Herzbergs theory.

The objectives of the study were

1. To assess the motivation level of executives based on Herzberg's two factor theory
2. To compare the differences in motivational and hygiene factors between younger and older executives
3. To analyse the motivation factor that is higher among the male and female executives
4. To compare the differences in hygiene and motivational factors between differing income levels of executives

METHODOLOGY

The study was carried out among the executives working in an organization in Chennai. A sample of 120 executives was selected by simple random sampling. The sample included equal number of male and female executives. The tool used for the study was Motivation Questionnaire which consisted of ten dimensions viz, working conditions, interpersonal relationship, salary, job security, status, achievement, advancement, growth, responsibility, recognition and reward. The scaling used in the instrument is a five point Likert scale. The statistical tools that were used for the study were mean, SD and t-test

RESULTS AND DISCUSSION

The percentage scores were calculated by dividing the sum of the scores by the maximum obtainable score and converted into percentages. This was done for both Herzberg's factors (hygiene and motivation) and also for the overall which are furnished in Table 1.

TABLE 1: MEAN AND STANDARD DEVIATION OF THE HERZBERG'S FACTORS

Herzberg's Factors	Minimum	Maximum	Mean	Std. Deviation
Hygiene	35.0	97.5	69.5	11.2
Motivation	31.8	90.9	66.1	11.9
Overall	33.3	90.5	67.7	10.6

The table 1 reveals that while the overall score of Herzberg's factors was 67.7, the mean score of hygiene factors are slightly higher than the mean score of the motivation factors. This reveals that employees gave more importance to working conditions, interpersonal relationship, salary, job security and status than to achievement, advancement, growth, responsibility, recognition and reward. This suggests that employees hygiene needs must be fulfilled before their motivational needs are satisfied. This confirms with the Maslow's hierarchy of needs which states that basic needs should be satisfied before the higher order needs are provided for the employees.

To further analyse, comparison of the levels between categories (age, gender and pay) was done using Independent t test. More than half (55.1% of the sample were aged 20 to 30 years and the rest (44.9%) were older than 30.

The Herzberg's factors for younger and older employees were analyzed, with the mean and standard deviation of scores, for a comparative study. The difference between mean score values for the two groups of employees was tested with the help of t- statistics and presented in Table 2.

TABLE 2: MEAN, STANDARD DEVIATION AND P-VALUES OF HERZBERG'S FACTORS IN YOUNGER AND OLDER EXECUTIVES

Factors	Age Group (yrs)	Mean	Std. Deviation	p value
Hygiene Factors	20 - 30	67.9	9.6	0.140
	>30	71.1	12.8	
Motivation Factors	20 - 30	66.7	10.8	0.423
	>30	64.9	13.0	
Overall	20 - 30	67.3	9.3	0.780
	>30	67.8	12.0	

For hygiene factors, the mean score for older employees is higher (71.1) than that of younger employees (67.9). This implies that older employees give more importance to hygiene factors than the younger employees. However for motivational factors, the mean score of younger employees (66.4) is higher than the mean score of older employees (64.9). This table reveals that the older employees give more importance to hygiene factors while younger employees give more importance to motivational factors. The implication is that the younger employees due to inner drive look for achievement, growth, responsibility, rewards and recognition and hence organizations should provide them for their younger employees. However, the older employees probably due to family commitments look more for job security, salary, inter personal relationship and good working condition. The difference between mean scores for the two categories of employees was statistically not significant at 1% level.

Further analysis was carried out to find the differences in the mean values in hygiene and motivational factors among male and female employees. The difference between mean score values for the two groups of employees was tested with the help of t statistics and presented in Table 3.

TABLE 3: MEAN, STANDARD DEVIATION AND P-VALUES OF HERZBERG'S FACTORS IN MALE AND FEMALE EXECUTIVES

Factors	Gender	Mean	Std. Deviation	p value
Hygiene Factors	Male	71.2	11.9	0.210
	Female	68.5	10.1	
Motivation Factors	Male	65.9	12.2	0.785
	Female	66.6	12.0	
Overall	Male	68.4	11.2	0.648
	Female	67.5	10.1	

The table reveals that male executives give more importance to hygiene factors (71.2) than female executives (68.5). This could be because the male executives being the main source of maintaining the economic status of the family give more importance to factors such as salary and job security. The table however reveals that, female executives gave marginally more importance to motivational factors than male executives. The implication is that the organization should provide hygiene factors to male executives before providing motivational factors such as rewards, recognition and achievement.

To find differences in the Herzberg's factors among the executives with differing pay, mean, standard deviation and p-values were calculated using t-statistics which are presented in Table 4.

TABLE 4: MEAN, STANDARD DEVIATION AND P-VALUES OF HERZBERG'S FACTORS IN EXECUTIVES WITH DIFFERING SALARY

Factors	Salary (Rs)	Mean	Std. Deviation	p value
Hygiene	5,000- 10,000	69.9	8.8	0.436
	>10,000	68.2	11.8	
Motivation	5,000- 10,000	65.9	11.9	0.777
	>10,000	66.7	11.9	
Overall	5,000- 10,000	67.4	9.5	0.859
	>10,000	67.8	10.9	

The table reveals that executives with lesser salary (Rs 5, 000 -10, 000) give more importance to hygiene factors (69.9) than employees with higher pay (68.2). This shows that executives with lesser pay give more importance to factors like salary and job security as their needs more in these dimensions. However executives with higher salary give more importance to motivational factors (66.7) than executives with lesser salary (65.9). This corroborates with the Maslow's theory of needs which states that when basic needs such as are fulfilled the employees look for higher order needs. Hence the organization should give more recognition, responsibility, reward and growth to executives with higher salary since their basic needs have already been met. However there was no statistical difference between mean values of factors between executives with higher and lower salary.

CONCLUSION

The study has revealed that executives seek motivational factors only when the hygiene factors are fulfilled by the organization. Hence the organization should take efforts to provide the hygiene factors such as good working condition, salary and job security before providing motivational factors such as reward, recognition, growth and achievement. Also the study

revealed that younger executives were more motivated by motivational factors than hygiene factors and hence organizations should focus on providing them to their young executives. However older employees give more importance to hygiene factors. Male employees seek more hygiene factors than female executives. Executives with higher salary give more importance to motivational factors than hygiene factors. Hence organizations should provide hygiene factors to executives in the lower level of the hierarchy and motivational factors to executives in higher level of hierarchy.

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Changing Pattern of Indian Households Savings in Financial Assets

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Abstract—Until the decade of the 90's, most of the middle class Indians were paying little attention to managing personal finance during their working life span and only at the time of retirement they would consult their well wishers or advisors about some deposit schemes with banks or post office or companies which would ensure them regular monthly or quarterly returns. A very small percentage of the rich and daring or adventurous Indians would dabble in stock markets or UTI schemes. With the advent of the new millennium, needs have multiplied and changed and so have the solutions. The importance of correct advice at the right time is being appreciated and an average Indian is trying to remain abreast of the developments in finance markets so as to manage his "Personal Finance" efficiently. Today because of rising inflation the purchasing power of money is decreasing at an accelerated pace. Earnings and savings are no longer enough to provide for the future. In order to maintain the purchasing power of savings, it has to be intelligently invested and these investments have to be actively managed. The main objective of this paper is to study the scheme wise investments by household investors in India.

INTRODUCTION

Investment is an activity that is engaged in people who have savings. But all savings are not investing. Investment is different from savings. It means different things to different people. One person may purchase gold in large quantity for the purpose of price appreciation and consider it as his investment. Another person may take an insurance policy to avail so many benefits it offers in future. That is, his investment, yet another person may lend some amount to somebody with an intention to get interest at a future date and may consider the same as his investment. In all these cases, one thing is common that the amount is invested with the aim of achieving some additional income or growth in value. Hence, it involves the commitment of resources that have been saved in the hope that some benefit will accrue in future. A major purpose of investment is to get a return or income on the funds invested. On a bond an investor expects to receive interest. On a stock, dividends may be anticipated. The investor may expect capital gains from some investments and rental income from house property. **Donald E. Fisher** defines "an investment as a commitment of funds made in the expectations of some positive rate of returns. If the investment is properly undertaken the return will commensurate with the risk the investor assumes." F. Amling defines, the term investment

means, “the purchase by an individual of a financial or real asset that produces a return proportion to the risk assumed over some future investment period.”

Objectives of the Study

The study is undertaken with the following objectives:

1. To study the scheme wise investments by household investors.
2. To study the investors’ preferences towards investments.
3. To study the trend analysis of investments by household investors.

Period of Study

The study covers a period of 10 years that is 1998-99 to 2007-08. The data collected, opinions and expectations revealed pertain to the same period.

COLLECTION AND ANALYSIS OF DATA

This study uses Secondary data which were collected from various text books, journals, magazines, RBI annual report, SEBI annual report, etc. The data collected were analyzed by preparing suitable tables. The information collected with the help of RBI are tabulated and analyzed by using various statistical measures like percentage analysis, mean and standard deviation, co-efficient of variance, skew ness, kurtosis and correlation coefficient have been used in different contexts.

REVIEW OF PRIOR STUDIES

A review of existing studies on investors is attempted in this chapter.

Out Look Money, 15th July, 2007 P.99

Indian men used to put their savings in bank deposits or the government bonds and Indian women used to put their small savings from household expenditure either at the bottom of their old steel trunk or in jewellery. The more enterprising ones used to invest in land and the rare ones in equity shares. The liberalization of Indian economy opened up several new investment opportunities and the growing disposable income made Indians less averse to risk. Indians put their money in stock markets but they burnt their fingers twice in scams. Indians put their money in new investment tools like chit funds and plantations and again burnt their fingers. But there is another set of Indians who made good money in booming stock markets, especially during the rally over the last four years. There is yet another group of Indian investors who learnt to trust the wisdom of fund managers at mutual funds. And a small group of Indians invested in life insurance policies for protection as well as long term wealth creation. The big question is what percentage of Indian population has really started using such new age investment avenues.

Out look Money 15th August, 2005 Page No.32

Indian house holds still favour the warm and fuzzy familiarity of their age-old investment avenues – Bank Deposits, Government Securities, small savings schemes and Life Insurance. At least, that's what the figures for the financial year 2003-04, released recently by the central statistical organization, seem to suggest.

Bank Deposits

Time planning for long-term goals like retirement simply meant putting your money in risk-free high – return debt instruments and putting your feet up. To day, interest rates are falling and tax breaks have been scaled back. But these facts seem lost on households. The largest portion of gross household savings continues to be invested in secured assets such as bank deposit. In the year 2003 –04 allocations to bank deposits have been the maximum growth, inching up to 42% of total house hold savings.

Small Savings

Government securities and small savings are the second most popular; accounting for about 18% of house holds savings in 2003-04. Over the years, allocation to these avenues has been steadily rising despite the fact that tax breaks on them have been whittled down considerably. Liberalizing the cap on the amount invested for tax benefits could see a further rise in investment in these avenues during the coming years. Between small savings and government securities, it is the former that hogs the bulk of claims on government, small savings accounted for 77.4% of claims on government in 2003 –04. However between 1998-99 and 2000-01, the allocation of government securities rose, while allocations to small savings fell. And between 2000-01 and 2001-02, the allocation to government securities zoomed from 10% to 32%, while allocations of small savings fell from 89% to 68%. This sudden spurt in investment in government securities during 2001 can be attributed to the introduction of the 5 years relief bonds, which offered 9% a year and were tax exempt. This incentive spurred investors to move away from small savings into government securities. Over the years allocations to government securities and small savings has been rising in absolute terms – house holds allocations to small savings more than doubled between 1998-99 and 2003-04 and allocations to government securities quadrupled.

Insurance and Pension Funds

Life insurance and Provident and Pension funds bring up the rear; these investment avenues accounted for a little over 12% each of total house hold savings in 2003-04. In absolute terms allocations to both these avenues have been on the rise. For instance, overall allocation to life insurance rose to 117% between 1998-99 and 2003-04. For provident and Pension funds this figure was 8%.

Shares and Debentures

The big Bull Run, which began late last fiscal, has left households cold, their allocation to the markets (Shares and Debentures) dipped for the four consecutive years. At 1.4% of total gross household savings, it is the lowest in over a decade, falling steadily from 3.4% of total household savings in 1998-99. The stubborn refusal of household savings to enter the equity market can be seen from the fact that the overall equity allocation dipped even though total household savings were up a staggering 267% over a decade (1993-2004).

Mutual Funds

The household savings gravitating towards mutual funds is not saying much. That is because, as the survey shows, the total pool of retail equity investors seems to be shrinking. Old habits die hard – the stubborn adherence to risk free savings is proof. That's a pity because the asset classes they won't embrace are the ones that hold out the promise of high returns – now and in the future.

Dr. V.L Shobhana and J. Jayalakshmi

In their study titled "Investor Awareness and Preferences-A Study" (2005) has examined the level of investor awareness regarding investment options and investment risks. The analysis revealed that investment in real estate/property is preferred by majority of the respondents. The second most preferred investment is bank deposits. Awareness about investment options and risks are high among old aged, highly educated and those who are professionals by occupation. Demographic variables such as age and education do not have significant influence over investor awareness where as difference in occupational status leads to difference in the awareness level of people.

A Bajaj Capital "Investors India" March 2005 Page no.16

The Quick Estimates of National Account for 2003-04 released in early Feb. gives the "feel good" sentiment for the simple reason that Indian households have saved 28.1% of their Gross Domestic product. That is, out of every Rs.100 earned, they are saving Rs.28.10 into the piggy bank. At the time of Dr. Rajendra Prasad assuming charge as the first President of the Republic of India –way back in 1950, Indians were saving Rs.6.20 out of every Rs.100 earned. That was the time, the national savings itself was low at 8.9 percent of GDP. During 1970-71, when the late Prime Minister Indira Gandhi was described as "Durga" at the height of Bangladesh liberation war, Indians were saving just Rs.10.10 out of every Rs.100 earned. When late Narasimha Rao took charge as Prime Minister of India, they were saving Rs. 19.30 out of every Rs.100. This rise has been consistent and impressive from 26.1% of GDP in 2002-03 impressive from 28.1% India, definitely, is in a big league, though it may not be in the class of china where the savings as a percentage of GDP is a whopping 40 percent. Others at the big table include Malaysia, Thailand and South Korea where the savings is pegged at 35 percent. By the by, what are the contours of this Indian savings which is Rs. 7,76,420 crore?.

Out of this, almost three-fourths (74%) came from the households, the balance coming from corporate and governments.

A Survey was Conducted by the Ananda Vikatan (A Tamil Weekly Magazine)

During January 1999. Public were interviewed on the aspect of savings and their saving habits. One salaried class investor told that he was in the habit of allocating 20 percent of salary for savings every month in the form of either a fixed deposit or a recurring deposit. In addition, he would earmark a certain amount and deposit it in a bank or a non-banking finance company.

EVOLUTION OF SAVINGS IN INDIA

A quick perusal of the Central Statistical Organization (CSO) data reveals that households park their savings in financial assets such as Banks deposits, investments in shares and debentures, mutual funds, investments in small savings schemes like postal savings, public provident fund (PPF) and insurance products. And another sizeable chunk going into physical assets such as residential properties, personal vehicles, mobile, etc. However, the household interest in the stock markets is puny for a long time due to anomalies that had rocked the capital markets. The search for risk free instruments ultimately convinced households to go in for low interest but secured bank and postal savings schemes.

TABLE 1: FINANCIAL SAVINGS AND INVESTMENTS (IN PERCENT OF GDP)

Year	Currency	Deposits	Claims on Government	Shares & Debentures	Contractual Savings	Total
1998-99	1.3	5.0	1.6	0.4	4.0	12.3
1999-00	1.1	4.4	1.5	0.9	4.3	12.2
2000-01	0.7	4.9	1.9	0.5	3.9	11.9
2001-02	1.2	5.4	2.3	0.4	4.0	13.3
2002-03	1.2	5.7	2.5	0.2	4.1	13.7
2003-04	1.5	5.3	3.2	0.0	3.8	13.8
2004-05	1.2	5.2	3.4	0.2	4.0	14.0
2005-06	1.5	7.8	2.4	0.9	4.1	16.7
2006-07	1.6	10.3	1.0	1.2	4.5	18.6
2007-08	1.7	8.8	-0.6	1.6	4.0	16.5

Source: RBI Annual Reports from 1998-99 to 2007-08

India is one of the high saving economies of the world. The rate of Gross Domestic Savings (GDS) has recorded a steady increase since the 1950s. The savings rate has increased from an average of around 10 percent in the 1950s to over 23 percent in the 1990s. It crossed 25 percent in the mid 1990s and reached its highest level of 29.1 percent in 2004-05. A large part of the overall improvement in domestic savings has emanated from higher household savings. The rate of household savings—comprising financial and physical savings—increased from around 7 percent in the 1950s to over 18 percent in the 1990s. In 2004-05, it stood at 22.0 percent. Since the 1950s, the household sector has remained the predominant source of the GDS and it contributed around 76 percent of total domestic savings in 2004-05. Over time, although both financial and physical savings have recorded an increase, the composition of household savings has seen a shift in favour of financial savings reflecting the spread of

banking and financial services across the country. The share of household financial savings – comprising Currency, Deposits, Shares and Debentures, Government Securities, Life Insurance Funds and Provident and Pension Funds –in the total household savings increased from 25 percent in the 1950s to around 47 percent in 2004-05. The rate of financial saving increased from less than 2 percent in the 1950s to 10.3 percent in 2004-05.

CHANGING PATTERN OF INDIAN HOUSEHOLDS SAVINGS

Bank deposits, the old warrior in terms of favorite parking space for retail investors, are still holding the fort and they are holding it quite commendably. According to RBI data, at the end of 2007-08, the total saving deposits with banks stood at Rs.415,245 crore which was an improvement over the previous year's 1998-99 figure of Rs.80,233 crore. As a result, the share of Bank Deposits in total financial assets of the system has shot up to 56.5 percent as against 38.7 percent in the year 1998-99. With interest rates on Bank deposits once again on a rise, a substantial chunk of Bank depositors are trying to avail the best return possibilities in the shortest possible time frame.

TABLE 2: HOUSEHOLD SAVING IN FINANCIAL ASSETS (RUPEES IN CRORE)

Year	Currency	Deposits	Claims in on Government	Shares & Debentures	Contractual Savings	Total
1998-99	21,822 (10.5)	80,233 (38.7)	28,220 (13.6)	6,992 (3.4)	69,836 (33.7)	207,103
1999-00	20,845 (8.8)	85,850 (36.3)	28,985 (12.3)	18,119 (7.7)	82,551 (34.9)	236,351
2000-01	15,632 (6.3)	102,017 (41.0)	39,007 (15.7)	10,214 (4.1)	81,903 (32.9)	248,774
2001-02	28,156 (9.7)	118,477 (39.8)	51,929 (17.4)	8,251 (2.8)	91,002 (30.6)	297,816
2002-03	28,447 (8.5)	139,701 (41.5)	62,560 (18.6)	5,504 (1.6)	100,398 (29.8)	336,609
2003-04	42,675 (11.2)	145,657 (38.3)	87,372 (23.0)	492 (0.1)	103,895 (27.3)	380,090
2004-05	36,977 (8.5)	161,416 (37.2)	106,420 (24.5)	4,967 (1.1)	125,926 (28.9)	435,706
2005-06	53,071 (8.9)	280,772 (47.0)	87,168 (14.6)	30,735 (5.1)	146,122 (24.4)	597,867
2006-07	66,323 (8.6)	425,050 (55.3)	40,627 (5.3)	51,086 (6.6)	185,881 (24.2)	768,967
2007-08	80,342 (10.9)	415,245 (56.5)	(-)27,042 (-3.7)	77,073 (10.5)	189,081 (25.7)	734,699
Mean	39,429.0	195,441.8	50,524.6	21,343.3	117,659.5	424,398.2
S.D.	21,263.34	131,230.6	38,268.4	24,819.6	42,985.7	206,653.1
C.V.	0.539	0.671	0.757	1.163	0.365	0.487
Skewness	0.721	0.929	-0.426	1.280	0.672	0.641
Kurtoses	2.134	2.104	2.596	3.176	1.867	1.768
Correlation Coefficient	0.926	0.897	0.006	0.702	0.950	0.942
Test Statistics	4.309	3.859	0.017	2.304	4.8504.799	

Source: RBI Annual Reports from 1998-99 to 2007-08.

Note: Figures in () indicates as percent of financial assets (gross)

Description Statistics

From the above table, it is ascertained that during the study period 1998-99 to 2007-08, the household investments in currency in India has been positively increased from Rs. 21,822 crore in the year 1998-99 to Rs.80,342 in 2007-08 which is positive and it indicates the increase in the growth of investment in currency in India. Household investments in Currency have a mean value was Rs.39,429 crore, Standard Deviation was Rs. 21,263.34 crore, Skewness was 0.721 and Kurtosis was 2.134. The Co-efficient of variance of investments in Currency was 0.539. During the study period 1998-99 to 2007-08, the household investments in Deposits in India has been positively increased from Rs. 80,233 crore in the year 1998-99 to Rs.415,245 crore in 2007-08 which is positive and it indicates the increase in the growth of Deposits in India. Household investments in Deposits have a mean value was Rs.195, 441.8 crore, Standard Deviation was Rs. 131,230.6 crore, Skewness was 0.929 and Kurtosis was 2.104. The Co-efficient of variance of investments in Deposits was 0.671. During the study period 1998-99 to 2007-08, the household investments in Claims on Government in India has been positively increased from Rs. 28,220 crore in the year 1998-99 to Rs.40,627 in 2006-07 which is positive and it indicates the increase in the growth of investment in Claims on Government in India but it has decreased to Rs.(-) 27,042 crore in 2007-08. Household investments in Currency have a mean value was Rs.50,524.6 crore, Standard Deviation was Rs. 38,268.4 crore, Skewness was (-) 0.426 and Kurtosis was 2.596. The Co-efficient of variance of investments in Claims on Government was 0.757 and so on.

Further, the average Household saving in Financial assets is higher in case of Fixed Deposits. The standard deviation of Household investments in fixed deposits is higher and is lower in case of currency. The coefficient of variation indicates greater variability in the ratio of shares and Debentures and c.v. is lower in case of contractual savings which indicates more homogeneity. The distribution of investments of household saving in financial assets is positively skewed in all investments except in claims in Government.

Correlation Analysis

The correlation analysis for Household Savings in Financial Assets in India during the study period 1998-99 to 2007-08 was ascertained, the positive correlation is observed between year with Currency (0.926), Year with Deposits (0.897), Year with Claims on Government (0.006) and Year with Shares & Debentures (0.702), the Positive correlation is observed between Year with Contractual Savings (0.950). And a positive correlation between year and total household savings in financial assets (0.942).

Trend Analysis of the Household Saving in Financial Assets

The linear trend method is most widely used in practice. Trend values can be obtained for all the given time periods in the series. It is a mathematical method and with its help a trend line is fitted to the data in such a manner that the following two conditions are satisfied.

1. $\sum (Y - Y_c) = 0$ i.e the sum of deviations of the actual values of y and the computed values of y is zero.
2. $\sum (Y - Y_c)^2$ is least. i.e. the sum of the squares of the deviations of the actual and computed values is least from this line and hence the name method of least squares.

The line obtained by this method is known as the line of best fit. The straight line trend is represented by the equation. $Y_c = a + bx$

Where Y_c is used to designate the trend values to distinguish them from the actual y values. a is the Y intercept and constant and b represents the slope of the trend line and another constant. In order to determine the values of the constants a and b the following two normal equations are to be solved.

$$\sum Y = na + b\sum X \text{ and } \sum XY = a\sum X + b\sum X^2$$

Where n represents number of years for which data are given.

It should be noted that the first equations is merely the summation of the given function, the second is the summation of X multiplied by the given function. We can measure variable X from any point of time in origin such as the first year. But the calculations are very much simplified when the mid-point in time is taken as the origin because in that case the negative values in the first half of the series balance out the positive values in the second half so that $\sum X = 0$ the above two normal equations would take the form.

$$\sum Y = na \text{ and } \sum XY = b\sum X^2$$

The values of a and b can now be determined easily.

Since $\sum Y = na$, therefore $a = \sum Y/n$

Since $\sum XY = b\sum X^2$ Therefore $b = \sum XY / \sum X^2$

TABLE 3: TREND VALUE OF THE HOUSEHOLDS SAVINGS IN INDIA (RS. IN CRORE)

Year	Currency	Deposits	Claims on Government	Shares & Debentures	Contractual Savings	Total
1998-99	21,822 (10167.2)	80,233 (20403.5)	28,220 (50163.7)	6,992 (-4545.2)	69,836 (56954.5)	207,103 (244062.5)
1999-00	20,845 (16669.9)	85,850 (59300.9)	28,985 (50243.9)	18,119 (1207.8)	82,551 (70444.5)	236,351 (284137.2)
2000-01	15,632 (23172.5)	102,017 (98198.3)	39,007 (50324.1)	10,214 (6960.8)	81,903 (83934.5)	248,774 (324211.7)
2001-02	28,156 (29675.1)	118,477 (137095.7)	51,929 (50404.3)	8,251 (12713.8)	91,002 (97424.5)	297,816 (364286.3)
2002-03	28,447 (36177.7)	139,701 (175993.1)	62,560 (50484.5)	5,504 (18466.8)	100,398 (110914.5)	336,609 (404360.9)
2003-04	42,675 (42680.3)	145,657 (214890.5)	87,372 (50564.7)	492 (24219.8)	103,895 (124404.5)	380,090 (444435.5)
2004-05	36,977 (49182.9)	161,416 (253787.9)	106,420 (50644.9)	4,967 (29972.8)	125,926 (137894.5)	435,706 (484510.1)
2005-06	53,071 (55685.6)	280,772 (292685.3)	87,168 (50725.1)	30,735 (35725.8)	146,122 (151384.5)	597,867 (524584.7)
2006-07	66,323 (62188.1)	425,050 (331582.7)	40,627 (50805.3)	51,086 (41478.8)	185,881 (164874.5)	768,967 (564659.4)
2007-08	80,342 (68690.7)	415,245 (370480.1)	(-27,042 (50885.5)	77,073 (47231.8)	189,081 (178364.5)	734,699 (604733.9)
	394290	1954418	505246	213433	1176595	4243982

The constant a is simply equal to the mean of y values and the constant Y . It should be noted that in case of odd number of years, when the deviations are taken from the middle year $\sum X$ would always be zero provided there is no gap in the data given. However, in case of

even years also $\sum X$ will be zero if the X origin is placed midway between the two middle years. The arithmetic straight line trend fitted by the method of least squares is by far the most widely applied trend curve. This particular trend curve is applicable for those series in which period to period changes are constants in absolute amount.

Note: Figures () Indicates Trend Values

The Trend Line is $Y = a + bX$

The Normal Equations are

$$\sum Y = n a + b \sum X$$

$$\sum XY = a \sum X + b \sum X^2$$

For Year and Currency

$$Y = 39429 + 3251.3x$$

$$a = \sum Y_1 / n = 394290/10 = 39429$$

$$b = \sum XY_1 / \sum X^2 = 1072912/330 = 3251.3$$

For Year and Deposits

$$Y = 195441.8 + 19448.7 x$$

$$a = \sum Y_2 / n = 1954418/10 = 195441.8$$

$$b = \sum XY_2 / \sum X^2 = 6418056/330 = 19448.7$$

For Year and Claims on Government

$$Y = 50524.6 + 40.1 x$$

$$a = \sum Y_3 / n = 505246/10 = 50524.6$$

$$b = \sum XY_3 / \sum X^2 = 13226/330 = 40.1$$

For Year and Shares and Debentures

$$Y = 21343.3 + 2876.5 x$$

$$a = \sum Y_4 / n = 213433/10 = 21343.3$$

$$b = \sum XY_4 / \sum X^2 = 949239/330 = 2876.5$$

For Year and Total investments

$$Y = 424398.2 + 20037.3x$$

$$a = \sum Y_5 / n = 4243982/10 = 424398.2$$

$$b = \sum XY_5 / \sum X^2 = 6612291/330 = 20037.3$$

**TABLE 4: PROJECTED GROWTH RATE OF THE HOUSEHOLD SAVINGS IN INDIA
(FROM 2008-09 TO 2012-13)**

Year	Currency	Deposits	Claims on Government	Shares & Debentures	Contractual Savings	Total
2008-09	75193.3	409377.5	50965.7	52984.8	191854.5	644808.5
2009-10	81695.9	448274.9	51045.9	58737.8	205344.5	684883.1
2010-11	88198.5	487172.3	51126.1	64490.8	218834.5	724957.7
2011-12	94701.1	526069.7	51206.3	70243.8	232324.5	765032.3
2012-13	101203.7	564967.1	51286.5	75996.8	245814.5	805106.9

The projected trend value for 5 years period from 2008-09 to 2012-13 are calculated and presented in the Table-4.

THE KRUSKAL – WALLIS TEST

The Kruskal – Wallis test, often called the H test, is used in place of one way analysis of variance test when the populations cannot be assumed normal. Thus, it can be used to test whether or not the means from K independent samples are equal when the populations are not normal. It uses a ranking method. Let n_i be the number of observations in the ith sample. The k samples are combined and then $n = n_1 + n_2 + \dots + n_k$ observations ranked from smallest to largest, substituting the appropriate rank from 1,2,3.....n for each observation. Observations with the same values are given the average of their ranks. The sum of the ranks for each sample are then computed.

R_i is the sum of the ranks from the ith sample, Kruskal and Wallis n=denoted by H the random variable

$$H = \frac{12}{n(n+1)} \sum_{i=1}^k \frac{R_i^2}{n_i} - 3(n+1)$$

$$= \frac{12}{n(n+1)} \left[\frac{R_1^2}{n_1} + \frac{R_2^2}{n_2} + \frac{R_3^2}{n_3} + \dots + \frac{R_k^2}{n_k} \right] - 3(n+1)$$

When the samples are from the same distribution (H_0 is true) and each sample consists of at least 5 observations, then H can be approximately by a chi-square distribution with k-1 degrees of freedom. For all samples the approximation is not very good, so Kruskal and Wallis provide tables of the exact distribution for the case of $k=3, n_i \leq 5$.

Algorithm

Suppose, we have k independent samples from k populations. We wish to test the null hypothesis.

Currency	Deposits	Claims in Government	Shares & Debentures	Contractual Savings
11	28	13	5	26
10	32	15	9	31
8	37	18	7	30
12	40	22	6	35
14	42	24	4	36
20	43	34	2	38
17	45	39	3	41
23	48	33	16	44
25	50	19	21	46
29	49	1	27	47
169	414	218	100	374

H_0 - the sample are from identical populations against the alternative hypothesis.

H_1 - the populations are not identical at the α level of significance.

Computation

Step 1: Calculate $H = \frac{12}{n(n+1)} \sum_{i=1}^k \frac{R_i^2}{n_i} - 3(n+1)$

Step 2: Accept or Reject H_0 .

If $H > X_{k-1, \alpha}^2$, Reject H_0 , otherwise accept H_0 .

$R_1=169; R_2=414; R_3=218; R_4=100; R_5=374$

$$H = \frac{12}{n(n+1)} \left[\frac{R_1^2}{n_1} + \frac{R_2^2}{n_2} + \frac{R_3^2}{n_3} + \frac{R_4^2}{n_4} + \frac{R_5^2}{n_5} \right] - 3(n+1)$$

$$= \frac{12}{50(50+1)} \left[\frac{(169)^2}{10} + \frac{(414)^2}{10} + \frac{(218)^2}{10} + \frac{(100)^2}{10} + \frac{(374)^2}{10} \right] - 5(50+1)$$

$$= 33.99$$

Table value (chi-square) $\chi_{0.5}^2$ at d.f. 4 = 9.488

The calculated value is more than table value. Therefore, H_0 is rejected. We conclude that the populations are not identical at the 5% level of significant.

CONCLUSIONS AND SUGGESTIONS

Since independence, the prime objective of Government policy in India is to promote a rapid and balanced industrial growth. As the development is a continuous process, it requires the utilization of resources more effectively to achieve the accepted means. Sustaining the development mainly depends on the availability of large volume of capital. Availability of adequate finance ensures systematic and uninterrupted development generally in the economy of the country and particularly in the field of business. Necessary finance can be made available if the financial intermediaries perform their work efficiently and effectively. Banks, Non-banking finance companies, Post office, Share markets are the major intermediaries. These organizations help the retail investors to save and invest their money for a specific purpose. Hence, these financial institution have dual role to play, primarily they undertake the responsibility of savings of individual investors and secondarily help the nation to generate the necessary funds.

Saving Culture

The Central and State Government should spread saving and investment habit by making foolproof safety mechanism. Only with prevalence of a healthy atmosphere, individual

investors will be inclined to deploy their funds on a continuous basis in various types on a continuous basis in various types of financial instruments of government.

Awareness Programme

Investors education is the need of the hour. Though number of institutions part with investor education, they are not sufficient. A mass and continuous awareness programme shall be conducted.

Arresting of Inflation

Unlike others, salaried class investors have a constraint-fixed income. Within the fixed income, many of the investors find it difficult to overcome the effect of inflation. The pay rise generally does not equate the increased cost of living. Though investors could effect savings. Such saving does not increase in proportion with pay rise. Due to the constant increase in prices, a serious damage is caused to the economic condition of middle and lower class salaried group. Hence, the Government must exercise some more control to arrest the inflation rate.

Tax Exemption on Interest

Other category investors like businessmen and self-employed have nothing to worry about tax deducted at source. Hence, many of them deliberately resort to tax evasion by dishonest means like suppression of income, falsifying records, maintaining improper records and statements, concealment of facts etc. Again, they tend to take advantage of the loopholes of tax laws. But salaried class does not resort to such type of illegal exercises. Therefore, they must be given concession in payment of Taxes. Moreover, the Central Government may give total tax exemption on interest on deposits in commercial bank or in specific nationalized bank. If this pioneering step is understood in right spirit and given a way for its functioning, the Government could certainly mobilize billions of rupees from salaried class alone.

Bank Interest Rate

Bank rates are often reduced and have become unattractive. The bank rates should be enhanced at least 11-12 percent to attract more investors.

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A Study on Factors Influencing Investment Behaviour of Equity Investors

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Abstract—*Investment activity for future benefit is part of human life. The art of investment looks into maximum benefit as maximised cost. Successful investing motives diversification of risk by understanding it. So even during slackness in the market certain investors who look into long-term benefit regularly make investment. The present study analysed the factors influencing investment behaviour of such regular investor.*

INTRODUCTION

Investments take place with the purchase of any asset that offers the expectation of future income or profit or both. Every individual who has surplus money than this needs for current consumption is potentially an investor. The art of investment is to see that the return is maximised with the minimum amount of risk, which is inherent in investment. Successful investing is not about avoiding risk but about understanding it. Of all the sections of the society, the household group contributes much of the capital, forming the lifeblood for the economy. Small investors contribute hugely to the economic and social development of the country. Investors need to preserve and build their wealth through various sensible means. Individuals should avoid putting their surpluses in one basket, instead there is a need to diversify their investment by choosing various alternatives. The investors should think twice and examine all the aspects before making any investment decision. The psychology of the investor plays an important role in the matter of deciding on a particular investment. If an investor is extremely cautious, he may go in for saving schemes like bank deposits and fixed – income investment with companies. If an investor is enterprising, adventurous and willing to take calculated risk he may go in for equity shares.

EQUITY INVESTMENT

Investment is the employment of funds with the aim of achieving additional income or growth in value. One makes investments for a return higher than what he can get by keeping the money in a commercial or co-operative bank or even in an investment bank. Investment is the allocation of monetary resources to assets that are expected to yield some gain or positive return over a given period of time. Investment is an attempt to carefully plan, evaluate and allocate funds in various investible outlets, which offer safety of principal, moderate and

continuous return and long-term commitment. Generally investors like to maximise the return out of their investment. When the return is higher, the risk is also higher. Return and risk go together and they have a trade off.

Equity shares are also called common shares and the investment in them is more risky than both bonds and preference shares. They however, offer greater advantage than both the other securities enjoy a better position in the capital market as far as the investors' attraction is concerned. In times of inflation, saving schemes and fixed-income corporate investment do not protect the purchasing power of the capital invested. If the company is successful, good dividends are paid and bonus shares are also issued. The market value of the shares goes up. On other hand, if the company is not doing well, there is no dividend, and no capital appreciation. In the equity investment the risk is high, the return is also high. To be sure, investment in equity shares is different from horse racing. It is gambling, through a certain amount of risk-taking in it.

FINANCIAL SYSTEM – A PROFILE

The financial system plays a key role in the smooth and efficient functioning of the economy. The major function of any financial system is to channel resources from individuals and entities with surplus to those with resources deficits. In doing so, the financial system not only satisfies the saving needs of the community but also facilitate the accumulation of investment capital that is critical to growth and development. The overall contribution of a financial system can however extend well beyond these primary roles by reconciling different risk preferences of individuals and entities. The financial systems or the financial sector of any country consists of specialised and non-specialised financial institutions, of organised and unorganised financial markets, of financial instruments and services, which facilitate transfer of funds. The financial system is concerned about money, credit and finance – the three terms are intimately related yet are somewhat different from each other. Financial institutions and markets are business organisations that act as mobiliser and depositaries of savings, and as purveyors of credit or finance. Financial markets are the centres or arrangements that provide facilities for buying and selling of financial claims or financial assets or securities. The financial assets represent a claim to the payment of a sum of money sometimes in the future and a periodic payment in the form of interest or dividend.

STATEMENT OF THE PROBLEM

Like any other trade / financial activities, financial markets are also affected by the different environment that is prevailing then and there based on the market conditions and trend. At present, there is economic slowdown generally that affect every movement of activity of industrial world. Even though there is slackness, it does not stop completely the investment activities. Instead, the level / number of transactions are reduced to a considerable extent. There are certain people who would like to continue their investment activities regularly.

In this context, the following questions raised.

What are the factors that induce the investors to invest?

Is there any relationship between those factors and investment practices of the investors?

In this background, an attempt is made by the authors to find out the factors influencing the investment behaviour with the following objectives.

OBJECTIVES OF THE STUDY

To find out the factors that are associated with investment behaviour.

To identify the regularity of investment of equity investors and its relations to the factors.

Framework of Analysis

The study used primary data. For the purpose of data collection 200 respondents, who are the equity investors, were selected using random sampling method. The data required for the study was collected by way of structured questionnaire. Owing to locational advantage, respondents belonging to Coimbatore district alone were selected. The data was collected through the direct personal interview with the help of questionnaire. The questionnaire contained questions relating to socio-economic profile of the investor, investment behaviours. To test the significance of association between the personal factors and investment behaviour, null hypotheses were formulated and tested by applying chi-square test. Inferences have been made by comparing the calculated value of χ^2 with the respective table value of χ^2 . The results have been tested at five percent and one percent level of significance. In order to prove the final results statistically, the percentage analysis are adopted.

TABLE 1: SOCIO-ECONOMIC PROFILE OF INVESTORS

Variable	Profile	No. of Respondents	Percentage
Gender	Male	164	82
	Female	36	18
Age	Below 20 years	35	17
	20-40 years	121	61
	Above 40	44	22
Marital Status	Unmarried	38	19
	Married	162	81
Educational Qualification	Up to 12 th	62	31
	UG	54	27
	PG	36	18
	Professional	27	14
	Others	21	10
Occupation	Agriculture	23	11
	Business	53	27
	Employed	89	45
	Professional	24	12
	Unemployed	11	5
Monthly Income	Upto Rs.10,000	130	65
	Rs.10,001 to Rs.20,000	55	28
	Above Rs.20,000	15	7
Family Member	Upto 2	12	6
	3 and 4	129	65
	Above 4	59	29

Source: Primary Data

The above table revealed the following:

200 investors, 164 (82%) are male investors and only 36 (18%) are female investors, which shows that most of the investors are male.

Out of 200 investors, 35 (17%) investors come under the age limit of up to 20 years. The second group consists of 121 (61%) investors and rest 44 (22%) investors are belonging to the last category of above 40 years.

Regarding the marital status 38 (16%) are unmarried investors and 162 (81%) are married. It shows that married investors are very much interested in equity investment than unmarried.

Out of 200 investors, 62 (31%) investors belong to the first category, 54 (27%) investors are undergraduates, 36 (18%) investors are post graduates, 27 (14%) investors are professionals and the rest 21 (10%) investors belong to the category of others. So most of the investors are with educational qualification, which are up to 12th.

In case of occupation of investors, 23 (12%) investors are agriculturists, 53 (27%) investors are business people, 89 (44%) investors are employed persons, 24 (12%) investors who are professional and the remaining 11 (5%) investors are unemployed persons. So most of the investors are employed persons.

Out of 200 investors, 130 (65%) investors come under first category whose monthly income ranges up to Rs.10, 000. There are 55 (28%) investors in the second category whose monthly income ranges between Rs.10, 001 to Rs.20, 000. In the third category there are 15 (7%) investors who earn more than Rs.20, 000 per month.

Among 200 investors, 12 (6%) investors come under first category of family with two members. There are 129 (65%) investor come under second category. Third category consists of 59 (29%) investors. So most of investors are hailing from family with 3 to 4 members.

REGULARITY OF BUYING SHARES

To know the regularity of buying shares the investors are grouped in to two categories.

TABLE 2: REGULARITY OF BUYING

Regularity of Buying	Number of Investors	Percentage
Regular	76	38
Occasional	124	62
Total	200	100

Source: primary data

Table shows that the investors are classified based on their frequency of buying shares. The first category consists of investors who are buying shares regularly. The investors who are not regular buyers of shares are grouped under second category.

Out of 200 investors, 76 (38%) investors come under first category. 124 (62%) investors fall under second category. Thus it is observed from the table 2 that most of the investors are occasional buyers of shares.

ANALYSIS AND INTERPRETATIONS

An attempt has been made to find out the factors, which are influencing the investment behaviour of investors' regularity of investment. The collected data is analysed and presented in the form of table below.

Gender and Regularity of Investment

The relationship between gender and regularity of investment is given in the following table.

TABLE 3: RELATIONSHIP BETWEEN GENDER AND REGULARITY OF INVESTMENT

Gender	Regularity of Investment		Total
	Regular	Occasional	
Male	61 (37%)	103 (63%)	164 (100%)
Female	15 (42%)	21 (58%)	36 (100%)
Total	76	124	200

Source: Primary data

Calculated χ^2 Value: 0.251 DF: 1 Table Value at 5% level: 3.841

From the table 3, it is clear that, the total number of male investors are 164. Out of which 61 (37%) are found to be regular investors and 103 (63%) of them are occasional investors. And out of 36 female investors, 15 (42%) of them are regular investors and 21 (58%) of them are occasional investors. The percentage of regular investors is high in the case of female group. However, as the calculated χ^2 value is less than the table value at 5% level, null hypothesis is accepted, and it is inferred that there exists no relationship between sex and regularity of investment.

Age and Regularity of Investment

In order to find out whether there exists any relationship between age and regularity of investment the following table is framed.

TABLE 4: RELATIONSHIP BETWEEN AGE AND REGULARITY OF INVESTMENT

Age	Regularity of Investment		Total
	Regular	Occasional	
Upto 30	14 (40%)	21 (60%)	35 (100%)
31 to 50	49 (42%)	72 (60%)	121 (100%)
Above 50	13 (30%)	31 (70%)	44 (100%)
Total	76	124	200

Source: Primary Data

Calculated χ^2 Value: 1.714 DF: 2 Table Value at 5% level: 5.991

The table 4 shows that, in the first age group there are 35 investors. Out of which 14 (40%) of them are found to be regular investors and 21 (60%) of them found to be occasional investors. In the second age group there are 121 investors, out of which majority 72 (60%) of them are found to be regular investors and the balance of 31 (70%) of them are occasional investors. As the calculated χ^2 value is lower than the table value at five percent level, null hypothesis is accepted, it is inferred that there exists no relationship between age and regularity of investment.

Martial Status and Regularity of Investment

The relationship between martial status and regularity of investment is shown in the following table.

TABLE 5: RELATIONSHIP BETWEEN MARITAL STATUS AND REGULARITY OF INVESTMENT

Martial Status	Regularity of Investment		Total
	Regular	Occasional	
Unmarried	14 (37%)	24 (63%)	38 (100%)
Married	62 (38%)	100 (62%)	162 (100%)
Total	76	124	200

Source: Primary Data

Calculated χ^2 Value: 0.026 DF: 1 Table Value at 5% level: 3.841

From the table 5, it is clear that, out of 38 unmarried investors, 14 (37%) of them are found to be regular investors and 24 (63%) of them are occasional investors. Out of 162 married investors, 62 (38%) of them are regular investors and remaining 100 (62%) are occasional investors. As the calculated χ^2 value is lower than table value at 5% level, the null hypothesis is accepted, and there exists no relationship between martial status and regularity of investment.

Educational Qualification and Regularity of Investment

In order to find out whether there exists any relationship between educational qualification and regularity of investment, the following table is formulated. The investors are grouped into five categories based on their educational qualification.

TABLE 6: RELATIONSHIP BETWEEN EDUCATIONAL QUALIFICATION AND REGULARITY OF INVESTMENT

Educational Qualification	Regularity of Investment		Total
	Regular	Occasional	
Up to 12 th	14 (23%)	48 (77%)	62 (100%)
U.G	22 (41%)	32 (59%)	54 (100%)
P.G	14 (39%)	22 (61%)	36 (100%)
Professional	15 (56%)	12 (44%)	27 (100%)
Others	11 (52%)	10 (48%)	21 (100%)
Total	76	124	200

Source: Primary Data

Calculated χ^2 Value: 11.820 DF: 4 Table Value at 5% level: 9.488

In the first group, there are totally 62 investors out of which 14 (23%) of them are, regular investors and remaining 48 (77%) of them are occasional investors. In the second group, there are totally 54 investors, out of third category majority 22 (61%) of the investors are found to be occasional investors. In the fourth category, there are totally 27 investors. Out of which 15 (56%) of them are regular investors. And in the fifth category there are totally 21 investors. Out of which 11 (52%) of them are regular investors and remaining 10 (48%) of them are occasional investors. The calculated χ^2 value is higher than the table value at 5% level, null hypothesis is rejected and it is inferred there exists significant relationship between educational qualification and regularity of investment.

Occupation and Regularity of Investment

To find out the relationship between occupation and regularity of investment, the following table is drawn.

TABLE 7: RELATIONSHIP BETWEEN OCCUPATION AND REGULARITY OF INVESTMENT

Occupation	Regularity of Investment		Total
	Regular	Occasional	
Agriculture	7 (30%)	16 (70%)	23 (100)
Business	22 (42%)	31 (58%)	53 (100)
Employed	29 (33%)	60 (67%)	89 (100)
Professional	14 (58%)	10 (42%)	24 (100)
Unemployed	4 (36%)	7 (64%)	11 (100)
Total	76	124	200

Source: Primary Data

Calculated χ^2 Value: 10.981 DF: 4 Table Value at 5% level: 9.488

Table 7 shows that, in the first category there are totally 23 investors. Out of which 16 (70%) of them are occasional investors. In the second category, there are totally 53 investors. Out of which 31 (58%) of them are found to be occasional investors and 22 (42%) of them are regular investors. The third category consists of 89 investors, out of which 60 (67%) of them are occasional investors. In the fourth category totally 24 investors, out of which majority 14 (58%) of them are regular investors. And in the last group majority 7 (64%) of them are occasional investors. The calculated χ^2 value is higher than the table value at 5% level null hypothesis is rejected. Hence, it is inferred that there exists significant relationship between occupation and regularity of investment.

Monthly Income and Regularity of Investment

In order to find out whether there exists any relationship between monthly income and regularity of investment, the following table is framed.

TABLE 8: RELATIONSHIP BETWEEN MONTHLY INCOME AND REGULARITY OF INVESTMENT

Monthly Income	Regularity of Investment		Total
	Regular	Occasional	
Up to Rs.10,000	48 (37%)	82 (63%)	130 (100%)
Rs.10,001 to Rs.20,000	22 (40%)	33 (60%)	55 (100%)
Above Rs.20,000	6 (40%)	9 (60%)	15 (100%)
Total	76	124	200

Source: Primary Data

Calculated χ^2 Value: 0.183 DF: 2 Table Value at 5% level: 5.991

It is clear from the table 8 the percentage of regular investors is less when compared to the occasional investors in cases. Further, as the calculated χ^2 value is less than the table value at 5% level, the null hypothesis is accepted. Hence, it is inferred there exists no relationship between monthly income and regularity of investment.

Number of Dependents and Regularity of Investment

In order to find out the relationship between number of dependents in the family and regularity of investment, the following table is drawn.

TABLE 9: RELATIONSHIP BETWEEN NUMBER OF DEPENDENTS AND REGULARITY OF INVESTMENT

Number of Dependents	Regularity of Investment		Total
	Regular	Occasional	
Nil	3 (20%)	12 (80%)	15 (100%)
Up to 2	31 (44%)	40 (56%)	71 (100%)
More than 2	42 (37%)	72 (63%)	114 (100%)
Total	76	124	200

Source: Primary Data

Calculated χ^2 Value: 3.094 DF: 2 Table Value at 5% level: 5.991

Table 9 shows that, the percentage of regular investors is low in all the criteria selected for the number of dependents. As the calculated χ^2 value is lower than the table value at 5% level, null hypothesis accepted and it's inferred that there exists no relationship between number of dependents in the family and regularity of investment.

Family Income and Regularity of Investment

In order to find out whether there exists any relationship between the family income and regularity of investment, the following table is framed.

TABLE 10: RELATIONSHIP BETWEEN FAMILY INCOME AND REGULARITY OF INVESTMENT

Family Income	Regularity of Investment		Total
	Regular	Occasional	
Up to Rs.10,000	26 (37%)	44 (63%)	70 (100%)
Rs.10,001 to Rs.20,000	35 (38%)	57 (62%)	92 (100%)
Above Rs.20,000	15 (39%)	23 (61%)	38 (100%)
Total	76	124	200

Source: Primary Data

Calculated χ^2 Value: 0.057 DF: 2 Table Value at 5% level: 5.991

The percentage of regular investor is high 15 (39%) in the third category and low 26 (37%) in the first category. The percentage of regular investors goes on increasing with the level of total family income. Hence, it could be inferred that there exists a relationship between total family income and regularity of income. But as the calculated χ^2 value is less than the table value at five percent level, it's observed that there exists no relationship between level of total family income and regularity of investment.

Reading Habit of Investment Column in News Papers and Magazines and Regularity of Investment

In order to find out the relationship between reading habit of investment column in newspapers, magazines and regularity of Investment, the following table is drawn.

TABLE 11: RELATIONSHIP BETWEEN READING HABIT OF INVESTMENT COLUMN IN NEWS PAPERS AND MAGAZINES AND REGULARITY OF INVESTMENT

Reading Habit of Investment Column	Regularity of Investment		Total
	Regular	Occasional	
Regular	38 (64%)	21 (36%)	59 (100%)
Occasional	30 (28%)	76 (72%)	106 (100%)
Not at all	8 (23%)	27 (77%)	35 (100%)
Total	76	124	200

Source: Primary Data

Calculated χ^2 Value: 25.132 DF: 2 Table Value at 5% level: 5.991

Table 11 shows that, in the first category there are 59 investors. Out of which 38 (64%) of them found to be regular investors and remaining 21 (36%) of them are occasional investors. In the second, there are totally 106 investors. Out of which 30 (28%) of them are regular investors and 76 (72%) of them are occasional investors. The last group consists totally 35 investors. Out 27 (77%) of them are found to be occasional investors. As the calculated χ^2 value is very much higher than the table value at 5% level, the null hypothesis is rejected. Hence, it is inferred that there is significant relationship between the reading habit of investment column in newspaper, magazines and regularity of investment.

Time Taken for Investment Decision and Regularity of Investment

In order to find out the relationship between time taken for investment decision and regularity of investment, the investors are classified into four categories.

TABLE 12: RELATIONSHIP BETWEEN TIME TAKEN FOR INVESTMENT DECISION AND REGULARITY OF INVESTMENT

Time Taken	Regularity of Investment		Total
	Regular	Occasional	
With a day	10 (32%)	21 (68%)	31 (100%)
Within a few days	15 (26%)	43 (74%)	58 (100%)
With in a week	19 (63%)	11 (37%)	30 (100%)
More than a week	32 (40%)	49 (60%)	81 (100%)
Total	76	124	200

Source: Primary Data

Calculated χ^2 Value: 12.311 DF: 3 Table Value at 5% level: 7.815

In the first category, there are totally 31 investors. Out of which 10 (32%) of them are regular investors and 21 (68%) of them are occasional investors. In the second category, there are totally 58 investors. Out of which 15 (26%) of them are found to be regular investor and remaining 43 (74%) of them are found to be occasional investors. There are 30 investors in the third category. Out of which 19 (63%) of them are regular investors and 11 (37%) of them are occasional investors. The last group consist of totally 81 investors, out of which 32 (40%) of them are regular investors and 49 (60%) of them are occasional investors. As the calculated χ^2 value is higher than the table value at 5% level null hypothesis is rejected. Hence, it is inferred that there exists a significant relationship between time taken for investment decision and regularity of investment.

Sources Utilised for Investment and Regularity of Investment

In order to find out whether there exists any relationship between sources utilised for making investment and regularity of investment the following table is formulated.

TABLE 13: RELATIONSHIP BETWEEN SOURCES UTILISED FOR INVESTMENT AND REGULARITY OF INVESTMENT

Sources	Regularity of Investment		Total
	Regular	Occasional	
Own savings	55 (37%)	93 (63%)	148 (100%)
Business Income	8 (50%)	8 (50%)	16 (100%)
Borrowings	1 (20%)	4 (80%)	5 (100%)
More than one	12 (39%)	19 (61%)	31 (100%)
Total	76	124	200

Source: Primary Data

Calculated χ^2 Value: 1.716 DF: 3 Table Value at 5% level: 7.815

In the first category, there are totally 148 investors. Out of which majority 93 (63%) of the are found to be occasional investors. In the second category, there are 16 investors. Out of which eight (50%) of them are regular investors and remaining eight (50%) of them are occasional investors. In the third category majority four (80%) of them are found to be occasional investors and in the fourth category majority 19 (61%) of them are occasional investors. As the calculated χ^2 value is lower than table value at 5% level, null hypothesis is accepted. Hence, it is inferred that there is no relationship between sources utilised for investment and regularity of investment.

Avenues of Investment and Regularity of Investment

In order to find out whether there exists any relationship between avenues of investment and regularity of investment, the following table is framed.

TABLE 14: RELATIONSHIP BETWEEN AVENUES OF INVESTMENT AND REGULARITY OF INVESTMENT

Avenues of Investment	Regularity of Investment		Total
	Regular	Occasional	
Mutual Fund	0 (0)	4 (100%)	4 (100%)
Real Estates	2 (67%)	1 (33%)	3 (100%)
Jewels	4 (33%)	8 (67%)	12 (100%)
Bank Deposit	21 (37%)	35 (63%)	56 (100%)
More than one	49 (39%)	76 (61%)	125 (100%)
Total	76	124	200

Source: Primary Data

Calculated χ^2 Value: 3.953 DF: 4 Table Value at 5% level: 9.488

In the first category, there are four investors all of them are found to be occasional investors. In the second category two (67%) of the investors are found to be regular investors. In the third category, eight (67%) of the investors are found to be occasional investors and in the fourth category, majority 35 (63%) of the investors are found to be occasional investors. In the fifth category also majority 76 (61%) of the investors are found to be occasional investors. As the calculated χ^2 value is lower than the table value at 5% level, null hypothesis

is accepted. Hence, it is inferred that there exists no significant relationship between avenues of investment and regularity of investment.

CONCLUSION

Regular investment of investors facilitates the flow of funds required to meet the financial needs of the industrial sectors. Irrespective of the developments in the capital market / economic conditions, investors like to invest regularly and this investment behaviour is highly related to educational background, their occupation, reading habit of investment news and the time taken for investment decision making process.

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Foreign Direct Investment and its Impact on the Economic Development of India— An Empirical Study

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Abstract—*In the era of globalization, Foreign Direct Investment (FDI) plays an important role in the development of both developing as well as underdeveloped economies. India's recently liberalized FDI policy permits up to 100 % FDI Stake in ventures. Industrial policy reforms have substantially reduced industrial licensing requirements, removed restrictions on expansion and facilitated easy access to foreign technology and FDI. The future of Indian Economy is brighter because of its huge human resources, rapidly upcoming service sector, availability of large number of competent professionals, vast market for every product, increasing impact of consumerism, absence of controls and licenses, interest of foreign entrepreneurs in India and existence of four hundred million middle class people. Today, India provides highest returns on FDI than any other country in the world.*

INTRODUCTION

Foreign Direct Investment is an investment made by a foreign individual or company in productive capacity of another country. It is the movement of capital across national frontiers in a way that grants the investor control over the acquired asset. As the third-largest economy in the world in purchasing power parity terms, India is a preferred destination for foreign direct investments. India's recently liberalized FDI policy permits up to 100 % FDI stake in ventures. Industrial policy reforms have substantially reduced industrial licensing requirements, removed restrictions on expansion and facilitated easy access to foreign technology and FDI.

Objectives

The main objective of this paper is to carry out an appraisal of FDI flows and its impact on the economic development of India. The following parameters have been considered for the appraisal:

- To examine the FDI inflow trend and growth in India.
- To examine the FDI inflow in Sector-wise, Country-wise in India.
- To examine the FDI approvals and inflows in India
- To analyze the Sector-wise GDP growth rate and trend and
- To compare the trends in exports and import with FDI inflows in India.

METHODOLOGY

This uses secondary data which were collected from websites, journals and news papers. The information collected are tabulated and analyzed by various statistical tools like percentage, common-size statements, mean, standard deviation and trend analysis. The study covers a period from 1991-92 to 2008-2009. The data collected, opinion and expectations revealed pertain to the same period. For the description and trend analysis, the study covers a period of 8 years from 2001-02 to 2008-09.

Analysis of FDI Trends in India

Trends in FDI Inflows in India

The Government of India has taken many initiatives to attract FDI inflows, to develop the Indian economy since economic liberalization. It shows average annual growth rate and per year average annual inflow of FDI. It can be seen from the Table No.1 that growth was found to be maximum (186.96%) in the year 2006-07. Second largest growth rate was 164.74 % in the year 1993-94. The main was reason behind this substantial increase of FDI in these years.

TABLE 1: TRENDS IN FDI INFLOWS

Year	Inflow (Rs. In Crores)	Growth Rate (%)
1991-92	351	--
1992-93	675	92.31
1993-94	1787	164.74
1994-95	3289	84.05
1995-96	6820	107.36
1996-97	10389	52.33
1997-98	16425	58.10
1998-99	13340	-18.78
1999-2000	16868	26.45
2000-2001	19342	14.67
2001-02	19265	-0.40
2002-03	21286	10.49
2003-04	14301	-32.81
2004-05	17138	19.84
2005-06	24613	43.62
2006-07	70630	186.96
2007-08	98664	39.69
2008-09	122919	24.58
Average Annual Growth Rate	48.51	

Source: www.dipp.nic.in/fdi-statistics/india

From the above analysis, it can be concluded that growth rate of FDI has not been consistent but over the last 18 years, it went up to Rs. 2, 31, 632 crore with an average annual and compound growth rates of FDI inflows stood at 51.24 % and 37.63 % respectively during the period between 1991-92 and 2008-09.

Sector-Wise FDI Inflow in India

The major sectors of the Indian economy that have benefited from FDI in India are financial sector (banking and non-banking), insurance, and, hospitality and tourism, pharmaceuticals and software and information technology. After the implementation of new economic policy, all the three sectors attracted from FDI. At the aggregate level it does not help to achieve the growth. The following table shows the sector-wise inflow of FDI in India:

TABLE 2: SECTOR - WISE FDI INFLOW (RS. IN CRORE)

Rank	Sector	Year					Cumulative Inflow (From April 2000- May 2009)	% of Total Inflow
		2004-05	2005-06	2006-07	2007-08	2008-09		
1	Service Sector (Financial & Non-Financial)	1986	2399	21047	26589	28411	89761	23
2	Computer Software & Hardware	2441	6172	11786	5623	7329	40229	10
3	Telecommunications	570	2776	2155	5103	11729	31422	8
4	Housing & Real Estate	0	171	2121	8749	12621	26583	7
5	Construction	696	667	4424	6989	8792	24871	6
6	Automobile	559	638	1254	2697	5212	15564	4
7	Power	241	386	713	3878	4382	14789	4
8	Metallurgical	836	6540	7866	4686	4157	11618	3
9	Petroleum and Natural Gas	1343	760	401	5729	1931	11046	3
10	Chemicals	909	1731	930	920	3427	9814	3

Source: www.dipp.nic.in/fdi-statistics/india

The sector-wise analysis of FDI inflow in India reveals that maximum FDI has taken place in service sector (from Rs.1986 Cr. to Rs.28,411 Cr.), followed by computer software and hardware sector at second position with Rs.7,329 Cr. and Telecommunications with Rs. 11,727 Cr in the year 2008-09. The FDI in housing and real estate, construction and automobiles has experienced huge growth. On the whole, service sector was found to be the most attractive sector, while chemicals sector proved to be the least attractive sector for foreign investors.

Country-wise FDI inflow in India

TABLE 3: COUNTRY - WISE FDI INFLOW (RS. IN CRORE)

Rank	Country	Year						Total FDI from 1991-2009
		1991-2004	2004-05	2005-06	2006-07	2007-08	2008-09	
1	Mauritius	33821 (42.39)	5141 (41.13)	11441 (62.68)	28759 (58.14)	44483 (56.26)	50794 (53.39)	161167 (53.37)
2	Singapore	2349 (2.94)	822 (6.58)	1218 (6.67)	2662 (5.38)	12319 (15.58)	15727 (16.53)	33852 (11.21)
3	USA	15410 (19.31)	3055 (24.44)	2210 (12.11)	3861 (7.81)	4377 (5.54)	8002 (8.41)	27959 (9.26)
4	UK	6649 (8.33)	458 (3.66)	164 (0.90)	8389 (16.96)	4690 (5.93)	3840 (4.04)	22904 (7.58)
5	Netherlands	6939 (8.70)	1217 (9.74)	340 (1.86)	2905 (5.87)	2780 (3.52)	3922 (4.12)	15843 (5.25)
6	Japan	7430 (9.31)	575 (4.60)	925 (5.07)	382 (0.77)	3336 (4.22)	1889 (1.99)	11225 (3.72)
7	Cyprus	8 (0.01)	12 (0.10)	310 (1.70)	266 (0.54)	3385 (4.28)	5983 (6.29)	10050 (3.33)
8	Germany	4512 (5.66)	663 (5.30)	1345 (7.37)	540 (1.09)	2075 (2.62)	2750 (2.89)	9488 (3.14)
9	France	2657 (3.33)	537 (4.30)	82 (0.45)	528 (1.07)	583 (0.74)	2098 (2.21)	5482 (1.82)
10	UAE	10 (0.01)	18 (0.14)	219 (1.20)	1174 (2.37)	1039 (1.31)	133 (0.14)	4006 (1.33)
Total		79785 (100.00)	12498 (100.00)	18254 (100.00)	49466 (100.00)	79067 (100.00)	95138 (100.00)	301976 (100.00)

The country-wise FDI inflow in India from top 10 investing countries is presented in Table No.3. It reveals that Mauritius has been investing the most in various sectors of Indian economy the top 10 investing countries in India from 1991 to 2009. Total FDI inflow from Mauritius was 53.37% up to March 2009. UAE is the lowest among the top 10 investing countries in India, accounting only to the 1.33%. The Singapore, USA, and UK stood at second, third and fourth position among the ten countries in terms of FDI in India. The FDI inflows from Mauritius were around 53.39 % on average during the period 2008-09. There is inconsistency in the share of FDI inflows from almost all the countries.

FDI Approvals and Inflows in India

The efficiency of the country in attracting FDI can be measured by comparing the growth rates of FDI approvals and Inflows:

TABLE 4: FDI APPROVALS AND INFLOWS

Year	FDI Approvals (Rs. In Cr.)	Growth Rate (%)	FDI Inflows (Rs. In Cr.)	Growth Rate (%)
1991-92	505		351	
1992-93	3818	656.04	675	92.31
1993-94	8862	132.11	1787	164.74
1994-95	8955	1.05	3289	84.05
1995-96	30882	244.86	6820	107.36
1996-97	30886	0.01	10389	52.33
1997-98	50389	63.15	16425	58.10
1998-99	27590	-45.25	13340	-18.78
1999-2000	25140	-8.88	16868	26.45
2000-2001	17237	-31.44	19342	14.67
2001-02	20940	21.48	19265	-0.40
2002-03	11058	-47.19	21286	10.49
2003-04	5417	-51.01	14301	-32.81
2004-05	8741	61.36	17138	19.84
2005-06	7900	-9.62	24613	43.62
2006-07	23003	191.18	70630	186.96
2007-08	19911	-13.44	98664	39.69
2008-09	44608	124.04	122919	24.58

The above table shows that there will be a greater effort in attracting FDI in India in the earlier period, as compared to the later period. Further, it reveals that FDI inflows grew continuously till 1997-98 (from Rs.505 Cr. to Rs. 50,389 Cr.) in the growth rate and thereafter, there has been inconsistency in the increase of FDI inflows till the end of 2008.

FDI and its Impact in Indian Economic Development

The Indian economy has reached in the orbit of high rate of economic growth. It is being widely acclaimed and considered as an emerging global economic power. The rate of growth recorded during the period 1991-92 to 2008-09 clearly indicated a tendency of steady upward trend. However, the decade of 80's emerged as a beginning of the high rate of economic growth or at least a dramatic departure from the past growth performance.

The Indian economy is diverse and encompasses agriculture, handicrafts, manufacturing, textile and a multitude of services. Although two-thirds of the Indian workforce still earns

their livelihood directly or indirectly through agriculture, service sector is a growing one and are play an increasingly important and role of India's economy. The advent of digital age and the large number of young and educated populace fluent in English, is gradually transforming India as an important back office destination for global companies for the outsourcing of their customer services and technical support, India is major exporter of highly talented workforce in software and financial services and software engineering.

Sector-Wise GDP Growth Rates (at Factor Cost)

The Indian economy is the third largest in the world as measured by purchasing power, with a GDP of Rs.5512 Million in the period of 2008-09. When measured in US dollar exchange-rates terms, it is the largest in the world with the GDP of 9.6 %. The GDP growth rate was very less at the time of economic reforms. The sector-wise GDP growth rates are:

TABLE 5: SECTOR-WISE GDP AT FACTOR COST (IN %)

S. No	Sector	Year						
		2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
1	Agriculture	-0.2	10.0	0.7	3.9	2.73	1.75	1.33
2	Industry	5.2	6.6	7.4	7.6	9.95	10.15	10.44
3	Service	6.6	8.5	10.2	10.3	11.18	11.76	12.16
	GDP at Factor Cost	4.6	8.5	7.5	8.4	9.2	9.3	9.6

Source: www.sbp.org.pk/ecodata/gdp_table

The above table indicates that the sector-wise GDP growth rate increased from 4.6 % in 2002-03 to 9.6 % in 2008-09. The GRP growth rate was increased in the service sector was from 6.6 % to 12.16 %. The GDP growth rate in Industry sector has shown an increasing, but in the similar time the growth rate was in declined in the Agriculture sector -0.2% to 1.33 %. Hence, it shows that there will be increasing trend of GDP growth rate in Service and Industrial Sectors.

Sector-Wise Share in GDP

The trends in the growth of GDP can also be analyzed by comparing the sector-wise share in the total GDP of India:

TABLE 6: SECTOR-WISE SHARE IN GDP OF INDIA

Year	Sector (GDP in %)		
	Agriculture	Industry	Service
1950-51	55.40	16.10	28.50
1996-97	31.50	24.90	43.60
1999-2000	25.93	23.33	50.74
2000-01	24.88	23.82	51.30
2001-02	24.15	23.73	52.13
2002-03	24.02	23.61	52.37
2003-04	22.89	25.54	51.57
2004-05	22.37	26.28	51.35
2005-06	22.47	25.86	51.67
2006-07	21.90	26.34	51.76
2007-08	21.27	25.73	53.00
2008-09	21.83	24.33	53.84

Source: Compiled from RBI Bulletin 2008 and www.eaindustry.nic.in

The table No.6 indicates that the FDI has a direct impact an Industry and Service Sectors. The Service Sector was reached a high FDI contribution of GDP growth at 53.83% in 2008-09. The industry sector in GDP growth was from 16.10 % to 24.33 %. It indicates that there is need of FDI in the agriculture sector to increased its share in the total GDP of India.

Comparison of FDI Inflow with Import and Export

Indian entrepreneurs initially gave less importance to Import and Exports by considering the domestic market as safe. The Import and Export position of India was not satisfactory during the pre-liberalization period. However, the imports and exports were inevitable to expand the market share and earn foreign exchange in a liberalized economy. The imports and exports from various sectors of the economy during the post-liberalization period have been showing an increasing trend:

TABLE 7: TRENDS IN EXPORT, IMPORT AND FDI INFLOWS

Year	Export (Rs. In Cr.)	Growth Rate	Import (Rs. In Cr.)	Growth Rate (%)	FDI Inflows (Rs. In Cr.)	Growth Rate (%)
1991-92	44041	-	47851		351	
1992-93	53688	21.90	63375	32.44	675	92.31
1993-94	69751	29.92	73101	15.35	1787	164.74
1994-95	82674	18.53	89971	23.08	3289	84.05
1995-96	106353	28.64	122678	36.35	6820	107.36
1996-97	118817	11.72	138920	13.24	10389	52.33
1997-98	130100	9.50	154176	10.98	16425	58.10
1998-99	139752	7.42	178332	15.67	13340	-18.78
1999-2000	159561	14.17	215236	20.69	16868	26.45
2000-2001	203571	27.58	230873	7.27	19342	14.67
2001-02	209018	2.68	245200	6.21	19265	-0.40
2002-03	255137	22.06	297206	21.21	21286	10.49
2003-04	293367	14.98	359108	20.83	14301	-32.81
2004-05	375340	27.94	501065	39.53	17138	19.84
2005-06	456418	21.60	660409	31.80	24613	43.62
2006-07	571779	25.28	840506	27.27	70630	186.96
2007-08	448377	-21.58	682088	-18.85	98664	39.69

Source: www.eaindustry.nic.in and Economic Survey

It is clear that the total export from have increased in the years 1993-94 (29.92%), 1995-96 (28.64%) and 27.58 % in the year 2000-01. But in the year 2001-02 was 2.68% and -21.58% were the lowest rate in the growth rate. The Import was peak in the year 1995-96 i.e., 39.53 % in 2004-05. The growth in import, export and FDI inflows was very gradual. There will be an inconsistency in the growth rate of FDI Inflow, Import and Export.

FINDINGS

The Major Findings of the Study are:

- India is attracting foreign investment at a good rate of growth. On a average, the growth rate of FDI over the last 18 years was found to be 49 %. The main reason for this substantial growth in FDI over the last 18 years was opening of Indian economy to foreign investment, relaxation of norms for foreign investments and enhancing sector-wise limit for foreign investments.

- Out of the total sector-wise FDI inflows from August 1991 to March 2008, the service sector enjoyed the lion's share, as compared to all other sectors of the Indian economy.
- Among the top 10 investing countries in India, Mauritius and UAE have been the largest and lowest investing countries respectively, in the various sector of Indian economy from 1991 to 2008.
- FDI approvals have been increased from Rs.1345 Cr in 1991-92 to Rs. 40,206 Cr. in 1996-97 and thereafter decreased and also show the inconsistency of FDI approvals and inflows.
- The sector-wise GDP growth rate increased from 4.6 % in 2002-03 to 9.6 % in 2008-09. The GDP growth rate in Industry sector has shown an increasing, but in the similar time the growth rate was declined in the Agriculture sector -0.2% to 1.33 %. Hence, it shows that there will be increasing trend of GDP growth rate in Service and Industrial Sectors.
- The FDI has a direct impact an Industry and Service Sectors. The Service Sector was reached a high FDI contribution of GDP growth at 53.83% in 2008-09. The industry sector in GDP growth was from 16.10 % to 24.33 %. It indicates that there is need of FDI in the agriculture sector to increase its share in the total GDP of India.
- The growth was very gradual but there will be an inconsistency in the growth rate of FDI Inflow, Import and Export.

CONCLUSION

To sum up, in India, the general economic direction is towards liberalization and globalization. So before entering into the market, a close and deep look should to be provided to those areas of Government policies that can increase the GDP of the country. Attracting foreign direct investment has become an integral part of the development strategies of India. The inflow of FDI has influenced the economic growth of various states creating strong base for the latest technology developing major sectors, giving rise to employment opportunities and enhancing exports. Government should modify norms for FDI in a way to adopt innovative policies and good corporate governance practices on par with international standards, by the Government of India, to attract more and more foreign capital in various sectors of the economy to make India a developed country.

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Internet Banking Acceptance—An Extended Technology Acceptance Model

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Abstract—Internet banking acceptance has gained recent attention by researchers in India. This study uses the Technology Acceptance Model (TAM). According to the Technology Acceptance Model (TAM), Perceived ease of use and Perceived Usefulness constructs are believed to be fundamental in determining the acceptance and usage of various IT. These beliefs however, may not fully explain the user's behaviour towards a newly emerging IT such as internet banking. The Technology Acceptance Model (TAM) is extended by incorporating 'Perceived Security' as a new factor that reflects the user's security and privacy concerns in the acceptance of internet banking, and its influence on an individual's intention to adopt internet banking. It also demonstrates the significance of Computer Self-efficacy and Awareness on behavioural intention through Perceived ease of use, perceived usefulness and perceived security. Based on a sample of 655 bank customers, the results strongly support the extended TAM in predicting the intention of users to adopt internet banking.

Keywords: Internet banking acceptance, TAM, Perceived Security, Computer Self efficacy, Awareness

INTRODUCTION

The advent of the Internet and the popularity of personal computers present both an opportunity and a challenge for the financial services industry, particularly the banking industry. The Banking and Finance sector has undergone a sea change or revolution after the internet penetration. Internet banking is changing the banking industry and is having major effects on banking relationships. Banking is now no longer confined to the branches where one has to approach the branch in person, to withdraw cash or deposit a cheque or request a statement of accounts.

The Internet and Mobile Association of India report (IAMAI 2006) reveal that costs of banking service through the Internet amount to a fraction of the costs through conventional methods. Industry estimates assume teller cost at Re 1/- per transaction, ATM transaction costs at Re 0.45, phone banking at Re 0.35, debit cards at Re 0.20 and Internet banking at Re 0.10 per transaction. Hence banks seek the diffusion of internet banking as they anticipate efficiency in operating costs. However, banks cannot expect instant returns, unless the Internet population itself does not reach a critical mass. On the customers side also the advantages are many. First, there is round-the-clock access. And second, one can access the

bank from anywhere in the world at one's own convenience. Other advantages include saving time, convenience, increased access to information on their bank accounts and effective management of personal finances.

Although the Internet banking is becoming more popular among consumers, there is still no evidence of the nature and intention of that adoption. Although millions of dollars have been spent on building Internet banking systems, reports have shown that potential users may not use the systems in spite of their availability. Human beings, being creatures of habit will probably view anything that is new with caution and suspicion. The same applies to internet banking. People are cautious and often reluctant to depart from traditional ways of banking to internet banking. On the other hand globalization and its impact on the use of information technology in the banking industry compels banks to “push” clients towards internet banking

THEORETICAL FRAMEWORK

Several theoretical approaches have been used to investigate the determinants of acceptance and use of information technology (Venkatesh et al, 2003). In acceptance studies, researchers focus on the attitudinal explanations of the use of a specific technology or service. The studies rely largely on the following five concepts: perceived usefulness, perceived ease of use, attitudes towards use, intention to use and actual use. Adoption research is grounded in three models from social psychology, namely, the Theory of Reasoned Action (TRA) (Ajzen and Fishbein, 1980), the Theory of Planned Behaviour (TPB) (Ajzen, 1991) and Technology Acceptance Model (TAM). Of the three theories, TAM has emerged as the most powerful and parsimonious theory to represent the antecedents of technology usage through belief in two factors that is, perceived usefulness and perceived ease of use of an information system (Davis, 1989). Given below is a brief description of the Technology Acceptance Model.

The Technology Acceptance Model

The TAM is an adaptation of TRA specifically tailored for modeling user acceptance of new information technology (software information systems within organisations) (Davis, 1989). TRA suggests that social behaviour is motivated by an individual's attitude towards carrying out that behaviour. However, it does not specify what specific beliefs would be important in a particular situation. TAM posits that the actual usage of technology can be predicted by user's behavioral intention and his/her attitude towards use, which in turn are influenced by the technology's perceived ease of use and perceived usefulness.

Davis (1989) used the theory of reasoned Action (TRA) and developed the technology acceptance model (TAM). Based on certain beliefs, a person forms an attitude about certain objects, on the basis of which one forms an intention as to how one should behave with respect to that object. The intention to behave is the sole determinant of actual behaviour. Davis adapted the TRA by developing two key beliefs, perceived ease of use (PEOU) and perceived usefulness (PU) to determine individual's acceptance of a technology more specifically information system usage. The first of these beliefs perceived usefulness is defined as the 'degree to which a person believes that using a particular system would be

beneficial or enhance his/her job performance' (Davis, 1989). The second, perceived ease of use is defined as 'the degree to which a person believes that using a particular system would be free of effort' (Davis, 1989). A diagram of the model is presented in Figure one.

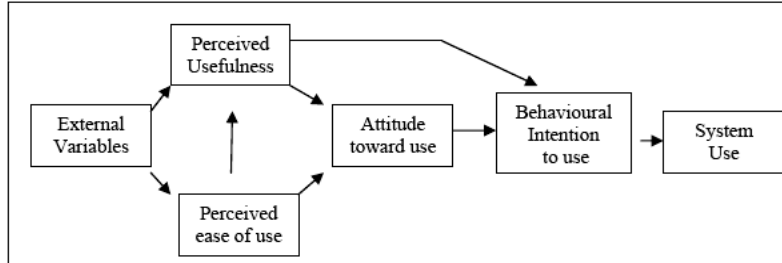


Fig. 1: The TAM

THE RESEARCH MODEL

Considering the simplicity of Technology Acceptance Model and the uniqueness of internet banking and its user groups, an extended TAM is used as a theoretical framework to examine the effects of Computer self efficacy and Awareness on users' acceptance of internet banking through attitude towards internet banking, where attitude is influenced by the three beliefs namely: Perceived usefulness, Perceived ease of use; and Perceived security.

The research model tested is shown in Figure two. Computer self efficacy and awareness have been included in the model as the individual difference variables. The model also includes an additional belief variable (Perceived security), in addition to Perceived usefulness and perceived ease of use.

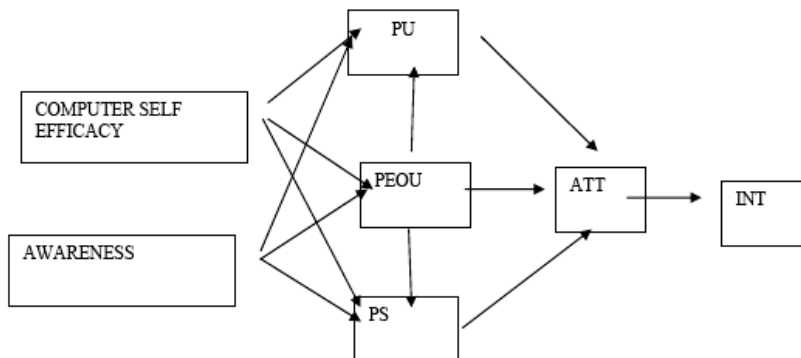


Fig. 2: The Research Model

Computer Self Efficacy

One important factor that influences the adoption of internet banking is the computer and internet proficiency of the consumer. Prior research has suggested a positive relationship between experience with computing technology and a variety of outcomes such as an affect towards computers and computer usage (Levin and Gordon, 1989; Harrison and Rainer, 1992;

Agarwal and Prasad, 1999). Self-efficacy is defined as the judgment of one's ability to use a computer (Compeau and Higgins, 1995) and has been examined by many researchers (Compeau and Higgins, 1995; Compeau *et al.*, 1999; Hong *et al.*, 2001; Agarwal *et al.*, 2000; Johnson and Marakas, 2000; Chau, 2001). Self efficacy, in this is measured as a skill level of consumers in using computers and internet. Chung and Paynter (2002) found that lack of prior use of internet banking inhibited consumer adoption. Therefore consumers who have more proficiency or skill in using computers and internet are more likely to adopt internet banking.

Awareness

Awareness is the amount of information a customer has about Internet banking and its benefit, which has a critical impact on the adoption of Internet banking. Sathye (1999) noted that low awareness of Internet banking is a critical factor inhibiting customers to adopt internet banking. Howcroft *et al.* (2002) find that lack of awareness of Internet banking services and its benefits are found to be reasons for consumers' reluctance to use Internet banking services. Guiltian and Donnelly (1983) also emphasized on the importance of awareness for the adoption of any new innovation. Suganthi *et al.* (2001) identify one of the major factors that affects the adoption or usage of any new innovation like internet banking as consumer awareness.

Internet banking literature supports that individual factor like knowledge (Sathye, 1999; Polatoglu and Ekin, 2001) has an impact on consumer's adoption of internet banking. Colgate *et al.* (2003) stated that when consumers made decisions for different alternatives in the market place, the awareness of the existing alternatives was a determinant for consumers to stay with their current banking provider. Therefore consumers who are more aware of internet banking are more likely to adopt internet banking.

Perceived Usefulness (PU)

Davis (1989) asserts that the decision to use new technology is determined by the extent to which a person believes that it is cost effective in providing goods or services compared to the current method. PU is defined as the degree to which a person believes that using a particular technology will enhance his performance. The PU is also an important variable from TAM (Araujo and Araujo, 2003; Noteberg *et al.* 2003; Gefen *et al.*, 2003; Matheison, 1991; Malhotra and Galleta, 1999). PU has been confirmed as an important variable that influences user technology acceptance and therefore has received a great deal of attention from previous researchers.

Perceived Ease of use

Perceived ease of use refers to the degree to which a person believes that using a particular system would be free of effort. According to TAM, the PEOU is one of the main variables influencing the use of technology. Extensive research over the past decade provides evidence of the significant effect of perceived ease of use on usage, either directly or indirectly through its effect on perceived usefulness (Agarwal and Prasad, 1999; Davis *et al.*, 1989; Hu *et al.*,

1999; Jackson *et al*, 1997; venkatesh, 1999, 2000; Venkatesh and Davis, 1996, 2000; Venkatesh and Morris, 2000). IT's that are easy to use will be less threatening to the individual (Moon and Kim, 2001). This implies that perceived ease of use is expected to have a positive influence on users in their interaction with internet banking systems.

Therefore the more the consumer perceives internet banking as easy to use, the more he or she is likely to adopt internet banking.

Perceived Security

Security has been identified as one of the biggest barriers for the uptake of internet banking (Sathye, 1999). Cooper (1997) and Daniel (1999) identified that an important factor affecting the acceptance and adoption of a new innovation is the level of security and risk associated with it. Security is a major reservation consumers have about internet banking. Concerns about transaction security such as potential cyber crime and errors in transactions can limit adoption of electronic technologies (Gingrade, 1998; Simms, 1999). Security is the state of being free from dangers like theft or losing money and information (Gefen *et al*, 2003). Consumer concerns about security and privacy have been noted by many experts (Miyazaki and Fernandez, 2001; Gefen *et al.*, 2003; Nissenbaum, 2004). One particular survey by Chung and Paynter (2002) identified consumer fears regarding transaction security as an inhibitor to the adoption of internet banking. Security has also been identified as a key consumer concern in other internet banking adoption studies (Black *et al.*, 2002; Siu and Mou, 2005). Hain *et al* (2003) observed that non-internet banking consumers were more concerned about security and privacy issues than internet banking consumers.

Awamleh and Fernandes (2005) revealed that security of internet banking transactions has a significant impact on customer satisfaction in internet banking. Consumer concerns about internet security and privacy have been noted by many experts in the adoption of internet banking. (Miyazaki and Fernandez, 2001; Gefen *et al*, 2003; Nissenbaum, 2004). Often people are hesitant to sign up for services that involve giving financial information electronically due to their concerns about security of transactions (O'Connell, 1999; Swaminathan, Lepkowska-White and Rao, 1999). Hence Perceived security is included in this study as a new variable. The hypotheses for the research model are presented in the table one.

TABLE 1: HYPOTHESES FOR THE RESEARCH MODEL

Hypothesis	Statement
H1	Computer self efficacy(CSE) positively influences Perceived Usefulness (PU)
H2	Computer self efficacy(CSE) positively influences Perceived Ease of Use (PEOU)
H3	Computer self efficacy(CSE) positively influences Perceived Security (PS)
H4	Awareness (AWA) positively influences Perceived Usefulness (PU)
H5	Awareness (AWA) positively influences Perceived Ease of Use (PEOU)
H6	Awareness (AWA) positively influences Perceived Security (PS)
H7	Perceived Ease of use (PEOU) positively influences Perceived Usefulness (PU)
H8	Perceived Ease of use (PEOU) positively influences Perceived Security (PS)
H9	Perceived Usefulness (PU) positively influences attitude (ATT)
H10	Perceived Ease of use (PEOU) positively influences attitude (ATT)
H11	Perceived Security (PS) positively influences attitude (ATT)
H12	Attitude (ATT) positively influences Intention to use internet banking (INT)

RESEARCH DESIGN AND METHODOLOGY

Research Tool used

Structural Equation Modeling (SEM) was done using AMOS 18. Structural equation models (SEMs) describe relationships between variables. It is similar to combining multiple regression and factor analysis. SEM offers a more effective way of dealing with Multicollinearity, and has methods for taking into account the unreliability of consumer response data.

Measures of the Constructs

A paper-based questionnaire was used as the instrument for the study. Items selected for the constructs were mainly adopted from prior studies to ensure content validity. One advantage of using TAM to examine internet banking acceptance is that it has a well validated measurement inventory (Davis, 1989) Items for Perceived Usefulness (PU), Attitude (ATT) and Intention (INT) were taken from previously validated inventory and modified to fit internet banking. (Agarwal and Prasad, 1999; Venkatesh and Davis, 1996, Wang et al, 2003) .Items for Computer Self efficacy was adapted from Compeau and Higgins (1995). Items for awareness and perceived security were measured by statements specifically developed for this study. Likert scales (1-5) with anchors ranging from “Strongly disagree” to “strongly agree” were used for all questions.

DATA ANALYSIS & RESULTS

Data was analyzed using Anderson and Gerbing’s (1988) two step approach whereby the estimation of the confirmatory measurement model precedes the estimation of the structural model. A confirmatory factor analysis using AMOS 18 was conducted to test the measurement model on a total sample size was 655 bank customers.

Reliability of the constructs was assessed by calculating the Cronbach’s alpha and for all the constructs the value was greater than the accepted level of 0.7 (Hair et al, 2006). The output showed that each indicator (factor loadings ranging from 0.59 to 0.99) loaded significantly on the constructs ($p < 0.001$), which reflects the convergent validity of the constructs (Anderson and Gerbing, 1988). Further the Average Variance Extracted (AVE) for all the constructs in the model was greater than 0.5, which again supports convergent validity. The AVE values were greater than the inter-construct squared correlation estimates which supports the discriminant validity of the constructs (Fornell and Larcker, 1891)

The chi-square (χ^2) value was 640.10; degrees of freedom (df) 328; ($p < 0.001$). Different common model-fit measures (shown in table 2) were used to assess the model’s overall goodness of fit: Root Mean Square Residual (RMR), Goodness of Fit index (GFI), The Adjusted Goodness of Fit Index (AGFI), The Normed fit Index (NFI), Relative Fit index(RFI), Comparative Fit index (CFI), Tucker Lewis Index (TLI).The model is an over identified model. The confirmatory factor analysis showed an acceptable overall model fit as shown in table two.

TABLE 2: FIT INDICES FOR THE MEASUREMENT MODEL AND STRUCTURAL MODEL

Fit indices	Measurement Model Values	Structural Model	Recommended VALUES
Root Mean Square Residual (RMR)	0.01	0.05	<0.05
Goodness of Fit index (GFI)	0.93	0.92	>0.90
The Adjusted Goodness of Fit Index (AGFI)	0.91	0.90	>0.90
The Normed fit Index (NFI)	0.97	0.96	>0.90
Relative Fit index(RFI)	0.96	0.95	>0.90
Comparative Fit index (CFI)	0.98	0.97	>0.90
Incremental Fit Index (IFI)	0.98	0.97	>0.90
Tucker Lewis Index (TLI)	0.98	0.97	>0.90
Root Mean Square error of approximation (RMSEA)	0.03	0.04	<0.05

Next the SEM was conducted on the structural model to test the hypotheses formulated in the preceding section. The model fit indices also provide a reasonable model fit for the structural model. Hence it is concluded that the proposed research model fits the data reasonably. The regression weights of the output and result of the hypotheses testing is shown in Table three. All hypotheses except H8 are accepted.

TABLE 3: STANDARDIZED REGRESSION ESTIMATES FOR THE HYPOTHESES TESTED

Hypothesis no	Hypothesized paths	Path coefficients	Supported/ not supported
H1	PU ← CSE	0.18*	Supported
H2	PEOU ← CSE	0.23*	Supported
H3	PS ← CSE	0.50*	Supported
H4	PU ← AWA	0.33*	Supported
H5	PEOU ← AWA	0.19*	Supported
H6	PS ← AWA	0.38*	Supported
H7	PU ← PEOU	0.16*	Supported
H8	PS ← PEOU	0.04	Not supported
H9	ATT ← PU	0.27*	Supported
H10	ATT ← PEOU	0.15*	Supported
H11	ATT ← PS	0.42*	Supported
H12	INT ← ATT	0.30*	Supported

* Significant at $p < 0.01$

FINDINGS & CONCLUSION

As expected, attitude ($\beta = 0.39$, $p < 0.001$) was found to have a significant positive effect on the intention to use Internet banking. The result suggests that the formation of positive attitude about Internet banking should take place before the technology can be accepted. The significant effect of perceived Usefulness ($\beta = 0.27$, $p < 0.001$), Perceived Ease of Use ($\beta = 0.15$, $p < 0.001$) and Perceived Security ($\beta = 0.42$, $p < 0.001$) on attitude is not surprising. Banks should publicize these factors to create a positive attitude amongst its customer towards Internet banking. The findings imply that banks need to make Internet banking easy to use and bank on the usefulness of internet banking systems and also project themselves as more secure.

Since perceived security is found to have a significant effect on attitude, the internet banking website should utilize the Secured Sockets Layer (SSL) technology, indicating that the transactions performed are encrypted and secured. Strategies may include development of security technology, embracing the best available encryption and firewall technology, and

adopting privacy and security policies. As security is a big concern in Internet banking, banks should highlight their promises to keep private information and transactions safe and secure. Perceived Ease of Use has a significant effect on Perceived Usefulness ($\beta = 0.16$, $p < 0.001$), but it does not have a significant influence on Perceived Security.

The results of this study supports the hypotheses that Computer Self Efficacy significantly affects Perceived Usefulness ($\beta = 0.18$, $p < 0.001$), Perceived Ease of Use ($\beta = 0.23$, $p < 0.001$) and Perceived Security ($\beta = 0.50$, $p < 0.001$). This suggests that individuals are likely to engage in Internet banking when they believe that they have the efficacy to use the technology.

The results also supports the hypotheses that consumers Awareness of internet banking significantly affects Perceived Usefulness ($\beta = 0.33$, $p < 0.001$), Perceived Ease of Use ($\beta = 0.19$, $p < 0.001$) and Perceived Security ($\beta = 0.38$, $p < 0.001$). This suggests that individuals are likely to engage in Internet banking when they are aware of the internet banking and the facilities it offers. This implies that consumer awareness of internet banking affects an individual's attitude and thereby the intention to use internet banking.

IMPLICATIONS AND CONTRIBUTIONS TO ACADEMIC RESEARCH

This study has several contributions to the information system knowledge base. First, this study has shown that perceived security is one of the important determinants of individual acceptance of Internet banking. This suggests the call for incorporating security as one of the determinants of behavioral intention to use Internet banking as appropriate.

Second, the results of this study show Computer Self Efficacy influences Perceived Usefulness, Perceived Ease of Use, and Perceived Security, and that Perceived Usefulness, Perceived Ease of Use and Perceived Security have significant effect on behavioral intention to use Internet banking through attitude towards internet banking. Thirdly, the results also shows that consumer awareness of internet banking influences Perceived Usefulness, Perceived Ease of Use, and Perceived Security, and that Perceived Usefulness, Perceived Ease of Use and Perceived Security have significant effect on behavioral intention to use Internet banking through attitude towards internet banking. The founded support of these constructs on behavioral intention demonstrates that the Technology Acceptance Model (TAM) is well founded.

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Brand Building Whims: Case Study of Century Old Banks

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Abstract—*In an era of heightened competition and re-engineering of banking services, a common problem for well established, somewhat socially oriented Century old Banks is to overcome the old traditional look and take a plunge into contemporary persona model. The route taken by banks to change consumer mindset is the “(re)branding approach” which is not just limited to redoing logos colorfully, but extends to employee motivation, refurbishing employee skills, inside-out makeover, realigning the positioning and co-branding. This conceptual paper delineates the brand development efforts of three premier banks in India. Change requires constant monitoring, consistent commitment and concerted strategies among which branding is a distinctive need.*

BACKGROUND

Like any other businesses in service sector, banks and other financial institutions are adapting branding for strategic purposes. The branding (rebranding) syndrome slowly sweeping across the Indian banking sector especially among Public sector banks can be attributed to several reasons. In the last few years, the increasing need to enhance income, especially fee based income, improve service quality, increase market share and reduce cost of operations have forced banks to alter their business models. The emerging model emphasizing contemporary concept of umbrella banking with simultaneous adoption of multiple channels for service delivery has become a reality due to sustained reengineering and computerization efforts by Banks. Further owing to financial liberalisation and competition there is little or no differentiation among products & product pricing parity; the wallet share is reduced per bank with demand on flexibility and customization. With claims that offerings in the financial services sector are relatively homogenous, brand differentiation has been portrayed as a new mantra to get closer to the customer. Branding seems to be like a potential silver lining to the ominous cloud of falling customer loyalty. In financial services having an integrated brand provides an alternative for customer relevant differentiation, without competing on price. This paper reviews the conceptual models of branding proposed by Kapferer (1997) as well as Aaker and Joachimsthaler (2000) and uses case studies of three prominent brands in banking sector to describe the approach for brand building adopted by them.

The growing importance of branding

According to BusinessDictionary.com, branding is the “Entire process involved in creating a unique name and image for a product (good or service) in the consumers’ mind, through advertising campaigns with a consistent theme. Branding aims to establish a significant and differentiated presence in the market that attracts and retains loyal customers.” Brands are not new to this consumerist world, but have become indispensable in our lives. Considered as beacons of trust, they deliver a sense of familiarity to the consumer through a perceived added value. With so much brand jargon in business these days, it is hard to understand what a brand really means to a business. It is often associated with slogans, advertising campaigns, logos, and organizational names. A brand is essentially a cluster of values, both emotional and functional, that promise a unique and welcomed experience for stakeholders.

Branding has never been considered a serious issue in the Indian banking sector with very few banks focusing on branding their products. Even though Banks in India are aggressively building scale and going global, when it comes to brand-building, they remain laggards. A July 2007 survey of global banks by the *Banker*, a *Financial Times* publication, ranked SBI at 70 and ICICI Bank at 146. Five Chinese banks were above SBI. The survey took into consideration parameters such as strength of capital, assets, soundness of capital assets ratio and profits. The prime reason that could be attributed to branding as a second thought could be the emphasis on operating efficiency and financial efficiency as preferred measures of performance. With product, price, technology parity catching up across categories, no longer differentiators, and the demand for Brands as a source of competitive advantage was inevitable. Few Banks have been already conferred with Super Brand status are HDFC Bank, ICICI Bank, HSBC Bank, State Bank of India and Canara Bank.

Re-branding is not a new phenomenon in financial service industry across the world. The Prudential Insurance Company has also revised its logo many times. The company kept the “Solid as Rock” symbolism but progressively modernized it to represent its innovative financial services until it became too modern and in the late eighties reverted it back to a more traditional logo. Canara Bank one of the most successful, century old Public Sector Bank in India whose motto is ‘Serving to grow and growing to serve’ has changed its Logo four times in the last 100 years, to remain contemporary and reorient itself to the changing times. It is interesting that few financial services firms such as City Bank, HSBC Bank, ICICI Bank, State bank of India commit to actively and consistently managing their brands. However branding as a strategic move is a relatively new concept for the Indian Banking industry. Major Banks such as Bank of Baroda, Canara Bank, Union Bank of India, IDBI Bank etc. have already gone through re-branding which is a symptom of a larger issue, They have begun to realize that if they need to play in a demand-driven economy, the brand would have to be a significant asset.

With the likelihood of increased competition in financial services sector from new entrants, the banking arena will see the presence of foreign players from 2009 onwards in line with India’s WTO commitments. Customer satisfaction studies show that New generation Banks being technologically savvy, customer centric, marketing-oriented thereby attract the young segment of customers. The strengths of PSU banks are more than required customer base, vast branch network across the country. With most of these Banks implementing cent percent computerization and inter-branch connectivity, they are turning towards branding way. As a first step towards branding, the power of various sources of communication to

reach the customers was initiated by hiking marketing budgets. Banks started to forge alliance with other business partners in insurance, mutual funds, tourism, telecom, education, retail sector etc to provide value to the consumers established on the image of trust and familiarity.

Banks serve a variety of clients with differing needs, which in turn makes it difficult to build a brand that is relevant to all groups. In general, brand management poses several challenges in financial services:

- Brand management is a relatively new concept for the industry
- Brand relevance is difficult to maintain with so many client types
- Brand positioning is complex due to variability in financial literacy and usage levels
- The similarity of product offerings by different banks makes differentiation more difficult

CONCEPTUAL FRAMEWORK

Brands, according to Kapferer (1997) serve eight functions among which the first two are mechanical and concern the essence of the brand: “to function as a recognized symbol in order to facilitate choice and to gain time”; the next three are for reducing the perceived risk; and the final three concern the pleasure side of a brand. He adds that brands perform an economic function in the mind of the consumer, “the value of the brand comes from its ability to gain an exclusive, positive and prominent meaning in the minds of a large number of consumers”.

Aaker and Joachimsthaler (2000) emphasize strategy as well as tactics in brand building. There are four challenges

1. *The organizational challenge*: to create structures and processes that lead to strong brands, with strong brand leader(s) for each product, market or country.
2. *The brand architecture challenge*: to identify brands, sub-brands, their relationships and roles. It is also necessary to clarify what is offered to the consumer and to create synergies between brands.
3. *The brand identity and position challenge*: to assign a brand identity to each managed brand and to position each brand effectively to create clarity.
4. *The brand building program challenge*: to create communication programs and other brand building activities to develop brand identity that helps not only with the implementation but also in the brand defining process.

METHODOLOGY OF RESEARCH

Realizing the timely need of branding orientation to support relationship marketing, some of the major Banks in India are undertaking a high-profile, and undoubtedly expensive, re-branding programme. After giving enough attention towards strengthening ATM networks, initiating Web banking and mobile banking platforms, banks have become conscious that long-term success lies in shedding their old-fashioned looks and coming up with a bright, colorful logo, dynamic new caption and campaigns on TV and print. To understand and conceptualize the phenomenon of branding it was felt that case study approach would be appropriate. Hence 3 Banks were chosen amongst which State Bank of India stands out

distinctly due to its large size and lineage, Canara Bank for its Financial Supermarket position and Corporation Bank for its technological orientation. Although the chosen banks firmly stood the test of time through escalating profits and operations across the country, they are into different stages of brand building. The information required to develop the case study was drawn from the public announcements of the banks and their partners. Interviews with the chairman in leading dailies also formed the input to the study. The study thus is qualitative and exploratory in nature relying on secondary data of 3 different organizations of Public sector origin with significant Government stake.

TABLE1: A SNAPSHOT OF THE PROFILE OF THE BANKS SELECTED FOR STUDY

	State Bank of India	Canara Bank	Corporation Bank
Total Business (in Rs crore)	12,84,576	3,25,112	122,496
Total deposits(in Rs crore)	7,42,073	1,86,893	73,984
Total advances(in Rs crore)	5,42,503	1,38,219	48,512
Earnings per share (in Rs)	143.73	50.55	62.24
Business per employee (in Rs lakh)	556	780	1048.86
Profit per employee (in Rs 000)	473.77	497	764
No of branches	11,540	2733	1054
No of ATMs	9502	2000+150e-kiosks	1032
Debit card holding dase	Not available	57.51 lakh	30 lakh

Source: Corporate websites of respective Banks as on March 31st 2009

STATE BANK OF INDIA

With roots stretching back to 1806, SBI the stalwart of the Indian economy was losing market share to up-coming private banks and a growing list of foreign players embarking on new technologies and new products to reach customers. With a substantial government stake of 60%, the Bank was languishing in inertia. Among the 10,000 branches, about 4000 branches give only 7-8 percent of business because these branches are located in some of the most inaccessible areas for social reasons. The prescription was innovation, but the challenge centered on getting 200,000 workers stretched across 10,000 branches to take their medicine. Communicating the need for change and shaking this huge corporate behemoth from its lethargy was a critical task (Mckinsey Quarterly).

SBI tried to reduce its over-staffing through computerizing operations and Golden handshake schemes. The Bank is also attempting to change old mindsets, attitudes and take all employees together on this exciting road to Transformation. A mass internal communication programme termed 'Parivartan' covered over 200,000 employees to drive home the message of Change and inclusiveness (Business Standard).

Given the backdrop of almost undifferentiated market existing in banking arena, positioning is considered to be almost an inherent part of brand strategy. Positive positioning is a simple concept which is associated with the effectiveness of visuals and copy of marketing communication in terms of providing clarity in the mind of the consumer. SBI with a vast network of branches and ATMs has a lineage of 200 years in banking history took a initiative in creating public financial awareness through its half a page print campaign in newspapers. The ads don't endorse SBI directly, but inform the common man (especially in

small towns and cities) about the Do's and Don'ts pertaining to routine banking facilities such as ATM, Netbanking, Net Shopping, credit cards, debit cards, mutual funds, etc. The aim of the education campaign developed by Interpub, a full service communication agency was to create a well-rounded knowledge base so that people would be better able to leverage the financial opportunities available while also creating an overall enhanced fiscal behavior pattern. A wide variety of ads touched upon the entire gamut of subjects and harnessed the potential of clear, concise communication in an impactful and relevant manner. Each ad was created with the specific intent of addressing a specific target profile. A clear course of action was provided and physical retention devices were inbuilt into each advertisement (Yogendra Gouti). Brand SBI promises lots of choices – “the widest selection” strategy, right from drawing the customer through captions such as making banking easier and simpler thus targeting common man even in these days of technology sophistication. For eg the brand tag line SBI e-Tax emphasizes that tax payment can be made in the convenience and comforts of home. SBI has tailor-made products targeted at specific segments for government and PSU employees, policemen, Nurses, medical personnel, SBI for SME etc. SBI has a wide range of home loan products and has been awarded as “The Most Preferred Home Loan Provider” by AWAAZ Consumer Awards. SBI home loans offer concessional interest rates on Green homes under its environment protection program. SBI has different options for its loan borrowers in terms of flexi, fixed and their applications during the life of the loan payment.

In the second phase of campaign, the bank is strengthening the positioning of Pure Banking and as the Banker for every Indian. The sub-brands are positioned for every behavioral need in banking. State bank of India is 29th most reputable company in the world according to Forbes.

CANARA BANK

Century old Canara Bank underwent re-branding exercise initially through change of logo and then to launch its new positioning for younger generation who prefer wide range of alternatives.

Before repositioning itself, the Bank undertook extensive market research. A cross section of its stakeholders strongly suggested that the bank needed to change with time and also adopt a collaborative relationship with its customers rather than a give-and-take relationship (Govinda Krishna seshan, 2008). The earlier logo had a poor brand recall, the earlier practice among banks was to deliberately choose complex symbols and logos to avoid easy duplication. The new logo for Canara Bank a blue and a yellow triangle interlocked is based on the idea of a bond and is a representation of the close ties between the Bank and its varied stakeholders- customers, investors, employees, institutions and society at large, with a tagline 'Together We Can'. The rich blue color connotes stability, scale and depth, in contrast the bright yellow depicts optimism, warmth and energy, the new brand identity is an attempt to position Canara Bank as the value creator and further reinforce its image as a customer centric bank. Ray+Keshavan- Brand consulting firm designed the new look. The aim of the re-branding campaign was to build a vibrant and youthful look.

The new brand identity has been supplemented by much needed changes in the internal structure and reorientation in terms of people, technology and business process management in keeping up with the new brand promise. Employees have a significant role to play in an organization that adopts brand management strategies. Management needs to ensure employees' behaviour is aligned with the brand; they need to consider the methods by which they can ensure the successful transfer of knowledge to employees that pertain to being customer focused and what the organization's brand stands for. The banks refurbished the skill levels of the employees through massive training programmes in order to improve their motivation to meet the new challenges. A reduction in administrative tiers of the bank was made by changing its organisation structure to a three-tier structure from the earlier four-tier structure to be nearer to the customers. Thus the response time has been reduced by 25 per cent, saving almost a week in some cases. These HR initiatives fetched the Bank "Global HR Excellence in Training", an award conferred by the Asia Pacific HR Congress, the largest rendezvous of HR Professionals, at Employer Branding Talent Management Congress.

Bank executives chose ad agency Ogilvy & Mather to create a campaign to communicate the change. An emotional appeal to exhibit "change for loved ones" was promoted through "slice of life" commercials in TV, print and outdoor campaigns with visuals of a father listening to music on his daughters i-Pod, South Indian mother-in-law learning Punjabi word by word to entice her daughter-in-law bride.

CORPORATION BANK

Established in 1906, Corporation Bank has a relatively small, regional and urban-centric presence compared to SBI and Canara Bank. It has been the path breaker among the Indian banks in many ways, as it was the first bank in the country to launch Cash Management Services, Gold Banking, m-Commerce and 100% Core Banking Services (CBS) compliance. According to research studies, Corporation Bank is efficient in all indicators i.e. profitability, financial management, growth, productivity, and liquidity. The Bank has won awards for excellent use of technology and its applications in banking.

Recognising and acknowledging the higher competitive pressures that the Bank faces due to its urban-focus, management is explicitly targeting branch expansion in smaller towns. The Bank also has begun exploring ways to serve the "unbanked," the lowest-income groups, which constitute much of the emerging market's population through "Branchless Banking" Model. In this model, the bank appoints a business correspondent in an unbanked area who uses modern biometric smart cards and voice-guided systems to provide secure banking operation for rural people without any barrier on timings. At present, the branchless banking model offers products such as savings bank, general credit card to its customers.

The bank is into Spartan brand building efforts positioned on "technology slot" by targeting young generation and launching value-added services enabled through ATMs, internet and mobile platforms. The bank has moved confidently and rapidly to integrate changes in the way it serves customers by ramping up its reliance on ATM (ATM to branch ratio is nearly 100%) and Internet usage calling for collaboration between parents and children by launching innovative products such as Corp Vidya. Most of the ads are just informative ads focusing on product attributes.

TABLE 2: A COMPARISON OF BRAND BUILDING PRACTICES OF THE 3 CHOSEN BANKS

	State Bank of India	Canara Bank	Corporation Bank
Slogan	“With you all the Way” Circular shape in the logo denotes unity and small circle in the centre means small man holds the key	“Together We Can” a blue and a yellow triangle interlocked	“Prosperity for all” Blending of balance, Kalpataru, Kamadhenu & Paddy
Colors of the logo	Blue	Blue and yellow	Yellow and green
Involvement of employees in brand building	Yes	Yes	Yes
Positioning the brand	“The banker for every Indian” focusing on relationships between consumer & consumer, consumer & business, family.	Emotional focus on family relationships as Peoples’ bank	Informative advertisements focusing on product attributes in the niche market
Main campaign	Trust of generation of customers through high profile advertisements and sponsoring TV programs	Single sponsor for “Canara Bank Yede thumbi haduvenu” a singer talent search program on the ETV Kannada channel.	Print, outdoor and radio campaigns. Full page advertisement on magazines, special issues etc
Brand context	Universal banking	Financial supermarket	Technological orientation
Brand consistency	Delivering clarity in communication	Intermittent	Intermittent
Brand extensions	Nurturing sub brands SBI Life Insurance, SBI Mutual funds, SBI credit cards	Canara Bank ATM	Corp ATM
Social cause	Opening branches in inaccessible areas, creating financial awareness through educational campaigns	Recognizing talent, tie ups with NGOs, identifying, training women entrepreneurs	Honoring outstanding SMEs through Corp Excel contest and student talent .Financial inclusion projects
Co brands	Association with insurance, mutual fund, airline, card agency	Association with insurance, mutual fund	Association with Life Insurance Corporation

SUGGESTIONS

1. With the introduction of self service technologies such as ATMs, Internet banking, banking has become a high involvement service. Banks need to create this involvement among capable consumers by creating awareness about the brand and its proposition or the extra benefit that brand offers in terms of value of money, time. Conveniences, flexibility, choice, new product promotion through discounts are the different slots in which the brands in financial services fit. The message should reflect the applicability to the target audience, which can be discovered through field study of that target audience and reflective of the values of the Bank as well.
2. Efforts to associate the brand with reference groups like common man, working and educated lady, mid-aged parents, young students who feel confident about using the service could invoke more interest. In case of technology enabled banking services, consumers still have fears of insecurity, negative perceptions of wrong entries, technology failure which should be removed from the minds through appropriate marketing communication.
3. Since banking involves contact between employees and customers, the primary way by which consumers can perceive added value and differentiation between financial service brands is through people-based “process” factors such as advice and expertise,

- service quality, customer orientation, flexibility and efficiency. Providing regular feedback to employees in relation to their customers through the provision of access to organizational market research reports as well as general customer comments received through informal channels is valuable.
4. Creating visibility for the brand alone through eye catching logos, advertisements will not suffice in future, because with every extra information consumer looks for credibility from that brand with every encounter. A brand could position by highlighting the negative aspects of other competitor brand and how those negative aspects are overcome and why a customer should choose this brand.
 5. The best form of co-branding is when it adds value and enhances functionality of the bank's own product. Successful co-branding occurs when both brands add value to a partnership but essentially should have same target segment. A well executed co-branding strategy can be effective in exploiting good product performance or in breaking into lucrative new markets previously unavailable or untapped by either or both of the co-branding partners.

CONCLUSION

Today Commercial banks in India operate in a sellers' market which is experiencing a boom with several brands trying to entice customers with different proposition. In consumer banking in Asia, the benchmark "80/20 rule" where 20% of customers generate 80 percent of profits does not apply, instead, only 5-10 percent of the customers account for over 100 percent of net profits. Therefore an aggressive mass media approach to build brands has to be overlooked, alternative methods such co-branding, NGO Partnerships, sponsorships, creating opinion leaders can be the solution.

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Consumer Confusion in the New Millennium— A Case Study

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Abstracts—The marketers would have us believe today that the customer is indeed king (or queen). A manifestation of this is the deluge of offers and freebies that almost assail us daily. 'Buy one! Take one free!' screams a prickly heat powder on one hand whereas a shaving cream package says '30% free!' A soap pack says '4 for the price of 3!' while a coffee powder offers a free sample pack of coconut oil! The poor customer tries his best to make sense of this confusing scenario but the marketer has to devise newer methods of hanging on to his fickle customer or even weaning him away from the competitor. Possibly, very soon, a customer may be given some freebies for just stepping into an outlet!

Keywords: Brand proliferation, customer loyalty, deal-proneness, market strategy and tactics, 'just satisfied' customer, relationship marketing

Note: This case which is based on real life incidents is only meant for classroom discussion to drive home & discuss some of the marketing concepts. It does not intend to illustrate effective or ineffective handling of business situations. The names of the characters have been changed to protect privacy

CONSUMER CONFUSION IN THE NEW MILLENNIUM

The last fifty years have witnessed a major transformation in the marketing environment in India. The main differentiator of marketing has changed progressively from output to price to quality to service later and now to choice. The Indian environment, being part of the larger global scene, is no exception. The winds of Liberalisation, Privatisation and Globalisation which started blowing through the economy from the nineteen nineties have brought in their wake a plethora of choice for the consumer for virtually every product. It is difficult to believe that in the seventies, there was a thriving black market in automobile tyres or that a decade later - in the eighties - the fastest selling scooter had a waiting list of ten years. Current period can thus be called "The Millennium of Choice".

India has witnessed a sea change as far as economic growth is concerned, ever since the triple headed policies of Liberalisation, Privatisation and Globalisation came into vogue. From what was disparagingly called 'the Hindu rate of growth' of about 3 % through most of the nineteen seventies and eighties, GDP growth has acquired such a momentum that today there is a serious debate on how to increase the rate of growth to reach double digits. The

changes this growth has brought about have affected virtually every sector of the economy and have led to a burgeoning middle class. The hero of our story, Mr. Ashik is a typical representative of this middle class.

Mr. Ashik, an engineering graduate with MBA, in his early fifties is working as General Manager (Production) in one of the prominent automobile manufacturing companies situated in the bustling metropolis of Chennai in South India. His wife, Mumtaz, is a post graduate. Of her own choice, she has decided to be a homemaker. They have two sons - the elder, Afsal is in the first year of his MBA course at one of the leading B-schools in Chennai after his graduation in Computer Engineering and the younger, Ajmal is appearing for his school final board examinations this year. The Ashik- Mumtaz family stay in Anna Nagar, an upmarket area in Chennai which is in proximity to the main industrial area near by where Mr. Ashik's place of work is located. His residential area also has access to many leading educational institutions which prompted this family to settle down here.

When the family bought a house therein more than two decades back, it was quite different from what it is today. As the area developed, small size shops catering to daily necessities would open first, be it groceries type or vegetables or food items. They were usually family owned, more often than not operated by people from certain communities from Southern part of the State. The owner or his trusted family member would sit at the cash counter and keep a stem watch on proceedings. The interior was often dingy, with dim lighting and not too many electric fans. Self-service was a concept unheard of yet; the customer thus would go to the counter beyond which there would be a bunch of delivery boys, place the order and wait for these boys to locate the material, weigh it if needed and pack it. There was nothing sophisticated about the packing, either. The usual mode of packing material was old newspaper sheets, wrapped around with lengths of string. Though the material being bought could be felt and touched on request, there was no guarantee on the weight. In many shops, the storage area could be seen just beyond the counter. Sighting of this was always not advisable as the customer could get a free congested view of Bills for purchases were normally not given and if the customer insisted, given very grudgingly. Lest this should give the impression that the entire exercise was customer-unfriendly, it must be mentioned that the owner and his boys would know their regular customers well and remember their usual preferences. If and when needed, credit in the form of monthly billing was also available at these stores.

The increase of population in the area as the city grew started a mini revolution. The locality was always an upper middle class one and to cater to the changing tastes, changed retail formats and started making their presence felt. Even the variety of goods available started changing. Branded clothes, restaurants and eating places, showrooms selling consumer durables and automobile dealerships - all made their appearance in the locality.

It has been one of the fastest growing areas of Chennai metropolis and today, there is hardly any important local or national retailer who does not have a presence here. The variety of shops has led to the Ashik family increasingly looking at shopping as a family experience, though the children do not always accompany them. As a shopper, Ashik, having been brought up in an era when there was not much consumer choice, is a bit conservative. He is a

hard core brand loyal and usually resists his family's pressure to try new products or new brands.

One Saturday evening last month, Mr. Ashik and his wife decided to go the nearby supermarket to stock up on groceries and toiletries for the next month. For a change, both their sons decided to accompany them.

The Ashik family usually patronise a supermarket operated by a Chennai based national chain, which is one of the pioneers in this field. This is despite the fact that within a half kilometre radius of this store, there are seven other comparable stores, some of which are run by national level chains, some which operate only in the State and at least one very good stand-alone local player. The major advantage the store generally patronised by the Ashik family has is that it has comfortable parking space. Other features which this store has, which its competitors in the area are trying to replicate, are a ramp for the convenience of the physically challenged and senior citizens, a play facility for children with adequate supervision and a take-away offering of very good fast food. On entering the store, the Ashik family come across a very well lit and properly air conditioned room with very customer-friendly displays and signage, with broad aisles for walking around. There are also uniformed staff present ready to help any customer when asked.

Mr. Ashik picks up a trolley and stops at the toiletries section as is his usual practice. Being a creature of habit, he starts taking 6 cakes of the family's regular bathing soap when his wife tells him "Just a minute. Look at this other brand - they have an offer of '6 soaps for 60 rupees'.

This makes it ten rupees each. Right? Our normal soap is, let's check, thirteen rupees each. Just on this one item, we'll save eighteen rupees for the month."

ASHIK: I'm sure there's something wrong. It's probably old stock or maybe a brand which doesn't sell. Maybe even from an unknown company. How do we know it is good? What if we get some skin disease or something?

AFSAL: Come on, Dad, why don't you accept that you don't want to change? The date on the wrapper says that this soap has been made this month -just 10 days ago, in fact. I read in the ET today that it is the single largest selling brand of soap in India this year and ... the same company which makes our old brand makes this one too! Let's try this out this month. Compromise - we'll buy four cakes of this brand and 2 cakes of the old brand for Vaappa (Dad).

ASHIK: The offer is only valid, if you buy 6 cakes.

AFSAL: No, they also have a 4 pack for forty rupees.

ASHIK: Okay, but I am sure we are going to regret it. What next - prickly heat powder? I'll pick up two tins of our usual brand.

Just then the younger son, Ajmal speaks up.

AJMAL: Hey, everybody, just check this out. This new brand of prickly heat powder has a great offer - 'Buy one! Take one free!' Sixty four rupees for two which makes thirty two rupees each. Mom, how many packs do we use each month and what does our regular brand cost?

MUMTAZ: We use two packs of 150 grams each and each costs forty six rupees.

AJMAL: So just on powder, we'll save forty six multiplied by two which is ninety two minus sixty four - twenty eight rupees. I can have two plates of my snack at the shop in the premises for that money.

ASHIK: Oh why don't you kids realise that money is not everything? This is an unknown company. We don't even know what they have filled the pack with.

AFSAL: Relax, Relax. You would trust a company with ISO certification wouldn't you? Well, this company has ISO 9000. Let's try this out this time, please.

ASHIK: You kids seem bent on changing me totally this month! Next time onwards, I should stop you from coming with me! Let me at least pick up my shaving cream in peace.

Mr. Ashik browses through the shaving cream shelf when a bright poster catches his attention. '30% free with FOR YOU shaving cream - pay for 70 grams, get 100 grams!' He does the calculation automatically and reckons that this tube will give him almost 50 % more shaves for the same price. He looks up and sees his two sons grinning at him. They tell him "Go ahead, Dad. Join the gang!"

Ashik grins back at them and without saying anything puts the tube of the cream with the offer into his trolley. Of course, being the man he is, he feels a twinge of regret at having ditched his old brand of 30 years. He now joins Mumtaz at the groceries and foods section. They look at each other and without saying a word, smile and change their brand of coffee - all because another brand is offering a freebie of a 50 ml. container of coconut oil. Feeling his balding pate ruefully, Ashik decides he will not have to buy coconut oil separately!

Now that the family realises that there are so many offers available, including some combination offers from the supermarket itself, they do not buy a single item at full price! When they reach home, they tote up the value of what they have saved monetarily and Ashik is astounded to see that on their monthly bill of around 1500 rupees on groceries and toiletries, they have actually saved almost 10%! This sets him thinking and a host of questions swarm about him - 'How do companies which give these offers make money?', 'Do they compromise on quality?', 'Do customers switch every time there is an offer?'....

Being a man with a logical bent of mind, he decides he has to find answers to some of these questions and the best source for that he feels would be his friend Sudheer Radhakrishnan alias Sudhi, who is the GM-Sales in one of the largest FMCG companies in India. In fact, almost all the products Mr. Ashik has hitherto been using are made by this company. Being a bit old school, Mr. Ashik does not like forsaking old loyalties and his buying a lot of new brands leaves him with a twinge of regret!

Next weekend, he gets a chance to catch up with Mr. Sudheer Radhakrishnan at the club at which both are members.

ASHIK: Hi Sudhi! Long time no see! What have you been up to?

SUDHI: Hi Ashik! I am running around the countryside trying to make my living by making guys like you buy my soaps and creams. Hey! Why do you have such a guilty look on your face?

ASHIK: I have changed my brand of toothpaste and shaving cream and soap and coffee powder - no longer your company's brands!

SUDHI: Hey what will we do without people like you? People like you who haven't changed for thirty years are those who are propping us up. What will we do now? Why did you change, anyway?

ASHIK: Your competitors had much better offers. By switching, I saved 10 % of my toiletries and groceries bill this month?

SUDHI: Valid point, boss. Each month, a new guy comes with a new offer on a new product. My margins are getting shot down terribly, I am losing customers like you by the droves, the customer is allegedly happy ... I don't know.

ASHIK: I thought I'd get some answers from you to the questions I have but you are confusing me even more!

SUDHI: What can I do, my friend! I read an article by two professors in an academic journal where they called this period "The Millennium of Choice". I'd prefer to call this The Millennium of Consumer Confusion!

However even at the end of the conversation with his friend Sudhi, Mr. Ashik still does not have an answer to the following questions!

1. Would companies be able to give these offers continuously?
2. Is price the only stimulus to which customers react?
3. How could a marketer work on retaining consumers in such a scenario?

EXPLANATORY NOTE

This case is meant for classroom discussion and aims to sensitize students to the flip side of unbridled consumer choice.

The authors feel that students of management and marketing should also get into the skins of marketers to realize the impact on organizations of brand proliferation and a continuous stream of offers by competitors. Shrinking margins, fickle customers and aggressive channel members are only some of the issues which are coming to the fore today. It is only apt that students are aware of such issues before they get into the big bad world.

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