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SIMSJMR

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Case Study-Help Jon Snow!
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FOREWORD

“Research is to see what everybody else has seen and to think what nobody else has thought”

SIMSJMR is an exclusive research journal for management students, an initiative by the Research Cell of Symbiosis Institute of Management Studies, Pune. The idea is to encourage and inculcate the practice of research among students. In this issue of SIMSJMR we have a wide array of papers covering various domains of Finance, Human Resource and General Management. The journal also includes four case studies on Investment Dilemma, business plan, business opportunity and business conflict.

First paper is a **Case Study–Investment Dilemma**. This study discusses about how demonetization drive of 2016 severely affected the business of people and they had to suffer losses due to a liquidity crunch. Since then, people have adopted the strategy of not putting all of their eggs in one basket, and they started to diversify his wealth and earnings.

Second paper is a **Case Study–Help Jon Snow!**. This study discusses about a financial model that helps in understanding the pros and cons of each investment and finally decides on an asset class (or a combination of asset classes) to get a good return on investment and meet financial goals.

Third paper is **Case Study- Muscle Might Gym**. This study aims to seek information regarding how people believe that the recent developments occurring in the locality of a particular area in the district will prove to be a profitable business opportunity and hence consider this as a crucial time to analyze the feasibility of business plan and invest in the same.

Fourth is a case developed on **Param Pharma Fillings**. The case talks of a conflict between management and trade union because of which the company had to shut their unit in that region which caused losses and ultimately other players were putting pressure of acquisition on the company.

Fifth paper is a case study in **Waste Management: Pune Behind the Curtains**. This research paper aims to study the present waste management scenario in the city of Pune, India. Waste generation is an inevitable process. Systematic disposal of waste is very essential today.

Sixth paper is **We Quit: Analysis of Attrition Intentions in IT Industry**. The purpose of this research is to analyse the factors affecting attrition among IT employees in Pune and Ahmedabad. There is a need for organizations and employees to find flexible and innovative solutions that maximize productivity by finding ways of growth opportunities within organization and the role of HR Manager in decreasing attrition levels in respective organizations.

Seventh paper is **Impact on E-Wallets due to Demonetization**. The purpose of this paper was to study and analyse the inception, acceptance and future of E-Wallets in India and as a guide to analyse the impact on E-Wallets due to demonetization.

Eighth paper is on **Relation of Repo Rates and Non-Performing Assets (NPAs) of Public Sector Banks**. This paper analyses the relation between repo rates and NPAs through statistical tools and attempts to bring out relevant deductions.

SIMSJMR provides an opportunity for student researchers to enrich the body of knowledge through their valuable research contributions. Original work in all domains of management is welcome by this journal. Kindly login to www.sims.edu to know more about SIMS as well as SIMSJMR.

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CASE STUDY – INVESTMENT DILEMMA

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The growth of the Indian Economy and availability of a highly skilled and cost effective workforce has made India a preferred destination for Multi-National Companies to set up their operations in India. Smaller Indian Companies and Suppliers that offer support services and products have also prospered. This has led to Indians having a lavish lifestyle and high disposable incomes.

Sectors like Hospitality and Retail have been the major growth drivers of the Indian Economy and accounted for over 17.5% of the country's GDP in 2016. Hence there has been an increase in demand for good commercial real estate properties that cater to the needs of these sectors. Mr. Kumar is a successful business owner. During the demonetization drive of 2016 his business was severely affected, and he had to suffer losses due to a liquidity crunch. Since then, he has adopted the strategy of not putting all of his eggs in one basket, and has started to diversify his wealth and earnings. Mr. Kumar has a monthly income of Rs. 2,00,000 per month. His household expenses hover around Rs. 60,000 per month, a Home Loan EMI of Rs. 70,000 per month and has SIPs of Rs. 50,000 per month. The remaining money is parked in a liquid fund, which is to be used for unplanned expenses. He has constructed a core portfolio consisting of stocks, mutual funds, bonds, and fixed deposits. He now has **25 Lakh Rupees** remaining, and wishes to further diversify and purchase alternate assets. After doing his research, Mr. Kumar has decided to invest in commercial real estate –

He has been presented with two options –

1. Be an investor/partner with Leisure Hospitality PVT LTD, who run a Business Hotel chain.
2. Purchase of Retail Space in an Upcoming Mall. **Leisure Hospitality PVT LTD** is an established player in the budget business hotel segment, and operates mid-sized serviced hotel apartments in the Business Hubs of popular Indian cities. The Hotel has offers and tie ups with many Multi-National Companies which has made them a very popular and preferred brand. They have recently decided to start operations in Mr. Kumar's home city of Pune, and have identified a location in Hinjewadi. The highlights of their business proposal is given below –

- ☐ Leisure Hospitality PVT LTD gets a fully furnished building constructed according to the standards and requirements of a 3 star business hotel.

- ☐ The hotel has only one standard type of room – Spacious 700 Sq. ft. studio apartment.
- ☐ They sell each room of the hotel to individual investors, who then become owners of that unit.
- ☐ On purchase of the unit, the investors immediately enter into a 30 year revenue sharing lease agreement with Leisure Hospitality PVT LTD.
- ☐ At the end of the lease agreement, a fresh lease will be executed with new terms and conditions – Subject to approval of Majority of the Owners.
- ☐ Gross Revenue Sharing Model – Total Income before expenditures is shared between all the owners of the units and the operator in a 50:50 ratio. Payment will be directly deposited into the owner's bank account on the 1st of every month.
- ☐ Pune Hotel to be Operational by 2019
 - ☐ Property is 500 meters from Rajiv Gandhi IT Park
 - ☐ Maintenance and Repairs will be taken care of by Leisure Hospitality PVT LTD.
 - ☐ The room rates have a yearly escalation of 5%.

The Pricing details of the Pune Hotel are given below:

Leisure Hospitality PVT LTD

Room Rent per day in Rupees	3500
Yearly escalation in Room Rent	5%
Total	
No of Apartments in Entire Tower	120
Assumed Occupancy Rate	70%
Property Tax to be paid per year in Rupees	15000
All-inclusive cost of each Unit in Rupees	40, 00,000

PRM Ltd is an Upcoming Indian Real Estate Company that has built its reputation as a reliable developer from its Residential and Office Projects. The company has acquired land in the Posh Locality of Viman Nagar in Pune, and is constructing a 5,00,000 sq. ft. Mall, which will be its entry in the Commercial Retail Space. The company is looking for Investors for this project. The highlights of their business proposal are given below –

- ☐ PRM LTD Constructs the Mall and its newly formed subsidiary company - PRM Property Management Services will run the Mall, taking care of maintenance, optimal brand mix, etc.
- ☐ PRM LTD has decided to retain 60% of the showrooms for itself. Hence only 40 Showrooms are available for Investors.
- ☐ Each showroom of the mall is sold to individual investors, who then become owners of that particular showroom.
- ☐ On purchase of the showroom, the investors immediately enter into a 15 year revenue sharing lease agreement with PRM Property Management Services.
- ☐ At the end of the lease agreement, a fresh lease will be executed with new terms and conditions – Subject to approval of Majority of the Owners.
- ☐ Gross Revenue Sharing Model – Total Income before expenditures is shared between all the owners of the showrooms and the operator in a 60:40 ratio. Payment will be directly deposited into the owner's bank account on the 1st of every month.
- ☐ Property is very close to residential and educational institutes.
- ☐ Mall to be Operational by 2019 will have a three screen cinema and have ample parking.
- ☐ There has been strong interest from various Brands to open outlets in this location.
- ☐ Maintenance and Repairs will be taken care of by PRM Property Management Services.

The Pricing details of the Showroom are given below:

PRM Central - Viman Nagar

Projected Rent receivable for Showroom per sq. ft.	50
Yearly escalation in Showroom Rent Area of each Showroom (In sq. ft.)	5%
Assumed Occupancy Rate	95%
Property Tax to be paid per year in Rupees	15000
All-inclusive cost of each Showroom in Rupees	40,00,000

Other Points

- ☐ Mr. Kumar is eligible for a Property Loan of up to Rs. 30,00,000 at 8.5% per annum
- ☐ It is assumed that once purchased, Mr. Kumar will not be looking to sell the asset.

As his Financial Advisor, analysis and evaluate the two investment opportunities, and suggest which property he should invest in.

CASE STUDY – HELP JON SNOW!

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Jon Snow, CEO of North Enterprises, is in the market to invest his personal savings. He is interested in three asset classes -

1. Equity
2. Debt
3. Commercial Real Estate

Since he knows nothing, create a financial model to help him understand the pros and cons of each investment and finally decide on an asset class (or a combination of asset classes) to get a good return on investment and meet his financial goals.

Profile of the Investor

Name	: Jon Snow
Age	: 30 Years
Gender	: Male
Marital Status	: Single but plans to get married within 5 years
Dependants	: None
Income	: 8, 00,000 Golden Coins Per Annum
Expenses	: 4, 00,000 Golden Coins per Annum
Current Savings	: 30, 00,000 Golden Coins
Liabilities	: Nil
Insurance	: Adequate Health and Life Insurance provided by R'hllor PVT LTD
Risk Appetite	: Medium to Low

Upcoming Expenses

- | | | |
|--------------------------------------|------------------|------------------------------|
| 1. Retirement | - 35 Years | - 7, 00, 00,000 Golden Coins |
| 2. Maester for Children's Education- | 15 Years | - 30, 00, 000 Golden Coins |
| 3. House | - 10 Years | - 50, 00,000 Golden Coins |
| 4. Marriage | - 5 Years | - 15, 00,000 Golden Coins |
| 5. Horse Carriage | - Every 5 Years- | 7, 00,000 Golden Coins |
| 6. Holiday | - Every 1 Year- | 1, 00,000 Golden Coins |

Equity

Asset Class Risk: High

Liquidity: High

Jon feels that he would not be able to invest in individual stocks, as he neither has the time or expertise to track and manage them on a daily basis. However, he is open to investing in Mutual Funds as they are professionally managed.

He has been keenly following the performance of the Westeros Large, Mid and Small Cap Index Funds and has observed the following –

Westeros Large Cap Index Fund

Average Returns : 15%
Equity Risk : Medium

Westeros Mid-Cap Index Fund

Average Returns : 20%
Equity Risk : High

Westeros Small Cap Index Fund

Average Returns : 25% Equity
Risk : Very High

Debt

Asset Class Risk: Low

Liquidity: Medium

The Iron Bank of Braavos offers investments in a variety of debt instruments. Of these, Jon is most interested in the Fixed Deposit and Bond Mutual Fund offered by the Bank. The Fixed Deposits are offered in a variety of maturity periods (7 days to 10 Years), and offer an 8% return per annum. However, post-tax these returns come down to **5.5%** per annum. Also, if these fixed deposits were to be closed prematurely, there would be a 1% penalty charged bringing down the interest to 4.5% per annum. The Bond Mutual Funds offered by the Bank generate **6%** returns per annum if held for less than 3 years and **7.5%** if held for more than 3 years (Indexation Tax Benefit).

Commercial Real Estate

Asset Class Risk: High

Liquidity: Very Low

Jon has always had an emotional attachment to the city he grew up in, and has always wanted to own property there. He has been made aware of a new shopping market being constructed just outside Winterfell. The builder is offering 18x60ft shops at a price of 20,00,000 Golden Coins. From the prevailing rental market in Winterfell, Jon can expect to receive 5,000 Golden Coins per Month as rental income.

However,

1. Property tax of 5,000 Golden Coins has to be paid per year.
2. It isn't always guaranteed that there will be a tenant. So it is assumed that the shop will be vacant for one month every year.
3. Repairs and Maintenance is expected to be 5,000 Golden Coins per year.
4. Winter is coming. This means demand for commercial property is expected to fall, and hence if Jon decides to sell the property, he will have to do so at a 20% discount on the purchase price.

CASE STUDY- MUSCLE MIGHT GYM

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Due to the recent vacancy in the 'Supreme Heritage' Commercial complex Mr. Anil Damle wants to grab this opportunity to convert the space available into a Gym. The owner wants to sell off an entire floor to the bidder as soon as possible. Mr Damle believes that the recent development occurring in the locality of Meradwadi area in the district of Ranpur will prove to be a profitable business opportunity and hence considers this as a crucial time to analyse the feasibility of his business plan and invest in the same. This location is situated approximately 10 Kms from his work place and around 13 Km from his house. The closest gym from this Location is established at a distance of 7 Km which gives Mr Anil a significantly large market to tap. Mr Anil Kumar works in an esteemed Investment Bank and enjoys the position of a Vice President. His annual Salary is Rs 42 Lakhs p.a. considering he deals with not only domestic clients but also international high network individuals. Mr Kumar owns an apartment which he had taken on a loan for which his EMI is Rs 1, 35,000 and the outstanding tenure is 4 years. He is a married man with two lovely children who are self-sufficient. With all the investments he has made over the last three decades his corpus is worth 3.5 crores out of which he plans to pull out at maximum 85% to help reduce the amount of loan he requires to purchase the floor. He approaches Ranpur Commercial Bank (RCB) which is willing to offer a loan of up to Rs 20 crores or LTV 85% (whichever is least) because of his excellent CIBIL score. His wife, Mrs Sunita Damle who works as a visiting faculty in a number of management institutes earns a salary of Rs 18.6 lakhs p.a which is sufficient to handle the expenses that come with their high standard of living however the EMI payments are made through the salary of Mr Anil.

The details are as follows

Total area of the Floor	59x35 m2 (22136.8 sq. ft.)
Rate per sq. ft.	Rs 8190/ sq. ft.
Number of rooms in the floor	4 (A, D, B, H- refer to plan)
Additional rooms to be constructed for the Gym	4
Number of lifts on the floor	2

The business plan involves adding a swimming pool which might be a tedious process considering the permission of various authorities as well as the structural engineer will be required which could delay opening up of the gym for its customers. In order to have an early breakeven Mr Anil does not want to leave any stone unturned when it comes to earning extra revenues like renting the yoga room for third party dance classes during the vacant hours.

Mr Anil has a few vendors in mind for purchasing of the gym equipments. He wants to spend at least a weeks' time on obtaining quotations from these vendors with the hope that bulk buying all the equipments will turn out to be economical since gym equipments are a one-time investment and cost a hefty amount.

Anil aspires to be the sole owner of the gym, however if sole proprietorship turns out to be infeasible he wouldn't mind getting into a partnership. This however is just one of the ideas amongst various others that could help him get started with this business venture.

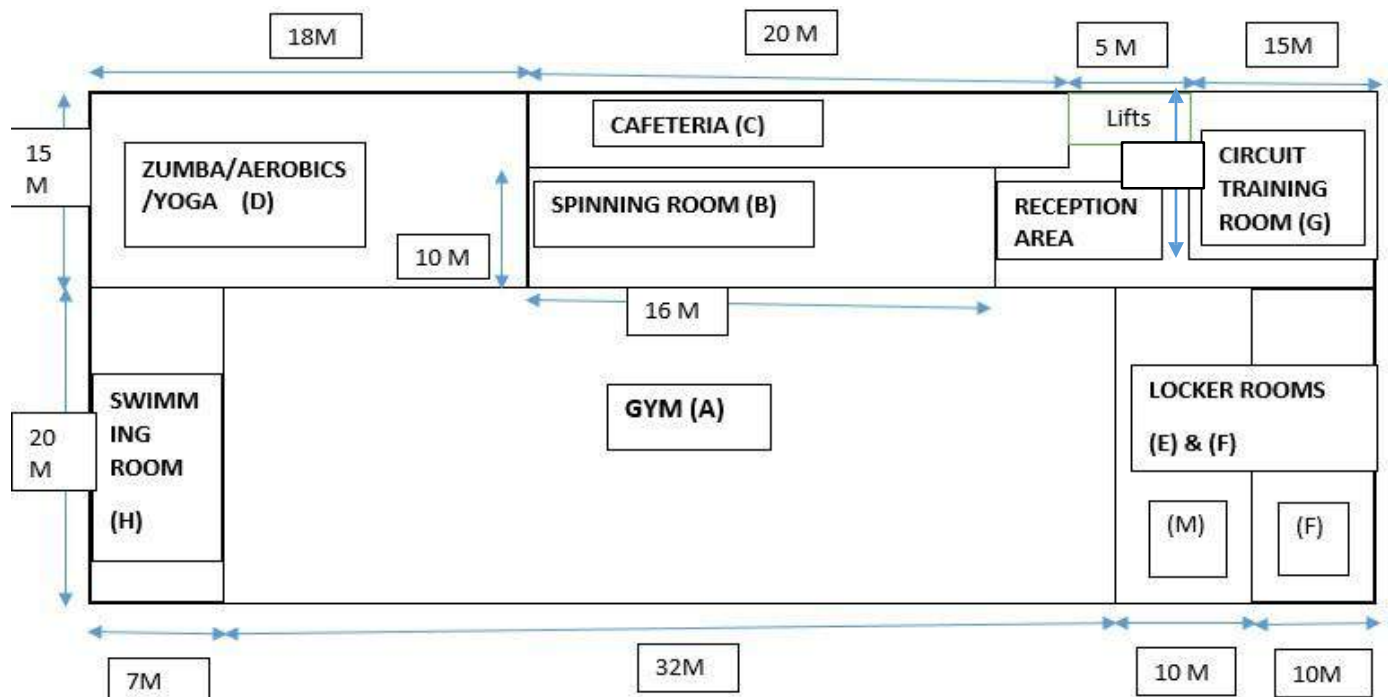
Interest on Loan	11.5%
Self Investment	Upto Rs 2.9 cr
Loan to value ratio	85%
Tenure of Loan	20
Moratorium Period	2 years

After a detailed survey the population within the 7 km radius was calculated to be around 1,47,000 out of which 17% were senior citizens (>60 years), 36% included teenagers and young adults (14 years-28 years), 42% represented between age of 28 years-60 years and remaining were <14 years. Keeping this in mind accordingly the marketing strategy and membership plans need to be decided.

Number of competitors in the vicinity	3
Population within a 7 km radius	1,47,000
Maximum utilization of the gym	85%
Rent acquired from the Cafeteria	Rs 30000/ month
Increase in rent per year	10%

Mr Anil has studied various competitor gyms and so he is adamant to obtain breakeven at max by 5 years. He doesn't want to quit his full time job to start the gym so he plans to hire a full time Gym Manager.

The gym floor plan is as follows-



M+ 100 F Maximum Capacity of Spinning room	35
Maximum Capacity of Yoga/ Zumba/ Aerobics	50
Maximum locker capacity	100
Max capacity in the weights area	90
No of lanes in swimming pool	7
Maximum utilization	90% (at peak hours -120%)
Number of shower rooms per locker room	3
Number of shower rooms per locker room	3

As a consultant we need to help Mr Anil Damle understand the feasibility of the project and if it proves to be infeasible we need to provide adequate and realistic solutions to help in making it a profitable business which could include various forms of additional revenues that can be earned by utilising the floor area. Considering that his gym will require more aggressive marketing strategies as compared to the already existing branded gyms, design one for the same. Design a membership plan keeping in mind the target audience. This plan should provide competitive rates to acquire larger market share.

CASE STUDY -PARAM PHARMA FILLINGS

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Mr. Param Bhai is an entrepreneur from Gujarat. He started his company Param Pharma Fillings, in the year 1991. The company is into manufacturing of pharmaceutical filling machines. Its operating unit is in Vadodara and since its inception, the company has done exceptional business and steadily increased its market share from 1991 to 2002, company focussed on the manufacturing of pharmaceutical filling machine. The company was successful in capturing the market near Ahmadabad and Surat, and slowly expanded its customer base.

Company Information:-

In 2003, the company set up its new factory in Mumbai and gained popularity among the pharmaceuticals companies in that region. During the year 2012-13, it became difficult for Param Bhai to operate from Mumbai unit which was responsible for up to 60% of the sales. Trade unions started influencing his workers and they started to interfere in the day to day activities of the plant from outside. Param Bhai found himself struggling against the incessant demands of the trade union leaders. The head of the trade union was not happy with the company policy and forced Param Bhai to increase salary of the worker every alternate month. There were 20 workers that worked there in the Mumbai plant, but they took more time to manufacture as a single head or double head filling machine when compared to 16 workers in Vadodara plant. There were also issues of a fight between the workers and the management and the situation was becoming uncontrollable for Param Bhai. It was bringing a bad name to his organization and subsequently loss in the market share. Also, it became difficult for Param Bhai to manage and operate both the units. So finally, Param Bhai thought of shutting down the plant in Mumbai as it was no more feasible to him and it was constant source of trouble for him. Thus, the production activities were finally seized by the end of December 2015. The company workers were paid their full dues and an offer to join the Vadodara plant was made to them. However, most of the workers did not find the offer feasible and only 2 workers agreed to join the company in Vadodara.

On being questioned by an MBA student named Aniket Patel about the marketing strategy adopted by Param Bhai for marketing his product. Param Bhai being the traditional business man replied he works in a B2B market and does not require marketing for his filling tubes.

He further added that in his industry 'word of mouth' is what works and it helps them in getting the orders. Through, word of mouth they have created a market base and deals with his clients over the call and have no online presence. The only online tool that he uses for the functioning of his business is e-mails, as it is essential in today's world according to him

Cost Involved

To make a basic filling machine it requires a period of 2.5-3 months when and the cost involved in making the machines are given below:-

Type	Single Head Filling Machine	Double Head Filling Machine
Price	2.40-2.80 Lakhs	5-5.57 lakhs

Customized filling machine rates:

Items	Quantity	Price (Rs)
Empty Tube	1	8000
Plastic Tube	1	10000
Aluminum Tube	1	12000
Ointment Tube	1	20000

The Company Also tries to make their clients go for customized tubes, so that they can earn more profits.

Payment Policy:-

The company's payment policy suggest every time an order is placed for filling machines, an advance payment of 40% has to be made by the clients and rest of the dues are settled after the machines have been as per the requirements of the client. However, owing to bad market conditions and the reservations of the client to pay an advance of 40%, the company had make changes in their payment policy, for example, now they take only 25% of the payment in advance for manufacturing of the filling machines. The repercussion of the decision is that now it has increased the overhead expense for Param Bhai. Also, there were delays in the payments from the client side which added to his financial constraint. The company gains a profit of 8.5-10% of total cost of manufacturing a filling machine. But being a capital good and bad market situation there was dearth of demand for filling machines and this was the reason why company was not able to generate healthy revenues. To add more to his woes, a well-established company named JB Fillings Ltd., from Ahmedabad set up its new unit in Vadodara. At first, Param Bhai's company was not perturbed from this competition he found it innocuous, but in October of 2015, JB Fillings

JB Fillings Ltd. saw that majority of the clients were opting for the single head filling machine in order to maximize their orders. They reduced the prices of single head filling machine and increased the prices of double head filling machine.

To add more, Mr. Param Bhai received a call from JB fillings Ltd. with the proposal of a meeting. He could not comprehend the purpose of the meeting but reluctantly agreed to go for the meeting. During the meeting, the company head of JB Fillings Ltd., Mr. Pradhan

Patel proposed Mr. Param Bhai of his plans to acquire his company, as he was struggling to sustain in the business. Param Bhai was speechless and livid hearing such a proposition and wanted to leave the meeting. Understanding the situation, Pradhan Patel offered a financial model to Param Bhai and explained it to him, how it would benefit them and also help both companies to expand more. But, Param Bhai was not interested in the idea and left the meeting without wasting any moment.

After few round of interview, he selected Harish Matkar, an MBA graduate from SIMS, Param Bhai then explained the entire situation to Harish and asked him to devise plans to establish his prominence again in the market.

WASTE MANAGEMENT: PUNE BEHIND THE CURTAINS

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Abstract

This research paper aims to study the present waste management scenario in the city of Pune, India. Waste generation is an inevitable process. Systematic disposal of waste is very essential today. Failing to achieve this would mean that by the year 2047, more than 1400 sq. km of land would be required in the country for its disposal. So we need to minimize the dependency on standard disposal methods by proper segregation and recycling of waste.

Approach

Understanding the solid and organic waste are of more importance for us than the rest of the forms of waste. The reason being that most of this waste comes directly from our households. This waste comprises of vegetable waste (25%); metals (7%); paper/cardboard (30%); textiles (5%); glass (8%); plastics (10%); miscellaneous (15%) [5]. If at all, what can we do on our part to reduce or improve waste disposal?

Focus of the paper is on initiatives taken and adopted by Pune city, to counter waste management challenges. Pune being the second largest Urban Local Body (ULB) in the states is on its path of becoming a major Institutional and Educational hub. As a part of this research the first step would be to visit some of the recycling plants in Pune to gather data and analyze it for further study. Next we would introduce the categories of waste that we come across in our daily lives. Taking hints from each category we would try to understand the best possible way to prevent treat or segregate and then dispose this waste.

Literature Review

One of the major challenges that is posed globally today is the management of municipal solid waste (MSW) due to extremely limited resources, rapid urbanization, exponentially increasing population and industrialization worldwide. In developing nations, these factors are further infuriated by improper management, technical skills and lack of adequate financial resources within authorities and municipalities.

More than 90% of the MSW generated in India is directly disposed on land in an unsatisfactory manner (Das et al., 1998). As the facilities to dispose waste are not up to the mark, this problem has already become acute in large cities and towns.

As per the research by Sharholi, Ahmad, Mahmood and Trivedi (2008), the percentage of compostable material in solid waste is almost 40-60%, paper is 3-6% and plastic, glass along with metals is less than 1%. Their paper highlights the fact that collection of waste has become

the responsibility solely of the corporations or municipalities. This has led to private contractors being employed for door-to-door collection, segregation and secondary transportation from collection points to disposal sites.

Ahmed & Ali (2004), in their study, have suggested that all those people who are not engaged by the public sector and whose livelihood depends on solid waste may be grouped into an 'informal' private sector. The term 'informal' is used because the activities of this sector are not regulated by any government agency. In their paper, they have grouped private sector operators under categories such as waste pickers, waste buyers, recycling firms, etc. They highlight that a sizeable population makes living out of picking waste. And the category of waste pickers is most vulnerable as it comprises a higher number of women and children.

In a study by Asnani (2006) he suggests that the lifestyle changes have led to an increased use of packaging material further adding to the per capita waste generation by 1.3 percent per year. Narrowing the focus to Pune city, Dhere, Pawar, Pardeshi and Patil (2008) in their analysis of how solid waste has caused air and water pollution have elaborated the current state of waste disposal site at Urli-Devachi. The air quality in and around this area is extremely poor. The average annual emission of SPM found at the disposal site is 1708.3 $\mu\text{g}/\text{m}^3$ (range 1499.7–2021.76 $\mu\text{g}/\text{m}^3$). This is higher than the permissible limit as stipulated by CPCB20.

Introduction

With the progress of 21st century there has been an excessive increase in supply and demand of goods. The number of commodities and their users has proliferated at a rapid pace during this course of time. Further increase in income and decreasing price of products is leading to product obsolescence.

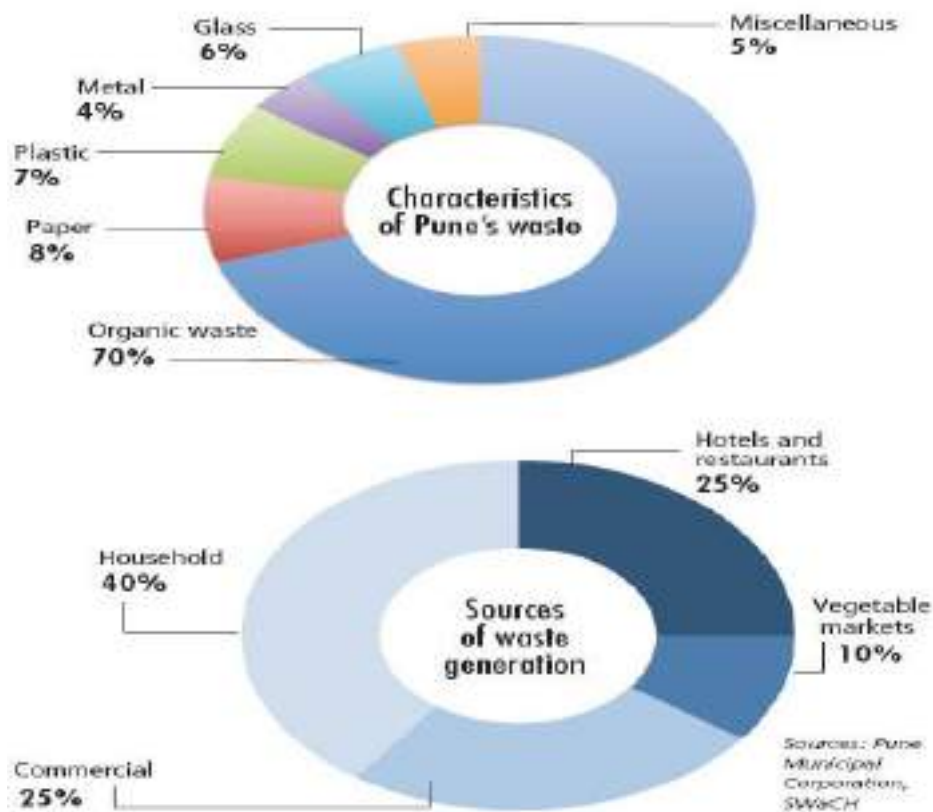
People buy products made of paper, metal and plastic and consume them for a very short period of time before disposing them off. And this use and throw culture is proving to be a curse today because more and more waste is generated on a daily basis thus amplifying burden on landfills and making the job tougher for waste pickers.

Pune city produces around 1300 tons of waste per day, a lot of which is untreated and left to decay in the landfills around city. This not only creates environmental hazards but also affects human life.

Growing consumerism and public apathy have had drastic effect on the magnitude of waste generated but unfortunately methods to process this waste are insufficient [6]. In this research paper we aim to explore existing methods of waste disposal through field visits and focus on the problems that demands immediate attention.

Waste contributors

Most of the waste Pune generates is organic, and comes from households



Section A: Solid Waste Collection and Handling (SWaCH), Pune

Stinky and gruesome was the place. Dull and dizzy were the surroundings. All one could see was a pile of rubble, mud, rags and what not. We call it solid waste.

Amidst the garbage, there stood a dilapidated structure in Kothrud Kachra Depot, Pune. Rusted doors, creaky windows and embellished with plastic roof- a roof made of plastic rags/material which sincerely promised not to fall under normal rainfall in Pune. A heap of clothes, then a few compartmentalized baskets filled with used clothes, shoes, books and old newspapers, were a few things that we came across as we entered. Such is the condition of the administrative office of SWaCH, the co-operative body which helps keep the city clean and healthy with its waste pickers employing solid waste management technique.



Figure 1: Swach administrative office, Kothrud, Pune

Progressing with our visit, we interacted with the staff (Alka Pawangadkar, personal communication, July, 2016) in the office and came to know the plight of waste pickers and the adverse impact that social class division has on them. The waste pickers have gained special skills of segregating waste but are not recognized and they continue to remain a victim of an age old social stigma in the society.

Not only do they collect waste but act as a bridge between factories and households wherein the garbage collected by them serves as a raw material for recycling industry. This door to door service is a source of livelihood for many.

Trying to get to the core of the problem we understood that 60% of the waste we produce is actually bio degradable. Growth of bacteria on something signifies presence of life and it can be termed as bio degradable, for example canvas and leather shoes, which witness algae growth during monsoons.

20% of the remaining waste is either recyclable or reusable. Paper qualifies this category as it can be recycled to make stationery items and toiletries etc., [9][10] and finally whatever is left behind like hazardous chemicals need to be disposed of in ways which are less harmful than the existing ones. Being the managers in multinational firms and the responsible citizens, it is now important for us to manage what we produce and not depend completely on the waste pickers whom we have labelled as most down trodden class of our social division.

Mismanagement of the waste disposal system is a problem and this is what SWaCH model is addressing by reducing costs. About 2300 waste pickers (Alka Pawangadkar, personal communication, July, 2016) get their hands dirty to collect and segregate waste and forward it to the PMC. And for this, they are inadequately paid and are rather ill-treated or called untouchable. The give-give notion is so prevalent in the society that for residents this service of collecting waste fails to qualify as payable with gratitude. But they miss to understand that by giving garbage to waste pickers along with a nominal amount of Rs.20 to 40 per month this becomes a give and take transaction in the long run. Also, PMC funds that are consumed by overhead expenses of fuel and labour to dump un-segregated waste can be used in providing public amenities such as dams, bridges and other infrastructure.

But the point to ponder here is why exactly do we have to separate waste? After all even in its segregated form it still is waste for us. To understand why this is the need of the hour, it is important to realize that each landfill which is not scientifically constructed degrades the soil quality over the years and further leads to underground water contamination. And this is yet another example of man threatening his own existence. In addition to this, given to the developing state of India, is it viable to leave acres of land unaccounted-wasted as landfills.

A tea bag constitutes of a piece of paper, metal staple pin, thread and cotton bag with granules in it. Proper disposal of tea bag calls for separation of these constituents before it reaches the garbage bins. Such awareness is needed in the society today and as a producer it is our responsibility. Because more is the requirement and consumption, more will be the wastage. So it is important to understand product usage life cycle. We combine all the waste and dispose it collectively in a plastic bag, feeling content with being organized. However this practice has severe repercussions as it delays the process of decomposition or recycling.

At this point if we try to think of alternatives to waste disposal, unfortunately there aren't any. Consider incinerating it and it would lead to wastage of resources thus increasing the greenhouse gas emission.



Figure 2: View from SWaCH administrative office, Kothrud, Pune

Waste management is the larger picture in which SWaCH is only one such body that is trying to make a difference by training its waste pickers to be professionals while they serve the educated class. Irrespective of weather conditions these people hardly ever take a day off. And all they expect from us is to be just a little more sensible by using different bags to dispose different kinds of waste. As a part of their work model, they try to make this task even easier for us by making small paper bags labelled according to what that bag is meant for. Imagine the plight of that poor worker who faces the disgust of opening garbage bags to find types of biomedical waste or human waste and then having to segregate it [8].

Section B: Pune Municipal Cooperation (PMC) Waste Collection/Transport Centre

Having understood that as of now PMC is dependent greatly on SWaCH as far as collection and segregation of waste from the housing societies is concerned; a PMC waste transport site is an

evidence enough to show the massive production of waste in this city. And such sites temporarily house waste not only from the residential projects around the city but also from the hotels, temples, commercial offices and industries.



Figure 3. Pune Municipal Corporation (PMC) Waste Collection Centre, Bremen Circle, Pune

As defined before, anything that cannot be categorized under dry waste will fall under the wet waste category which will include vegetable waste, Fruit waste, Food waste except oily waste, tea leaves, Coffee powder, Garden trimmings, leaves, flowers, pencil shavings, match Sticks, newspaper (good to line the waste bin with paper without using plastic covers).

PMC collects dry and wet waste in separate vehicles, thus collecting about 1300 tons per day [1]. Each vehicle has a capacity of about 7-8 tons but in spite of that PMC workers feel that the frequency of vehicles carrying waste from societies to the collection centre should be increased in order to make the city cleaner. There is a large volume of waste that accumulates during monsoons, which needs to be cleaned off the streets before it becomes a source of disseminating diseases. Public apathy further aggravates this situation as the waste lying on roadside, vacant places and outside drainages poses environmental and health hazards. In addition to this, the malpractice of throwing waste at vacant places and elsewhere makes the job of waste pickers even more difficult.

Municipalities have a proactive role to play in handling waste, as strategic placement of garbage bins encourages for systematic disposal of waste. Excel Industries provides a mobile garbage collection and treatment service called Mobitrash.



Figure 4. Garbage Collection Vehicle, MobiTrash

It treats the segregated organic waste from your own site. MobiTrash provides primary treatment to dissociated organic waste and turns it into odour free raw compost, which is carted away for further curing [2].

Section C: Organic Waste Converter (OWC) & Biogas Plant

A part of the wet waste is processed at the Organic waste composting (OWC) site. One of these OWC is located at Bremen Square in Pune city and has the capacity to produce 2 tons of wet waste per day which is ironical to the fact that Pune city produces 1300 tons of waste per day. Here the waste is nit-picked to remove plastics, metals and other non-biodegradable materials. This segregation is done manually which again highlights the plight of labourers in our country. Automation of waste segregation would not only increase productivity of the composting site but also add to the business value.



Figure 5. Manual segregation of wet waste at OWC site

This particular PMC site is managed by Excel Industries as it houses a homogeneous OWC (Organic Waste Converter) for treating the wet waste to obtain ready manure. The Excel OWC turns large amounts of organic waste into compost. The privately owned company boasts its OWC to be an ‘easy to use’ Decentralized Waste Management System”

that is designed to eliminate odour and keep away flies and rats. The manure developed is Fertilizer Control Order (FCO) compliant (administered by Agriculture Department, Government of India) and can be used in gardens or agriculture. The process is robust to handle an extremely wide ranges and grades of waste [7].



Figure 6. OWC site with the ready compost from OWC machine

The manual effort involved before the waste can be processed, stresses the problem of segregation of waste at the source itself. We prefer to dump all the refuse together in one plastic bag which is an unorganized and non-eco-friendly way of disposing waste. But this indeed only adds to the problem at the root. Collective disposal of biodegradable and recyclable waste is negligence on our part that adds to the difficulty that workers face while segregating waste. To save our time in this use-and-throw generation we've forgotten certain practices our ancestors used to follow. It won't take very long to remember that in yester years our fore fathers managed to feed animals with the kitchen waste. Leave aside animal feeding, but our changed lifestyle does not allow us to even think once about better disposal practices of kitchen waste.

The practice of packaging used today calls for a major revamp as even a small commodity is packed and protected not only to ensure safety but to win customer satisfaction. The ruthless competition between e-tailers and retailers has actually initiated a vicious cycle of waste generation as a well packed material symbolizes niche quality and exemplary level of service.

Race to win the market share thus inflicts an additional burden on landfills disturbing the ecosystem at large. The era of ecommerce as we call it, has its own ill effects. Order a mobile phone online and it accompanies at least two plastic bags. The heightened use of corrugated boxes and plastic bags is only adding to heaps of plastics and paper in every household which is sold to scrap dealers at the end of each month. We could help municipalities by reusing these and being sensible enough to not buy more plastic bags to dispose waste.

But does the entire 1300 ton of waste come from households around the city? Of course not. Hotels, commercial offices, industries etc. have a major share in it. Some of the five star hotels produce 3 tons of waste per day which indicates poor planning and management in hospitality industry. For example, quantity and amount of dishes is such that a normal person with normal

appetite would not be able to finish it (Nilesh Bhagat, personal communication, September, 2016).

This calls for a better approach towards a la carte planning which caters to the appetite keeping in mind the waste generation as well. People would definitely resort to moderate quantity of food vis-a-vis price.

However, no matter how many such control measures we incorporate or infrastructure we build to treat waste, the revolutionary change will only come from mass awareness and participation among citizens. Many of us spend hefty amount in shopping malls and other luxuries but are unwilling to contribute a little part of our earnings towards waste management. In the society where waste pickers strive to attain their livelihood, we find it worthless to pay for waste collection services.

A part of wet waste also reaches biogas plants. Like at the OWC plant, the waste here also is segregated manually. And it is unfortunate that when it is about waste, this human effort is put in by whom we've given the status of backward classes.

These waste-to-energy plants are a boon to the society today. Amidst all the grave issues and consequences of waste generation, they stand apart as saviour of the human race thus processing the waste and getting rid of it. One such biogas plants in Pune city, has a capacity of processing waste up to 5 tons [13]. The cow dung and wet waste is mixed with water in a tank and fermented to produce methane gas. The gas is then used to drive a generator which produces electricity. This biogas plant in particular is used to light up 70 to 80 street lights [15] along with sufficing the entire plant needs.

But the irony is that, even after benefiting from these plants to such a large extent they continue to be a scarce entity. Government and municipality funds are allocated majorly for the collection and transportation of the waste and not for its treatment. Only if more of such OWC sites are established could accelerate processing of waste. And this would in turn also contribute to the ecological balance.

Section D: Uruli Garbage Dumping

A large quantity of the dry is transported to a village called Uruli devachi.

Pune Municipal Corporation uses a 163-acre plot spread across three villages of Phursungi, Mantarwadi and Uruli Devachi as the dumping ground for the rest of the waste which remains untreated. This open mammoth dustbin of the city, was meant to be a 'temporary' arrangement, but 23 years on, villagers are losing hope [3]. They fear the dump yard that has rendered their farmlands infertile and water in wells non-potable may never be closed. Villages where the only source of livelihood is farming such dumping areas are a nightmare. The garbage has caused

soil pollution and degraded the soil quality to an extent that it can no more be used for cultivation.

The garbage has now become the sole identity of this place and land prices in these villages have plummeted under the weight of a garbage dump. It has also marred the scenic beauty of this place where not long ago the fields were verdant. The stench has permeated their clothes, and also their lungs. This land with overflowing garbage displays a stark contrast for a town that two decades ago dreamt of transforming itself into a 'Smart City'.

The forlorn villagers have long been complaining about contaminated water, foul smell and unhygienic living conditions with no relief at all for the past two decades.

The air in these villages is as polluted as its water. Phursungi, Uruli Devachi and Mantarwadi have a collective population of one lakh and approximately 150 clinics and hospitals [12]. The children in the villages are said to be getting prone to asthma and other respiratory diseases. One can find patients of asthma and respiratory tract infections in every household. People also suffer from all types of skin diseases apart from various aches and pains. The overall immunity of villagers is poor as they heavily depend on antibiotics all the time.

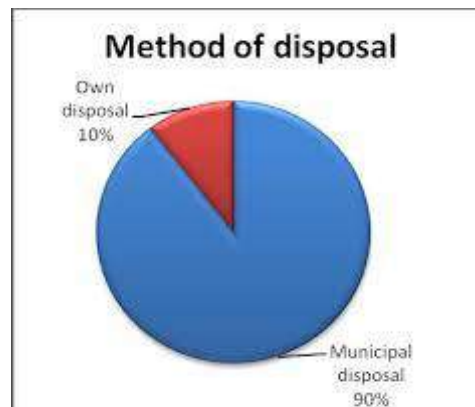
The village also reported to have faced at least 8 to 10 incidents of fire [4] at the garbage depot which were found to cover the village air with thick black toxic smoke for days after the fire broke out.

The PMC generates 1,300 tons of waste every day and had been dumping it at Uruli Devachi for long. PMC is able to cater to the waste generated in processing plants [11]. However, the present capacity cannot take care of the future and there have to be more provisions.

Conclusion

Waste management is the need of the hour and all the stakeholders namely citizens and municipalities have a pivotal role to play in it. On one hand government needs to channelize funds to facilitate waste planning whereas on the other awareness also needs to be propagated among masses.

90 % of the waste generated in the city reaches the municipalities to be treated or dumped. Whereas only 10% is treated in house by the residents around the city. There are laws which have been formulated as guidelines for the builders to construct compost pits within the premises, but due to absence of stringent checks this perspective remains unexplored. If the number of in-house treatment mechanisms are not increased, PMC will soon be unable to cater to the needs of waste management considering the sudden surge in upcoming development projects in Pune city



Source: Pune Municipal Corporation

Current scenario is such that people are reluctant to contribute even a meagre sum for waste picking because they feel it is worthless. Along with that another issue that requires immediate attention is manual segregation of waste. It is high time we start paying heed to the plight of workers who have been labelled with low social status. The least we can do on our part is start disposing waste in an organized manner, such as by segregating plastics away from kitchen waste. This in turn would also reduce the burden on waste pickers.

Management of waste is a shared responsibility of citizens as well as the municipal bodies. Consider the hotels where zero food wastage is unachievable. However there is always a scope of better planning in terms of the kind of food that is served. Carefully placing the menu items focusing on customer appetite and daily consumption can surely bring down the daily wastage. We're clear that this problem has solution. And it is going to come from us by changing a few habits. Organizations like SWaCH are acting as a torchbearer here by being the service provider in waste collection and disposal. And when nature plays its part to timely decompose whatever it produces, why can't man?

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WE QUIT: ANALYSIS OF ATTRITION INTENTIONS IN IT INDUSTRY

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Abstract

The purpose of this research is to analyse the factors affecting attrition among IT employees in Pune and Ahmedabad. The topic is selected after rigorous exercise of reading various Journals, Online Articles, white papers and News, response from HR Managers and Employees working in IT Industry. There is a need for Organizations and employees to find flexible and innovative solutions that maximize productivity by finding way of growth opportunities within organization and the role of HR Manager in decreasing Attrition levels in respective organizations. Indian software industry has had a phenomenal growth in the last two decades and is expected to sustain this momentum in the foreseeable future. Based on content analysis of 86 cases, the paper identifies several human resource management challenges: managing human resources in globally distributed team, shortage of software professionals having sufficient knowledge and competencies, low-skilled nature of the work, lack of well-developed HR systems and processes, high employee turnover, lack of work-life balance, and the problems associated with the use of contract employees. The paper develops a model for managing growth linking the various variables emerging from the study.

Design/methodology/approach: The research was carried out with the help of Questionnaire for Employees working in IT Industry. Different employees of the Indian Software industry between 21-40 years have been taken for the study. Further employees are categorized on the basis of their work experience.

Findings: The study has found that IT professional Lack in growth opportunities is having more intensions of attrition resulting in potential attrition for organization. Also, Qualitative analyses found that informants reported insufficient resources to do their jobs, inconsistent or inadequate training experiences, negative perceptions of the organizational culture and management (e.g. minimal recognition and inadequate support for professional growth or innovation), and typically positive perceptions of co-worker relationships. To examine the relative impact of these factors and background variables (age, race, office location, and position) on duration of employment, a multiple linear regression was conducted. Age, office location, position, and perceptions of organizational culture significantly predicted duration of employment

Research limitations: The key sector identified for this research was IT Industry. This research was conducted considering only Ahmedabad and Pune locations and also only middle level and high level employees in respective organizations as the target audience.

Practical implications: Growth in opportunities is one of the major factors resulting in decrease in Attrition rate. Deeper comprehension of antecedents of attrition for employees having different levels of experience taken separately; can help to understand the psyche of these employees which can be used as an indicator to predict attrition related concerns to chart future course of action.

Originality/value: The paper provides useful insights on how antecedents of attrition change when employees climb the ladder of experience in one or different organizations.

Keywords: Growth Opportunities, Attrition Rate

Paper type: Empirical Paper

Introduction

Time and again the importance of human capital management in the service industries has been stressed upon and the attrition of employees caught the fancy of researchers from decades. Keeping attrition at bay is a daunting task for most of the service industries and software industry in particular, where high quality knowledge workers are crucial for sustainable business operations and profitability. The Indian software industry is making great strides internationally because of its knowledge workers. Knowledge and expertise in different domains form the key factors in the software industry and the success of any software company depends on how efficiently it manages these assets. Being an employee centric industry, employee retention and eventually the retention of knowledge directly influences the growth trajectory of the company. A plethora of studies conducted in the past have thrown light on different issues and concerns related to attrition.

Whether a company manufactures, innovates or is a service provider, they all have one basic feature in common: they can't move into the future without Human Resources. The buzzword in current IT industry "Attrition" throws attention towards weakening of manpower in an organization. Many reasons have emerged in the last few years behind employees leaving an organization viz. improper career growth, compensation issues, extended working hours, working environment and personal issues as well. Organizations are also finding it difficult to retain employees henceforth further alleviating costs in new recruitment, training new employees and aligning them to company's environment. Thus, high attrition has become a nightmare for senior management in organizations these days.

In a human resources context, attrition is the gradual reduction or decrease in the size of a workforce. Simple ways to describe it are "how long employees are willing to stay" or "the rate of traffic focusing on getting out of the company's door". The Broad objective of this research is to find out the major reason behind employee rejecting even retention. Employee attrition

predicts and reveals that company's internal weaknesses and barriers. Hence our study will also focus on finding out possible ways of employee motivation, satisfaction and involvement within organization.

Attrition is when an employee leaves his/her current job due to various different reasons. It is when an employee ends his membership in an organisation where he or she received monetary compensation for the work done. It is reduction in the number of employees through retirement, resignation or death. Attrition takes place due to non-fulfilment of employees expectations from the organisation in return of services provided to them. Many factors play a role in the employee attrition rate of any company, and these can stem from the employer and the employees. Wages, company benefits, employee attendance, and job performance are all factors that play a significant role in employee turnover.

The Causes of Attrition:

Attrition can bring losses to an organisation as a whole. Therefore job attrition can be very costly to the organisation because it takes lot of time, efforts and resources to train and develop employee, so that they work effectively and efficiently for that particular organisation and in case employees leave their jobs it cause great loss to the company because then they have to train another employee with all the sources again. That is why attrition is very harmful.

Basically, if the employees are not interested in their jobs, they will leave. Being unhappy is not the only reason why workers leave their jobs. There are several other reasons to why attrition is occurring frequently in an organisation.

- Sometimes, individuals leave their companies because their skills are in demand, and therefore they are lured away by other companies for higher pay and better benefits.
- The other reason could be their qualifications for the job. When employees are placed in jobs that are too demanding or not challenging enough then they become discouraged and quit their jobs. This usually happens when the job descriptions are not clearly communicated to the applicants during the interviews.
- Lack of growth options within the company.
- Improper work timings
- Family pressure and personal reasons.
- Health problems due to imbalance in work-life pattern.
- Salary and other benefits
- Work environment

Objectives:

1. To find out the causes of high rate of attrition in IT sector in India.
2. To analyse the factors affecting it.

Limitations:

- The research is limited to IT Industry only.
- The survey is bound to employees working in IT MNC, in Ahmedabad and Pune.

Review of literature

Major factors of attrition & Ranking: **Nappinnai**, in **2013** suggested that meagre salary, desire to work with a global firm, lack of recognition causes of higher employee turnover while **Shankar, 2014** - Found out the Stress from Overwork, Work Life Imbalance and No Growth Opportunities contribute to a high Attrition percentage while **Dorance**, in **2014** - comprehensively studied the employee turnover attitudes. Employee leaves organization with a specific reason. Salary and Working conditions are the most contributing factors towards employee turnover. Adding to this, **Suchitrain 2014** emphasized that Dissatisfaction with Pay and lack of Recognition compels an employee to search for options outside the organization. Apart from the factors stated above **Farkiya** in **2015** found out that Interpersonal Relationships between the manager and the employee and ill-health often force an employee to file for separation.

Human Capital Trends: **Shankar** in **2013** suggested that with the emerging focus on applications of Cloud Computing and new platforms, the services and the roles are getting diversified. The industry is having a shortfall of skilled employees at the moment because of the gap between the Industry Standards and the Training Institutes while **Nappinnai** in **2013**, continued in the same vein and said Technology is advancing at an unprecedented rate. Individuals are relatively quick to adapt to ongoing innovations, but organizations move at a slower pace. Even slower moving are public policy issues, such as income inequality, unemployment, immigration, and trade. It's these gaps among technology, individuals, businesses, and public policy that are creating a unique opportunity for HR to help leaders. **(James, 2013)**- An engaged workforce is less likely to leave the organization at any cost. Quality of work has more relevance than quantity of work, An engaged workforce thus leads to better profitability, Attrition rate of top IT companies for the year 2015 Infosys India's second-largest technology outsourcer Infosys attrition rate is at 19.9%, Wipro : Attrition rate is 21.1%. **Shankar, 2013** – One in every three employee expressed concern with the Compensation. **Farkiya** in **2015** predicted that there will be huge demand for labour in Finance, Insurance and Real Estate thus raising the Employee Turnover in these sectors.

Employee attrition behaviour and Consequences: The survey conducted by **Shankar and Muneera (2013)** through survey based questionnaire. Total sample size was 120, out of which 40 samples have been collected from employees working in software companies from more than five years, 35 from those who were working here from less than five years, 17 from those who are team leaders of leading software companies and 28 from those who are working here (Shankar and Muneera2013).

The questionnaire consists of 24 questions. Initial 4 questions are related with employee's basic information where as in next 20 questions, 5 questions from each parameter namely working conditions, job related stress, personal problems and career growing with.

Employee Retention and Turnover: The survey conducted by **Michael and Chipunza (2011)** had a total sample size of 145 people who responded through a questionnaire.

The study found out that the below mentioned factors influenced retention of an employee to a great deal:

- Training and Development
- Sense of belonging to the Organisation;
- Job Security
- Challenging/Interesting work
- Freedom for Innovative Thinking

Adding to this, **Nappinnai** in **2013** said providing good infrastructure, an inspiring leader and challenging work is just not enough to engage an employee. Organisations have to give their employees the freedom to enjoy their work and an environment free from monotonous work. He also gave some employee retention strategies which are: Hire the right staff, empower and appreciate the employee while **Shankar** in **2013** found out that recruiting the Right employees is an important process but Talent Attraction and Retention is the main challenge. Increase in employee turnover explicitly means lower productivity, loss of expertise and compromise on quality. In addition to this, **Farkiya** suggested that Organisations should include recreational facilities, personal space for each employee, and career growth plan and time management skills in their curriculum so as to engage employees better.

Cost of Attrition: **Suchitra** in **2016** gave the formula to devise the Employee Turnover as:

$$\text{Employee Turnover} = \frac{\text{Total number of employees of who left}}{\text{Average no of people employed during the time period}} * 100$$

Attrition causes heavy loses to the organization, not only in terms of man power also in monetary terms. For example, if one employee leaves the company for any reason, the cost can be close to Rs. 60,000 or approximately equal to 2 months' salary. There are various costs associated with the attrition rate mentioned by **Shankarin2013**. These costs can be in terms of monetary or in terms of time wasted. Some of these costs are such as Recruitment Costs, Training Costs, Low Productivity Costs, New Hiring Costs, and Low Sales Costs etc.

Research Methodology

Selection of Topic: The study enables the researcher to find and elaborate on the attrition rate in the IT companies. It paves the way to study the impact of turnover antecedents on the IT employees' decision to stay with the organization. The study enables to know the Organizational commitment of the employees.

Research Design: To analyse employee's attrition intention and its impact on organizational outcomes 20 questionnaires with closed ended questions will be sent through mails to 100 employers working in IT sectors in different companies situated at Ahmedabad, Pune and Mumbai.

Sample: The research is considered to be a qualitative research. The target population is 100 of the organizations where the research is conducted. The element of the population is the first and middle line employees of the organization are taken under study. The method by which sampling units will be selected is by simple random sampling. Primary data collection is by using a structured questionnaire.

The data collected will be analysed using statistical tool available in the statistical package for social science (SPSS). The tools used for analysis of the data are reliability test, regression and ANOVA.

Pilot Study: Total number of samples taken by asking questions to 15 employees for pilot study. Total number of questions taken for study is 10. In this study all the respondents belongs to the age group ≤ 30 and they have experience of 3-4 years. All the respondents possess their educational qualification as Graduation and post-graduation. The respondents work nature is said to be permanent and full time only within the organization. The draft question has been added in Appendix Page No.____.

Hypothesis: Due to lack of growth opportunity, IT Industries are facing increase in attrition intensions of employees.

H0: Lack of Growth Opportunity is not one of the major factors of Increase in Attrition.

H1: Lack of Growth Opportunity is one of the major factors of Increase in Attrition.

Data Collection: The present study made use of both primary and secondary sources of data.

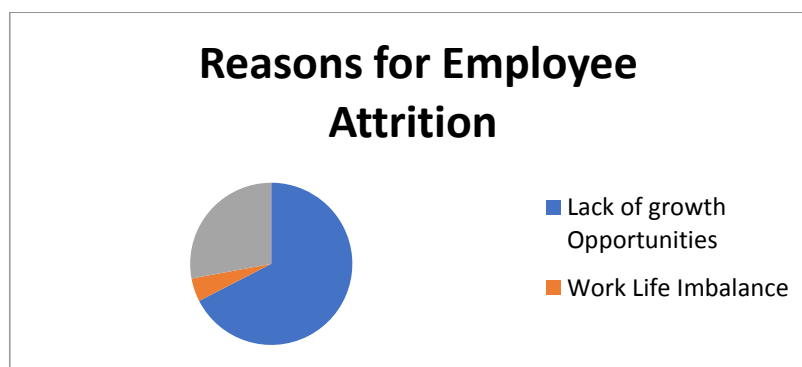
- **Primary:** The primary data will collect directly from the respondents/employers/employee by administering a pre design questionnaire/ schedule.
- **Secondary:** The sources of secondary data include data extracted from research papers from EBSCO, and the reports from IT Organization under study.

Data and analysis

The primary data has been tabulated and presented in the form of tables and graphs followed by discussio

Table 1: Reasons of employee leaving organization

S.No	Reasons of employee leaving organization		
1	Reasons for Employee Attrition	N=86	Percentage
	Lack of growth Opportunities	58	67.44186
	Work Life Imbalance	4	4.651163
	Work Environment	24	27.90698

**Figure 1: Reasons of employee leaving organization**

Discussion: From the above analysis we can infer that from all the respondents 58% employees leave organization due to the lack of growth and 24% leave due to the Work environment. Respondents who leave organization due to work life balance are 4%. The above mentioned results are similar to the result of **Shankar (2014)**, who also found that the Stress from Overwork, Work Life Imbalance and No Growth Opportunities contribute to a high Attrition percentage.

Table 2: Table showing employees Satisfaction index with Growth.

SNo	Employees Satisfaction index with Growth		
1	Satisfaction with Growth	N=86	Percentage (%)
	Not Satisfied	41	47.674
	Satisfied	41	47.674
	Very Satisfied	4	4.6512

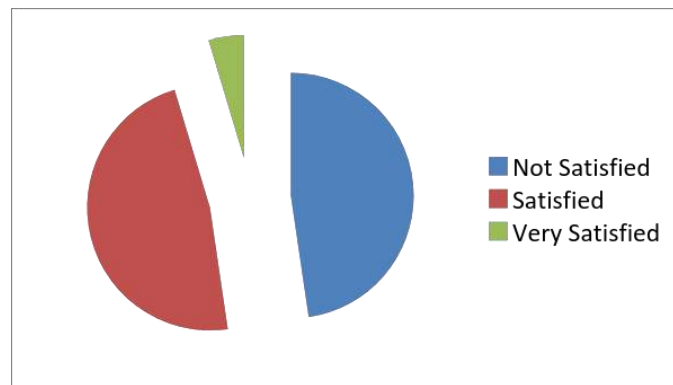


Figure 2: Employees Satisfaction index with Growth.

Discussion: An employee's perception of internal opportunities for growth and development is one of the more important predictors of employee engagement. Understanding this, there were disappointed to discover, through our latest research, that the employee perception of internal opportunities is the lowest it has ever been. The above table shows the employee's opinion about growth opportunities in various attributes. The above results are similar to result of **Suchitra (2014)** emphasized that Dissatisfaction with Pay and lack of Recognition compels an employee to search for options outside the organization.

Table 3: Growth Opportunities

SNo	Growth Opportunities		
	Better Package	N=86	Percentage (%)
	Yes	75	87.2093
	No	11	12.7907

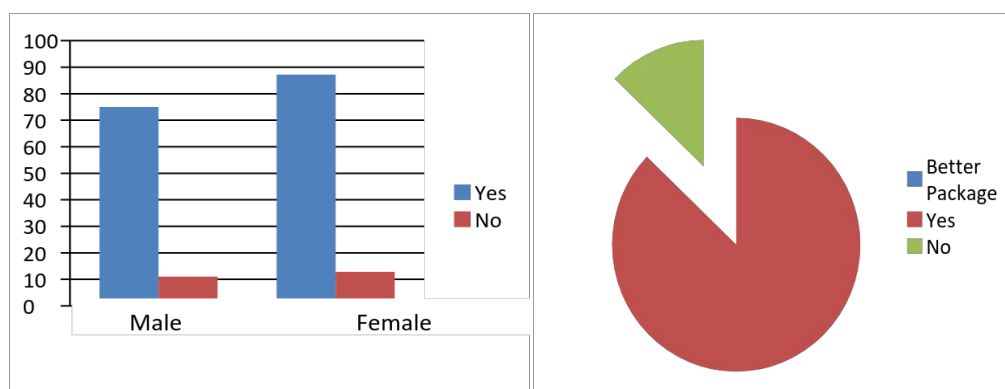


Figure 3: Growth Opportunities

Discussion: From above analysis we can infer that among the respondents who are working in various IT field 87% feel there is positive growth in organization and rest found it No growth opportunities in organization.

Table 4: Clarity on Communication with senior management.

1	Clarity on Goal Communication	N=86	Percentage (%)
	Yes	44	51.1628
	No	42	48.8372
2	Communication from Management	N=86	Percentage (%)
	Yes	55	38.3721
	No	31	54.6512

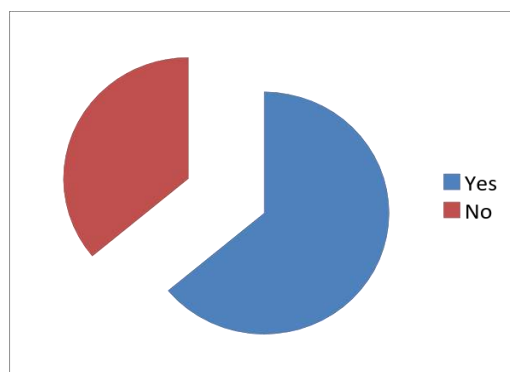
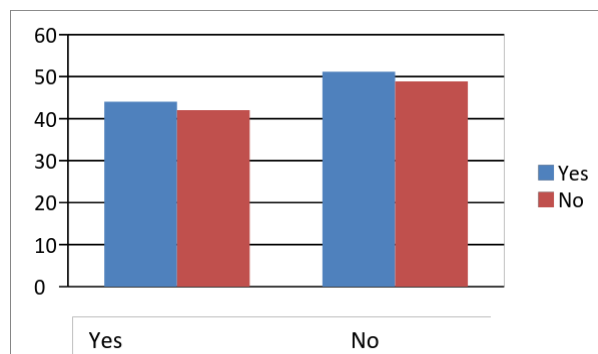
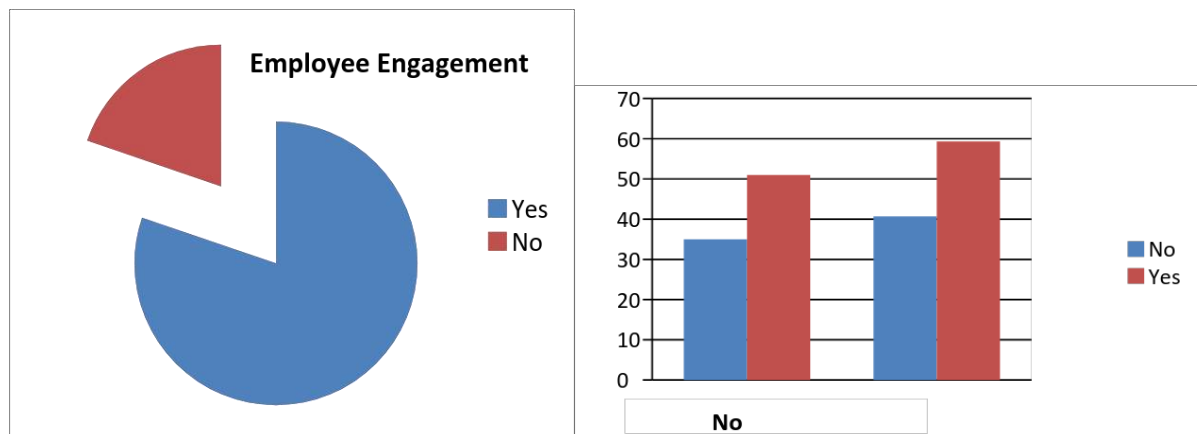


Figure 4: Clarity on Goal Communication

Discussion: In an organization communication occurs between members of different hierarchical positions. Superior-subordinate communication refers to the interactions between organizational leaders and their subordinates and how they work together to achieve personal and organizational goals. The following table shows the employee's opinion about superior – subordinate relationship in various attributes.

Table 5: Employee Engagement

S.No	Employee Engagement		
1	Employee Recognition	N=86	Percentage (%)
	No	35	40.6977
	Yes	51	59.3023

**Figure 5: Employee Engagement**

Discussion: Employee Recognition is the timely, informal or formal acknowledgement of a person's or team's behaviour, effort or business result that supports the organization's goals and values, and which has clearly been beyond normal expectations. The following table shows the employee's opinion about superior – subordinate relationship in various attributes. The following table shows the employee's opinion about recognition in various attributes.

Conclusion and recommendations

Employee Attrition is an issue that can be found in many companies today, but escaping this issue is not a concept that is unattainable. From research, and as reflected in this paper, Attrition can be drastically reduced by simply gaining the commitment and dedication from employees.

All other factors deterring employees from organizational commitment such as non-interest or little or no satisfaction stem from them possessing true loyalty and commitment for their organization.

In order for companies to stray away from the horrible effects of turnover, it is best that they develop prevention methods such as in dept. hiring/selection process or exit interviews, that allow them to sustain employees. When Attrition is suspected within an organization, an accurate measure of past and existing Attrition must occur and the cost associated with turnover must be analysed. Once both of these issues have been studied, companies can decide on the proper solutions according to their analyses, the ultimate one being the attainment of employee loyalty and commitment.

To conclude, IT firms need to understand that now, the case is not about giving more salaries and preventing the employees from leaving. Employees need much more than what is obvious. A long-term relationship needs to be established with its employees.

Moreover, employees in this sector need a lot of personal space and a well thought-out career growth plan. Also, HR practices are needed to be fine-tuned so as to get the right kind of employees. Some of the strategies suggested in this paper can be very easily implemented without any cost to the company.

Some other strategies are not so easily implantable, but are very important for the growth of this sector, and are necessary for benefiting the country on the whole.

Recommendations

- Working conditions should be improved.
- Employee should be valued as a part in his office.
- The communication between the staff and the management should be effective.
- The office policies should be supportive to the employees.
- Workloads in the office should be distributed equally.
- There should be a regular staff meeting conducted by the management.
- Employees should be given constructive feedback about the work performed.
- Retention Strategies Including below:
 - a. Providing Relevant Talent- companies should think of training as career development.
 - b. Job Enlargement- doesn't constrain them in particular position. Think for next step.
 - c. Fostering a culture of management concern- companies must help them develop their full potential.
 - d. Rewarding managers- should be awarded for their technical and financial results.
 - e. Clearly identify the people you want to keep.

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IMPACT ON E-WALLETS DUE TO DEMONETIZATION

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Abstract

Purpose – The purpose of this paper was to study and analyse the inception, acceptance and future of E-Wallets in India and as a guide to analyse the impact on E-Wallets due to demonetization.

Design/Methodology/Approach – The research was designed using quantitative technique in the form of a questionnaire for the primary source of information which was sent to respondents to get an insight on usage of E-Wallets. For detailed analysis to know more about impact on E-Wallets due to demonetization the journals, research papers and news articles were used as a secondary source of information.

Findings – The research has been clearly indicated that the usage of E-Wallets has been increased drastically among the people after the demonetization. People started preferring E-Wallets as a payment method instead of Cash payment method. The research also lent evidence to the fact that there will be huge scope and opportunities for the digital payment players to increase their market size. This will have a positive impact and will encourage E-Wallets companies, bank as well as other payment service provider to launch more initiatives which might increase private consumption.

Research Limitation/Implications – The research was limited to respondents with in the age group of 15 – 60 years from different cities in India. As there is a growing competition between banks and E-Wallets companies, this paper will help E-Wallets companies to understand how digital payment service provider and banks are coming up with innovative mobile wallets apps and to also help them to take the required measures accordingly to improvise on their features in their E-Wallets apps.

Practical Implication – This research will assist banks to increase their market share by ascertaining and taking necessary steps to reach out to those customers who are aware of E-Wallets but are hesitant to use them.

Keywords – Demonetization, E-Wallets, Mobile Wallets, Mobile Banking apps, UPI

Paper Type – Empirical Research

Introduction

DEMONETIZE, the dictionary meaning is “To deprive (a metal) of its capacity as a monetary standard” or “To withdraw from use as currency”. On the night of 8th November 2016, the Indian Prime Minister made a surprise announcement on the television that currency notes of 500 and 1000 denominations were to be withdrawn from the market with immediate effect. The government stated that citizens had nothing to fear. People holding the two denominations could either deposit them in banks or exchange them at the bank for new currency notes.

The higher denomination banknotes in Rs 1,000, Rs 5,000 and Rs 10,000 were reintroduced in the year 1954 and these banknotes were again demonetized in January 1978. So the last time demonetisation was done in India is almost 36 years ago.

Objectives

1. To study the role of demonetization.
2. To study the impact of e-wallets against human behaviour.
3. To analyse the market strategy of e-wallets.

Limitations

1. The research is restricted to Indian economy.
2. Respondents' age is between 15 years to 60 years.

Review of literature

Demonetization

Alvares (2009) in his report, “The problem regarding fake currency in India.” He said that the country's battle against fake currency is not getting easier and many fakes go undetected. It is also stated that counterfeiters hitherto had restricted printing facilities which made it easier to discover fakes. **Veerakumar (2017)** in his article, “A study on people impact on demonetization” said that the demonetization of the highest denomination note undertaken by the government is a big shock to the people, taken for several measures such as tax evasion, counterfeit currency and funding of illegal activities. Some people are depositing currency notes in excess of specified limits directly into bank accounts has showed the unaccounted income, subject to higher tax and other penalties. Alternative payment methods, such as e-wallets, online transactions using e-banking, debit and credit card usage have been increased and this will shift an efficient cashless infrastructure. However **Asra (2017)** in her article, “Effects of Demonetization in India” said that the impact of the shock is a function how much of the currency will be replaced till the end. The demonetization is taken for several measures such as removing black money from public; it stops corruptions and fake currency. However it is unfair to expect because it is a first step to cashless society which is good for country. The

step taken by the government is right which is going to give a positive impact on economy or country not in immediate way but definitely it will support the Indian economy. Also **Thilagavathi (2017)** said in his article, “impact of demonetisation in India” that Although the comprehensive long term impact of these demonetization measures cannot be fully ascertained at this stage, the overall economy is expected to benefit from a decrease in unaccounted cash transactions and an elimination of counterfeit currency notes, leading to more effective tax collection and increased transparency in ascertaining transaction costs. An increase in transparency is also likely to improve attractiveness for foreign investors, while higher bank deposits and formalizing large hitherto unaccounted for income streams is expected to improve the fiscal deficit of India.

Cashless payment

Das and Agarwal (2010) in their article, “Cashless Payment System in India- A Roadmap” said that Cash as a mode of payment is an expensive proposition for the Government. The country needs to move away from cash-based towards a cashless (electronic) payment system. This will help reduce currency management cost, track transactions, check tax avoidance / fraud etc., enhance financial inclusion and integrate the parallel economy with main stream. Also, **Kaur (2017)** in her article "Demonetization: Impact on Cashless Payment System" said that the cashless transaction system is reaching its growth day by day, as soon as the market becomes globalised and the banking sector grows, more and more people will move from cash to cashless system. The cashless system is not only requirement but also a need of today society. All the online market basically depends on cashless transaction system. The cashless transition is not only safer than the cash transaction but is less time consuming and not a trouble of carrying and trouble of wear and tear like paper money. It also helps in record of the all the transaction done. So, it is without doubt said that future transaction system is cashless transaction system.

Demonetization, Cashless payment and E-Wallets

Choubey (2017) in his article, “Demonetization and its impact on adoption of Digital Payment: Opportunities, Issues and Challenges” said the digital payment had given relief and force to learn digital transaction after demonetization. People adopted technology slowly, but don’t wanted to pay extra for digital transaction. However, people of India faces money problems during demonetization they suffer with no cash. In addition, for this medium like paytm helps them. Also Dhamija (2017) in his article, “impact of demonetisation E-Commerce Websites and payment system” It is clear that demonetization has impacted the ecommerce industry. Due to demonetization consumers are buying products through online mode instead of retail shops due to cash crunch. The consumers have adopted new method of making payment where prior to demonetization, consumers were making payment by choosing the cash on delivery option but now majority of them are shifted to debit card and Paytm wallet to make payments. Indu (2017) in her article, “Awareness of E-wallets among people” also said that the banking system evolved, it became easier, safe and even remunerative to keep one’s money in a bank account

and it became still easier and safe to use, transfer money in bank accounts for making payments for the economic transactions. This was more so for large value transactions

Research Methodology

The study enabled the researcher to find and elaborate on the use of wallets among people post demonetization. The study was carried out through questionnaires among the people in India aging from 15 years to 60 years. The respondents were ranging from students to working professional.

A sample study was conducted among random 20 people using sample questionnaire and the data was analysed.

Hypothesis: The use of e-wallets has increased post demonetization.

The data collected is tabulated and discussed in the form of tables and graphs. Appropriate statistical tools have been used for analysis and testing of hypothesis.

Results and Analysis

Tables

Table 1: E-Wallets Company

S.No.	E-Wallets Company	n=100	Percentage
a.	Paytm	84	84%
b.	MobiK wik	5	5%
c.	Oxygen	2	2%
d.	PayUmoney	4	4%
e.	Others	3	3%
f.	None of the above	2	2%

Table No.2: Usage of E-Wallets post demonetization

S.No.	Duration of using E-Wallets (in months)	n=100	Percentage
a.	1-6	47	47%
b.	7-12	1	1%
c.	13-18	21	21%
d.	19 & above	23	23%
e.	Not applicable	8	8%

Table No. 3: Rating of E-Wallets Service

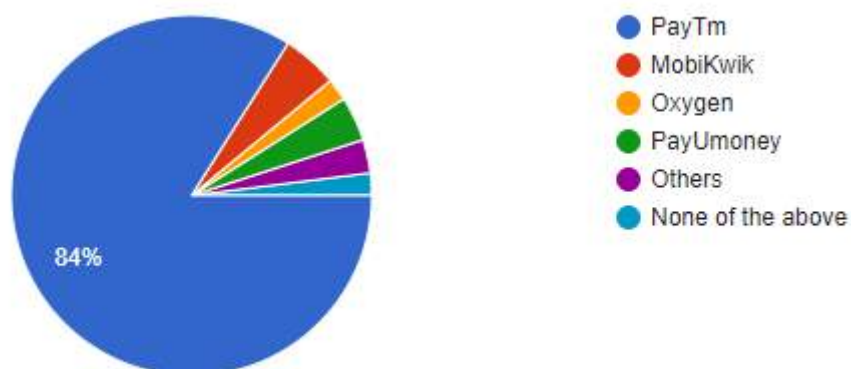
S.No.	Rating the E-Wallet service	n=100	Percentage
a.	Very High	14	14%
b.	High	56	56%
c.	Average	26	26%
d.	Low	2	2%
e.	Very Low	2	2%

Table No. 4: Preference of E-Wallets over Cash Payment

S.No.	Preference of E-Wallets over Cash Payment	n=100	Percentage
a.	Yes	79	79%
b.	No	21	21%

Table No. 5: Continue using E-Wallets in the future

S.No.	Would continue using E-Wallets in the future	n=100	Percentage
a.	Yes	79	79%
b.	No	2	2%
c.	Not Sure	19	19%

Figures**Figure 1. E-Wallets Comapany**

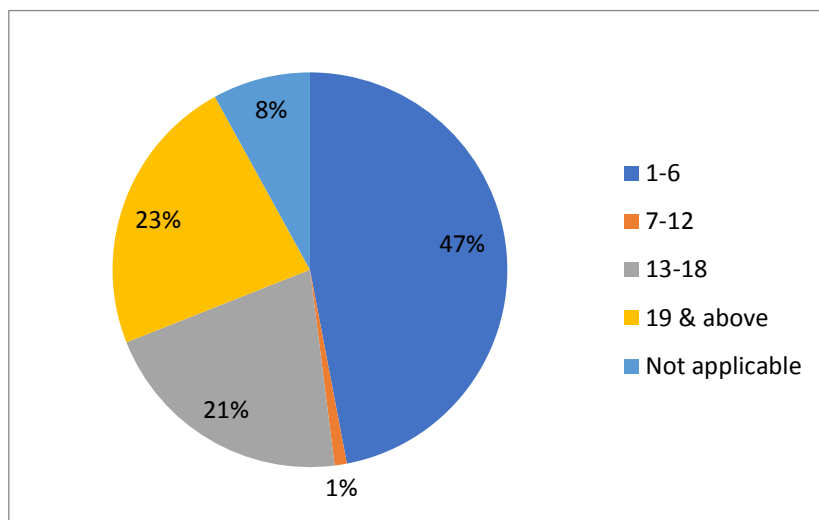


Figure 2. Duration of using E-Wallets

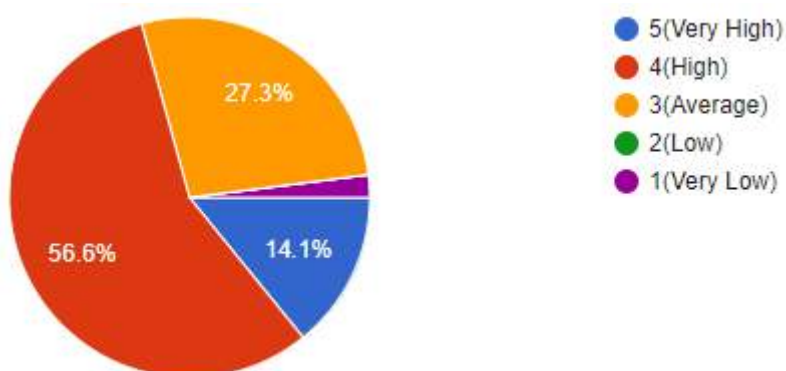


Figure 3. Rating of E-Wallets Service

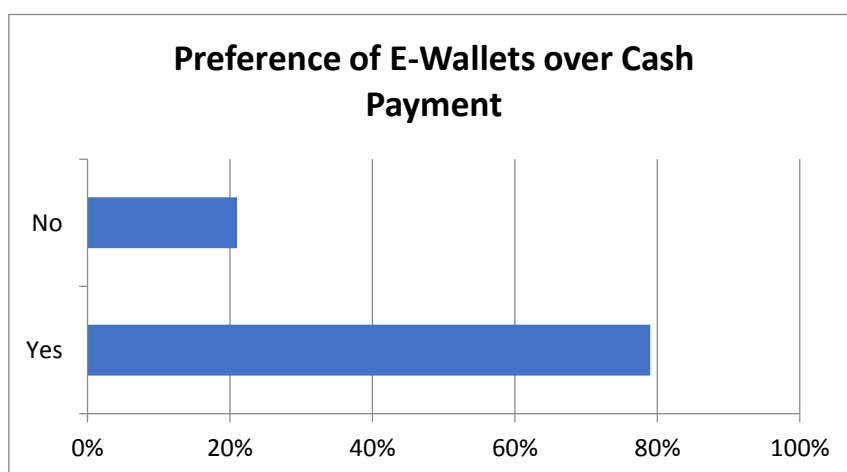
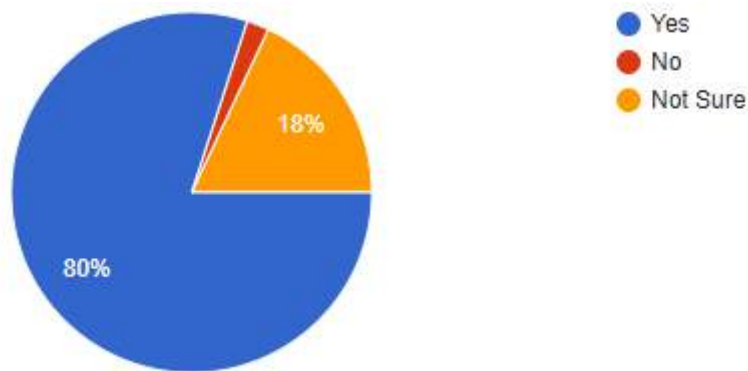


Figure 4. Preference of E-Wallets over Cash Payment

Figure 5. Continue using E-Wallets in the future



Conclusion

The cashless transaction system is reaching its growth day by day , as soon as the market become globalised and the growth of banking sector more and more the people moves from cash to cashless system. The cashless system is not only requirement but also a need of today society. All the online market basically depends on cashless transaction system. The cashless transition is not only safer than the cash transaction but is less time consuming and not a trouble of carrying and trouble of wear and tear like paper money. It also helps in record of the all the transaction done. So, it is without doubt said that future transaction system is cashless transaction system.

The research has been clearly indicated that the usage of E-Wallets has been increased drastically among the people after the demonetization. Respondents preferred E-Wallets as a payment method instead of Cash payment method. The research also lent evidence to the fact that there will be huge scope and opportunities for the digital payment players to increase their market size. This will have a positive impact and will encourage E-Wallets companies, bank as well as other payment service provider to launch more initiatives which might increase private consumption.

The majority of the respondents being in the bracket of 21-40 years who were young and extensively used E-Wallets post demonetization. Due to which there was high competition for the companies providing the e-wallet facilities. As per the research most of the respondents are used Paytm as the preferred payment option.

Recommendations

The government's demonetization move, and the subsequent cash crunch, has led to a surge in digital payments. According to the government data, the number of daily transactions through e-wallet services such as Oxygen, Paytm and MobiKwik has shot up from 17 lakh — recorded on November 8 when demonetization was announced — to 63 lakh as on December 7 (a growth

of 271%). In terms of value, the surge has been 267%, from Rs 52 crore daily to Rs 191 crore now. Transactions through RuPay Cards (e-commerce and pointof- sale) were up 316% at 16 lakh daily, while in terms of value the growth has been 503% at Rs 236 crore.

The government and digital payment companies expect the trend to stay strong. The trend got a boost after Finance Minister Mr Arun Jaitley's announcement of a slew of incentives for digital payments. The surge has been encouraging and in line with the government's thinking of promoting digital transactions "to drive in honest, accountable and transparent" payments, said Ravi Shankar Prasad, minister for electronics and IT.

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RELATION OF REPO RATES AND NON-PERFORMING ASSETS (NPAs) OF PUBLIC SECTOR BANKS

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Abstract

India faces a challenge to its financial integrity from the exponential rate at which Non Performing Assets of its Public Sector Banks are increasing. There have been warnings from the regulatory authorities that the figure may cross 12% in the near future. This paper analyses the relation between repo rates and NPAs through statistical tools and attempts to bring out relevant deductions. Top 5 Public Sector Banks have been studied with relevant Correlation and Regression Analysis on NPA data. The findings of the study need to be appreciated holistically as the current NPA issue cannot be viewed in isolation as being caused by repo rates alone.

Keywords: Non Performing Assets, Repo Rates, Public Sector Banks

Present Status of NPAs

As on June 2016 the total Non-Performing Assets (NPA) for Public and Private Sector Banks in India was about Rs 6 lakh Crores. Out of these the amount of top twenty NPA accounts of Public Sector banks was Rs 1.54 lakh Crores. These had risen to Rs 8 lakh 29 thousand Crores by Jun 2017. These figures are alarming and reflect a poor state of bad loans in the Indian Banking Sector. Presently, the State Bank of India has highest value of NPA at 1,88,068 Crores followed by Punjab National Bank at 57,721 Crores. Bank wise NPAs of top 38 banks as on Jun 2017 with rise in NPA ratios over the last one year are given in Table 1.

Importance for early resolution of NPAs

Impact of Solvency and Liquidity of Banks- Liquidity is the ability of the banks to honour their short - term liabilities. Solvency is the ability by banks to honour their long – term liabilities. NPAs have an impact on both solvency and liquidity as the value of the bank assets goes down if they become unrecoverable.

Impact on Private Investment - The present expansion of Indian Economy is supported by Consumption and Public Investment. This leads to higher priority being given to Public Investment. Private Investment is necessary to revive long – term sustainable growth in India and is lagging behind due to high NPAs and debt ridden banks. Banks attach more risks to giving out loans as they do not want further addition to their NPAs.

Impact on Interest Rates - An increase of NPAs implies banks attach more risks to giving credit. In order to compensate for such risks, the banks may increase the interest rates thereby

increasing the cost of borrowing. The income of banks reduces with the added requirement of higher provisioning compared to standard assets. The profitability of the banks is affected. Increase in NPAs reduces the ability of the banks to lend more resulting in Credit Contraction.

Table No 1: Bank Wise Gross NPAs as of June 2017 (Rs. Crore)

Bank	NPAs	Bank	NPAs
State Bank Of India	188,068	Indian Bank	9,653
Punjab National Bank	57,721	HDFC Bank Ltd.	7,243
Bank Of India	51,019	Vijaya Bank	6,812
IDBI Bank Ltd.	50,173	Punjab & Sind Bank	6,693
Bank Of Baroda	46,173	The Jammu & Kashmir Bank	5,641
ICICI Bank Ltd.	43,148	Kotak Mahindra Bank	3,727
Canara Bank	37,658	IDFC Bank	2,004
Union Bank Of India	37,286	The Federal Bank	1,868
Indian Overseas Bank	35,453	KarurVysya Bank	1,807
Central Bank Of India	31,398	The South Indian Bank	1,696
UCO Bank	25,054	The Karnataka Bank	1,691
Oriental Bank Of Commerce	24,409	Yes Bank	1,364
Axis Bank Ltd.	22,031	IndusInd Bank	1,272
Corporation Bank	21,713	The Lakshmi Vilas Bank	878
Allahabad Bank	21,032	City Union Bank	735
Syndicate Bank	20,184	RBL Bank	458
Andhra Bank	19,428	Dhanlaxmi Bank	354
Bank Of Maharashtra	18,049	DCB Bank	285
Dena Bank	12,994	Total	829,338
United Bank of India	12,165		

Source: AceEquity

Table 2: Summary of Gross NPA Positions and Ratios

	NPAs Rs Cr	NPA Ratio
Mar-16	571,841	7.69
Jun-16	618,109	8.42
Sep-16	651,792	8.81
Dec-16	677,443	9.18
Mar-17	711,312	9.06
Jun-17	829,338	10.21

Hypothesis

The aim of this research paper is to investigate whether a change in the repo rates has a corresponding effect on the quantum of NPAs held by Public Sector Banks. To carry out research into the subject, hypothesis as given in the succeeding paragraphs is proposed to be tested:

H0: There is no relation between repo rate change and change in the NPAs of selected Public Sector banks.

H1: There is a relation between repo rate change and increase in NPAs of selected Public Sector Banks.

Data Sampling

The data sampling will involve use of “Judgement Samples”. All Public Sector Banks form part of the Universe. However, for the purposes of research and analysis only those top 5 Public Sector banks having the highest NPAs in terms of monetary value will be studied to draw appropriate lessons. Considering this criterion for selection the banks proposed to be studied are State Bank of India, Punjab National Bank, Bank of India, Bank of India, IDBI and Bank of Baroda. The selection is limited to top five Public Sector Banks as they are the biggest defaulters in terms of bad loans.

Data Collection

The Data analysed and interpreted in the research, being financial, is secondary in nature. It has been collected from various sources such as the financial stability reports published by the RBI, Bloomberg Data Terminal, Capitaline, various Research Papers, journals and books. The data is mainly relating to the last six years, i.e., from 2011 onwards.

Objectives of Research

The research aims at objectives as given in succeeding paragraphs.

To Study the Gross NPAs and their growth overtime of selected Public Sector Banks.

To study the changes in repo rates over the last six years and its relation if any to Bank NPAs

To suggest remedial measures and recommendations at the generic and specific levels towards resolution of NPAs.

Analysis and Findings

Trends in Repo Rates The trends of last ten and twelve years repo rates are given as succeeding figures. The last five years have witnessed the RBI reducing the repo rates from 8 to 6 percent which is also indicated through a separate illustration.

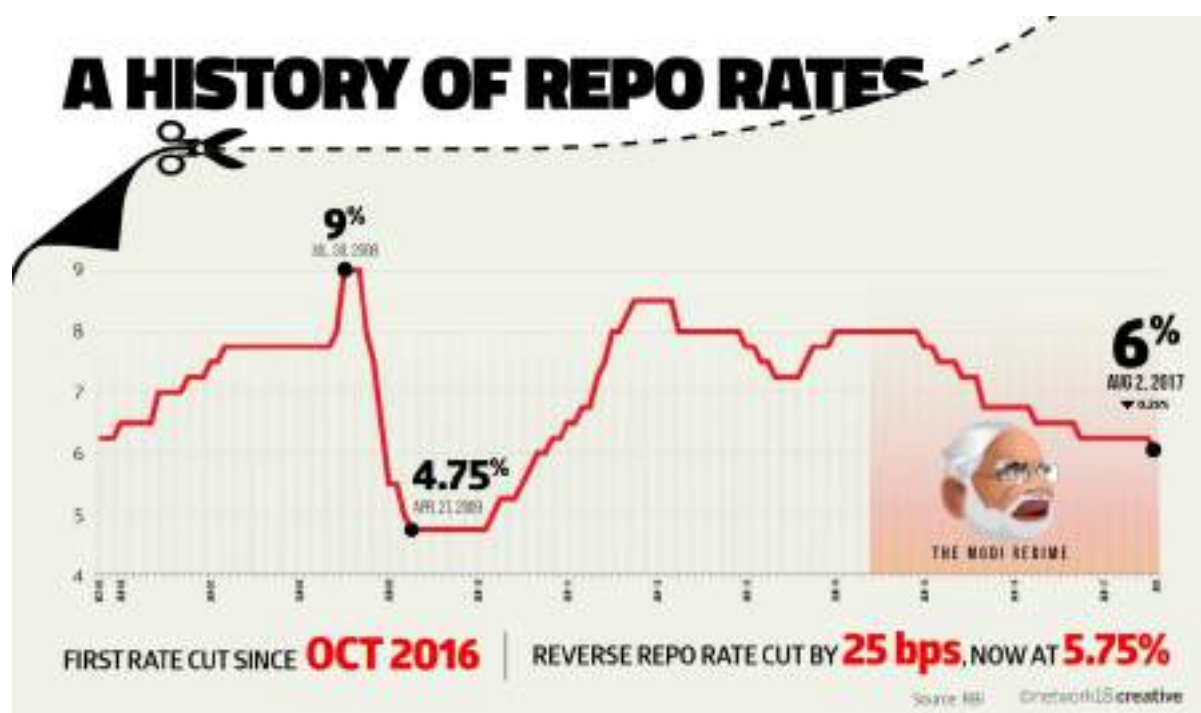


Figure 1: Trends in Repo Rates between 2005 and 2017



Figure 2: Variations in Repo Rates from 2012 to 2017

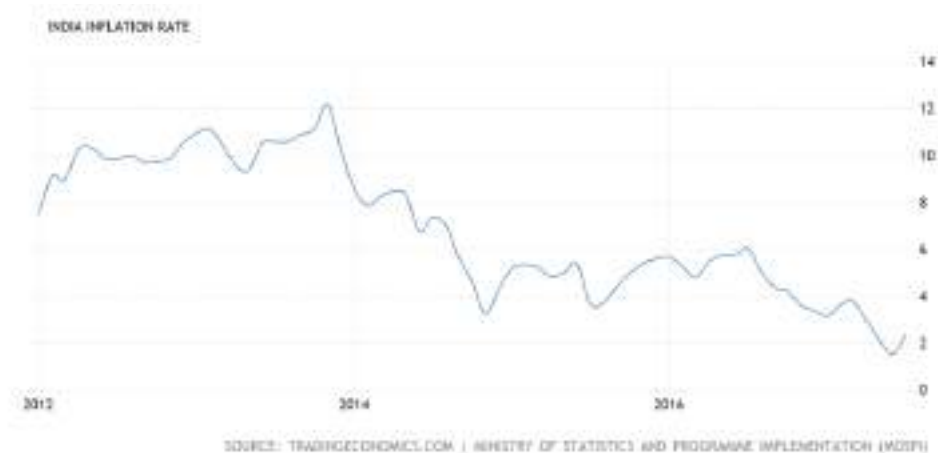


Figure 3: Variations in Inflation Rates from 2012 to 2017

Since the Repo rate is also decided by the inflation in the economy the inflation over the last five years is being shown. Data of NPAs of the leading Public Sector Banks was collected of the last seven years. The repo rate presently has reverted back to 6 percent again. Bank NPAs are in Lakh Crores

Table 3: Repo Rates Vs Gross NPAs of Top Five Public Sector Banks

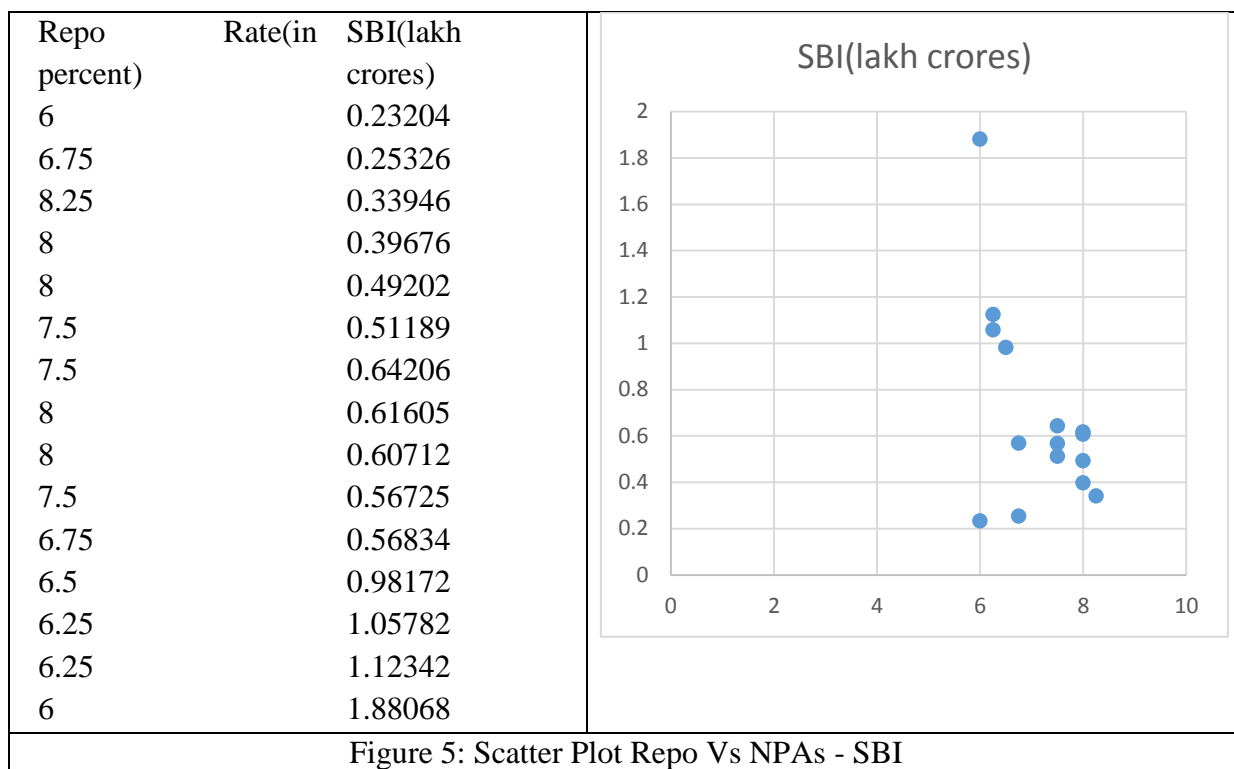
Date	Repo Rate (%)	SBI	PNB	BOI	BOB	IDBI
Sep 10	6	0.23204	0.04024	0.04869	0.02719	0.02471
Mar 11	6.75	0.25326	0.04379	0.04811	0.03152	0.02784

Sep11	8.25	0.33946	0.05150	0.06548	0.04302	0.03889
Mar 12	8	0.39676	0.08719	0.05893	0.04464	0.04551
Sep 12	8	0.49202	0.14023	0.08898	0.05879	0.05848
Mar 13	7.5	0.51189	0.13465	0.08756	0.07982	0.06449
Sep 13	7.5	0.64206	0.16526	0.09880	0.10887	0.09370
Mar 14	8	0.61605	0.18880	0.11868	0.11875	0.09960
Sep14	8	0.60712	0.20751	0.14127	0.13057	0.11559
Mar 15	7.5	0.56725	0.25694	0.22193	0.16261	0.12684
Sep 15	6.75	0.56834	0.24945	0.29893	0.23710	0.14757
Mar 16	6.50	0.98172	0.55818	0.49879	0.40521	0.24875
Sep 16	6.25	1.05782	0.56465	0.52261	0.42949	0.30133
Mar 17	6.25	1.12342	0.55370	0.52204	0.42718	0.44752
Sep17	6	1.88068	0.57721	0.51019	0.46173	0.51367

State Bank of India

Trends in growth

SBI is the country's largest lender and the oldest commercial bank in India. In the beginning of April 2017 it merged with five of its associate banks. This was an example of consolidation at a large scale by the bank in its efforts to grow in size and further enhance its market share. Gross NPAs of SBI jumped from Rs. 39676 Crores in FY 2011 - 12 to Rs. 112,342 Crores in FY 2016 - 17. This is nearly three times in five years. The NPAs have accelerated particularly over the last two years nearly doubling in value from Rs 56725 Crores in Mar 2015 to Rs 112,342 Crores in Mar 2017. The succeeding tables give the result of correlation tests, scatter plots and regression analysis between the repo rates and the NPAs of SBI. As an illustration the Scatter Plot of Repo Vs NPAs along with Summary of Output and Regression Analysis of SBI is being given. A similar exercise has been carried out for all the other banks, however for reasons of brevity only the analysis of observations is being given in this paper.



	<i>Repo percent)</i>	<i>Rate(in percent)</i>	<i>SBI(lakh crores)</i>
Repo percent)		1	
SBI(lakh crores)	-0.52658232		1

Summary of Output

<i>Regression Statistics</i>	
Multiple R	0.526582
R Square	0.277289
Adjusted R Square	0.221696
Standard Error	0.376536
Observations	15

Regression Analysis – SBI

ANOVA								
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>			
Regression	1	0.707169185	0.707169185	4.9878249	0.043730689			
Residual	13	1.843127934	0.141779072					
Total	14	2.550297118						

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	2.638	0.880013	2.99768	0.01028	0.7368478	4.5392	0.737	4.539
Repo Rate(in percent)	-0.27319	0.122325	-2.2333	0.04373	-0.537462	-0.009	-0.537	-0.009

Analysis of Observations

Correlation of -0.5265 was found between NPAs of SBI and the repo rates. This is an indicator of moderate negative correlation between the variables. An Analysis of the scatter plot along with the regression statistics output was also carried out for further investigation. R Square value is relatively low at 0.277. The P value is 0.043 which is less than 0.05, though not very far off from the accepted level. Therefore, we may conclude that a moderately significant negative relationship exists between repo rates and NPAs of SBI. Accordingly, the null hypotheses is rejected.

Punjab National Bank

Comments on Growth of NPAs. The NPAs have shown a rising trend increasing from Rs 8719 Crores in Mar 2012 to Rs 55370 Crores in Mar 2017. This is nearly six and a half times in five years. The NPAs have more than doubled in the last two years from Rs 25694 in Mar 2015 Crores to Rs 57721 Crores in Sep 17. This is an alarming trend for a bank which has over 80 million customers. Correlation tests along with regression analysis to investigate the relationship between repo rates and NPAs of PNB have been given in succeeding tables.

Analysis of Observations

A Correlation of – 0.6017 was found between NPAs of PNB and the repo rates. This indicates a moderately negative correlation between the variables. A Scatter Plot between the two has been taken along with regression statistics output. R square which is a statistical measure of how close the data are to the fitted regression line is relatively low at 0.3621. P value is 0.0176. This value which helps determine the significance of the results is less than 0.05 and indicates

evidence against the null hypotheses. There is a moderately significant negative relationship between the repo rates and NPAs of the bank. Accordingly null hypotheses for PNB is rejected.

Bank of India

Comments on Growth of NPAs

The bank suffered losses over two consecutive years due to an acceleration in non performing assets. In Mar 2012 the NPAs of the bank amounted to Rs 5893 Crores . On Mar 2017 the NPAs stood at Rs 52044 Crores which was almost nine times over five years.

Analysis of Observations

Correlation of -0.6651 was found which is relatively higher as compared to Correlationscalculated for SBI and PNB. This figure being less than 0.7 can again be classified as moderately correlated . R Square value of 0.4424 is higher as compared to SBI and PNB and indicates a higher coefficient of determination. The P Value of 0.006 which is much lesser than than the accepted level of significance of 0.05 indicates strong evidence against the null hypotheses. In case of Bank of India,we may reasonably conclude that there is a significant negative relationship between repo rates and NPAs of the bank for our chosen confidence interval of 95%.

Bank of Baroda-Bank of Baroda had NPAs of Rs 4464 Crores in Mar 2012 which jumped rapidly to Rs 42,718 Crores in Mar 2017. This is nine and a half times over five years. The growth in NPAs has been more alarming from Mar 2014 onwards.

Analysis of Obserations

In the case of Bank of Baroda near similarities were found to the figures of Bank of India. Here the Correlation was -0.657 which is nearly similar to the Bank of India figure. Being less than 0.7 the variables may be considered to be moderately correlated.The P value of 0.0077 is much lesser as compared to 0.05 and indicates strong statistical evidence against the null hypotheses.

IDBI-The Bank witnessed a rise in NPAs from Rs 4551 Crore in Mar 2012 to Rs 44752 Crores in Mar 2017.The NPAs for this bank have risen to an alarming 21.25% of its gross assets which is now affecting the profitability of the bank. Correlation of -0.6286 implies moderately significant correlation between the variables. The P value of 0.0120 is less than 0.05 necessitating a rejection of the null hypotheses for this bank also, like others. It is logical to conclude that in case of IDBI there is a significant negative relationship between repo rates and NPAs of the bank.

The regression analysis of all the chosen top five public sector banks indicates that there is a statistical correlation between repo rates and the NPAs. The alternate hypotheses has to be accordingly accepted i.e. a decrease in repo rates has an influence and contributes to increase in the NPAs of the Public Sector Banks.

Conclusion

Regression and Correlation tests for all five Public Sector banks indicate a **moderately significant negative relationship between Repo Rates and Non-Performing Assets**. The findings of the study need to be **appreciated holistically as the current NPA issue cannot be viewed in isolation as being caused by repo rate changes alone**. There are a large number of interdependent economic and financial factors major and minor which ultimately result in high NPAs.

Today India is facing a challenge to its financial integrity from the rate at which the NPAs are increasing and its consequent impact on the banking system. There have been sufficient warnings through RBI Financial Stability Reports that by March 2018 the gross bad loan ratio will rise to 11% of the total advances. **This figure may cross 12%** as a worst case scenario. This will imply a significant increase from the figure of 9.6% of Mar 2017. The **International Monetary Fund Financial Soundness Indicator** has indicated that India ranks poorly in NPA resolution. The current NPAs have already put limitations on the banks to lend money. This impacts the bank's assets and blocks the flow of money to the public at large. For growth of economy one needs healthy lending activities more so for the Public Sector Banks which comprise 70% of the banking sector.

On a broader perspective certain sectors need revival. There has been a slump in the thermal power sector with no new plant being established in the recent years. Steel Industry is showing signs of revival. The government will have to take steps which bring stimulus to stagnant sectors of the economy with a view to boost investment. The Insolvency & Bankruptcy Code is a major step in this context. A number of cases have been referred to the National Company Law Tribunal. The tribunal had taken a decision on more than 650 cases by Sep 2017.

While the government has taken measures in the form of Insolvency and Bankruptcy Code 2016 there are several challenges which continue to persist. The main issue in this context is that even in the case of the resolution plan being approved will the banks be able to treat the asset as Standard. RBI will definitely need to carry out an in depth analysis of all factors causing NPAs and bring out appropriate guidelines on the functioning of the banks on a continuous basis. This may include some harsh measures to come to terms with the mounting debt.

It also needs to be appreciated that NPAs are not only financial risks but also strategic risks. They include not only the banks involved as stakeholders but the regulators, the industry experts and the litigation authorities which have a role to play in the ultimate resolution. The bankers will have to know the borrowers in depth to whom they are lending. They need to have an insight into what the money is going to be used for.

Ultimately all lending involves taking a risk. Stakeholders need to recognise this and take all necessary steps **to mitigate the risk**. We also need to recognise that a developing economy passes through various stages. Present state of affairs is perceived as a stage in the path towards ultimate consolidation by some optimists.

It may also be pertinent to mention that the NPA menace is largely confined to Public Sector Banks. The Private Sector banks have by and large handled the NPAs in a better way.

There are a number of laws which are in place to deal with a plethora of issues in the domain of NPAs. The RBI has disseminated a large number of guidelines and policies, however implementation at ground level has been lacking. Laws are stringent but there is a lack of implementation in letter and spirit at the lower levels.

Of late the banking narrative in the country has been revolving around the resolution of NPAs. There are two broad domains of NPAs – retail & corporate. The NPA problem is graver on the Corporate Loans. The Strategy to come to grips with the NPAs still being worked out. Constant refinement to the strategy is required. The process under the new Bankruptcy Code is time bound. There is a six month time limit imposed in the code. The large NPA accounts need to be closely monitored on a daily basis by the higher management of the bank. Wherever the situation entails course correction it should be done promptly.

It is also a reality that banks cannot avoid a haircut. Invariably the monetary policy and its key features including repo rates will have to be decided deliberately by the RBI. Generally, the structure of assets and liabilities in the bank is such that the liabilities side include more than 90% of retail deposits. Here the term deposits are predominant. For the bank the key issue is that when the costs are fixed on the liabilities side then how do you reduce the rate of interest on loans. On the positive side the NPAs are being recognised by the banks and monitored continuously by the RBI. Provisioning is being done in order to conform to the Basel 3 Standards and the asset quality is being reviewed by banks in detail. Government has announced in 26 Oct 2017 an unprecedented Public Sector Bank Capitalisation Plan of Rs 2 lakh 11 thousand crores. Hopefully, this may well be the trigger point for NPA resolution. The banks on their side should also be ready to give out loans to the genuine borrowers so that growth in economy can be sustained.

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