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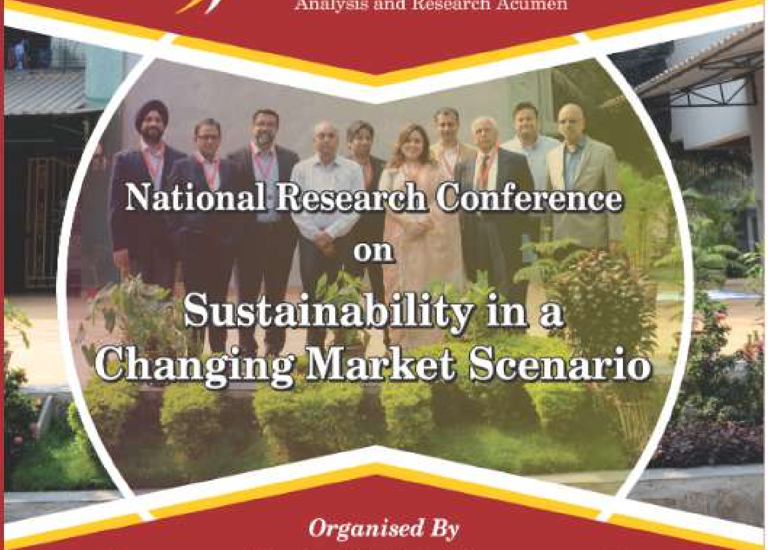

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STUDY OF THE INSOLVENCY AND BANKRUPTCY CODE 2016

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Abstract

India has been riddling since decades with the problem of insolvency and bankruptcy issues. Several public sector banks, financial institutions and operational creditors were facing severe credit default risk. Various laws and codes have been passed as a corrective measure, but have proved to be inefficient and failed to provide any kind of relief to the creditors.

There was thus a need for reform in insolvency and bankruptcy laws. The Insolvency and Bankruptcy code 2016 (IBC) has been instrumental in creating a shift in the way the bankruptcy process of defaulting firms has been dealt with. The IBC 2016 promises to bring about transparency, method and infrastructure in the entire system of liquidation. Changing up core aspects of the insolvency process, it gives companies a well-deserved chance at revival. Despite the recent amendments to the code and regulation changes by the Insolvency and Bankruptcy Board of India, there are still few grey areas in the code. This paper aims to thus test the effectiveness of the IBC 2016 since its introduction in 2016 and whether it resolves lags in the previous system. Hence, the paper dwells into the various components of IBC to critically analyse its sustainability and scalability. The research paper is purely based on secondary research through different news articles and reports from reliable sources.

Though it is too early to comment on the impact of the IBC 2016, the researchers have tried to study the code and conclude whether it will be successful in fixing the problems and will keep up to its promise in the long run.

Keywords: *Insolvency, Bankruptcy, IBC Code 2016*

Introduction

The Indian economy had growth rates which were among the highest globally in the year 2000 because of the internet boom. This kick started a phase where enormous amounts of investments were made by companies that over-leveraged themselves in the fear of losing opportunities which looked very lucrative. The Investment-GDP ratio had soared by 11% reaching 38% in 2007-08. The Global Financial Crisis in the year 2007-08 ended high growth levels. The reduced growth rates led to low revenues, while high inflation levels led to the RBI increasing the interest rates. All this culminated into creation of NPA's at an exponential rate in the Financial Sector. In a survey done between 2014 and 2017, gross NPAs of public sector banks rose to Rs 7,23,513 crore from 2,24,542 crore. Banks reported that the amount of bad loans exceeded the total interest they earned as 'operating earnings'. Over a period of 30 years, India implemented 12 Debt resolution mechanisms but all the laws failed to meet the purpose for which they were implemented. The borrowers used ambiguity in the judiciary to delay resolutions, avoid liquidation, retain control and deteriorate the value of the company. The creditors ended up seeing massive cuts in their debt recovery when these cases saw any form of conclusion. The World Bank in 2015 estimated that it took 4.6 years on average to resolve insolvency in India contrary to UK & US which took 1 & 1.5 years respectively. This one of the major reasons India was ranked 142 out of 189 countries by the World Bank for ease of doing business in 2015.

According to a study by The Ministry of Finance, if one would go at the rate of disposal at which insolvency cases were being resolved in the year 2015 it would take us another 324 years just to complete the backlog. Thus the new government felt an urgent need for an efficient, effective and speedy framework to curb the increasing number of NPA's.

Therefore, The Insolvency and Bankruptcy Code (IBC) 2016 was introduced as one solution for all the above problems.

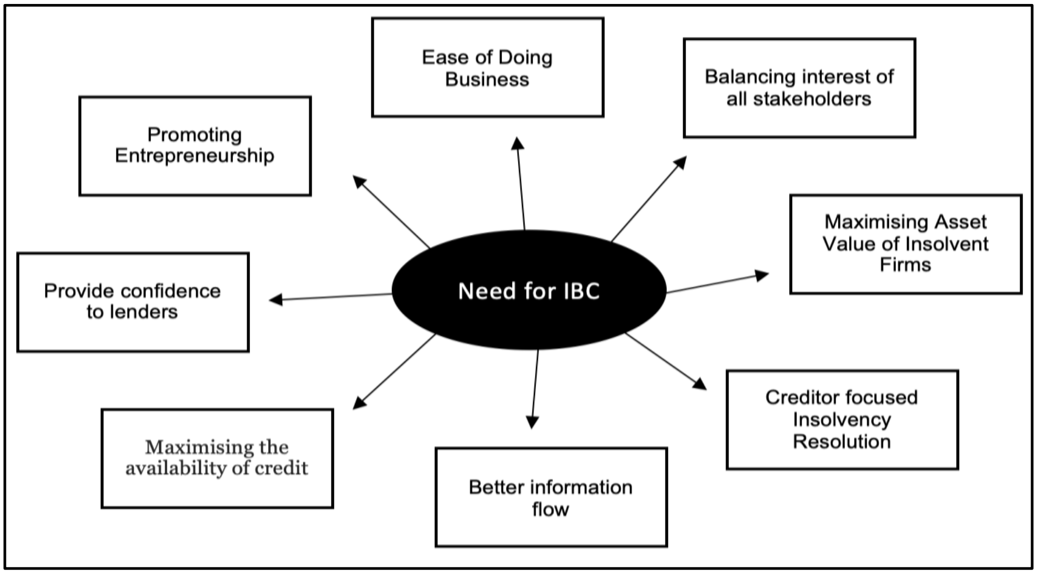

Fig.1 - Need for IBC

Birth of the Insolvency and Bankruptcy Code

The Insolvency and Bankruptcy Code, 2016 (IBC), passed on 26th May, 2016, is a landmark reform for India in the insolvency and bankruptcy ecosystem. The code has been put together by amending previous debt resolution mechanisms. IBC solidifies different statutory guidelines declared before and focuses on a time-bound resolution combined with maximization of value. This gives borrowers a second chance at reviving their failing businesses and lenders a hope of recovering their money. Hence, the Code aims at stabilizing the debt market and catalyzing growth in India. It has amended previous guidelines like :-

- Companies Act, 1956/2013
- Securitisation and Reconstruction of Financial Assets and Enforcement of Security Interest Act, 2002 (SARFAESI Act, 2002)
- Sick Industrial Companies Act, 1985 (SICA Act, 1985)

In all 2 laws were repealed and 11 laws were amended and redrafted under IBC.

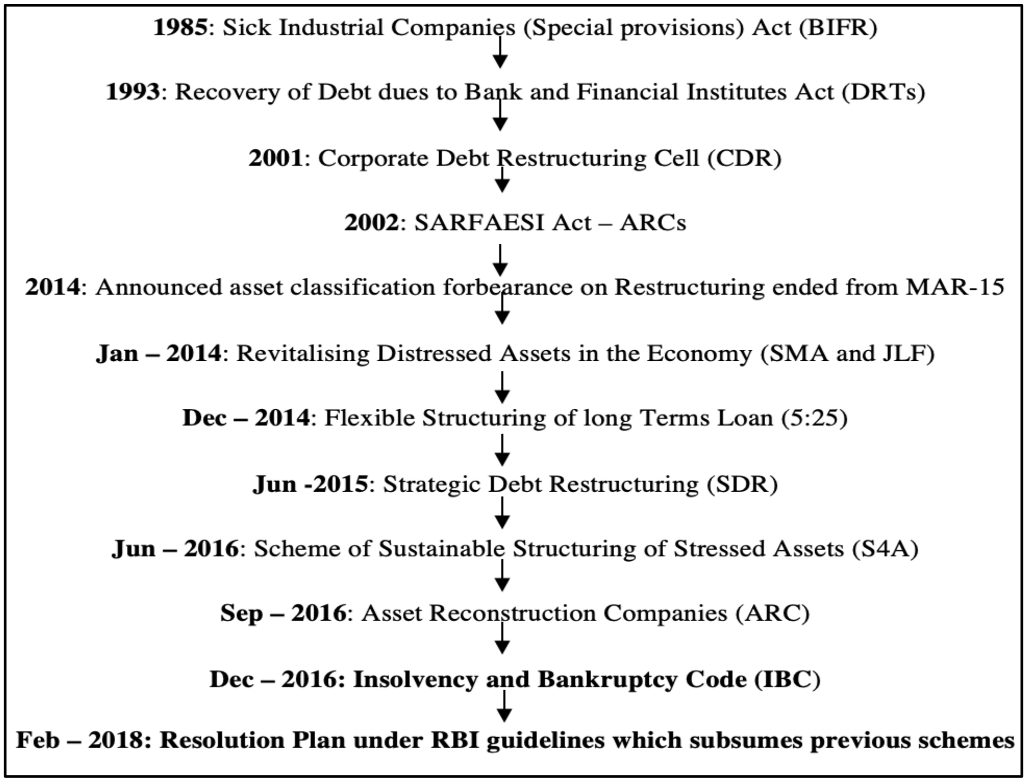

Fig.2 - Debt resolution mechanisms in India, over the years

Institution of IBC

A gist of the Infrastructure to support the implementation of IBC was set up in under a year of its inception, which are as follows:

1] **Insolvency and Bankruptcy Board of India (IBBI)-** Apex authority in charge of regulating the Corporate Insolvency Resolution Process. Its primary job is to create and amend laws relating to reorganization and insolvency.

2] **National Companies Law Tribunal (NCLT)/ Debt Recovery Tribunal (DRT) -** These are the adjudicating authority for the IBC 2016. They look into the matters of insolvency resolution. NCLT deals with corporates, companies and LLPs, whereas DRT is for individual bankruptcies.

3] **Information Utilities (IUs)-** These bodies keep all financial and credit records of the borrowers which becomes useful during the CIRP.

4] **Insolvency Professional Agencies (IPAs)-** These are registered bodies that matriculate the Insolvency Professionals.

5] **Resolution Professionals (RPs)/ Insolvency Professionals (IPs) -** RPs are appointed by the Adjudicating authority to replace the board of directors and look after the daily operations of the company. They work towards formulating a resolution plan for Committee of Creditors (CoC).

Corporate Insolvency Resolution Process (CIRP) Under IBC 2016

The Corporate Insolvency Resolution process (CIRP) is a set of guidelines and workflow that is carried out after a complaint is filed. The defined process of the IBC 2016 is as follows:

Step 1: Default of above INR 1 Lakh leading to CIRP application filed by financial creditors or homebuyers.

Step 2: Appointment of Resolution Professional (RP) who will undertake the working of the business by dissolving and replacing the board of directors.

Step 3: Moratorium Period of 180-270 days where no third party will be able to take action against the defaulting entity.

Step 4: Formation of Committee of Creditors (CoC) i.e. A collection of all financial creditors who will review the resolution plan prepared by the RP and decide whether it is feasible.

Step 5: Implementation of resolution plan if accepted by 66% of CoC; liquidation of company if otherwise. Liquidation will take place on the basis of the Priority waterfall of Claims method, which defines order of priority.

Benefits of IBC

(1) Creditor in control (vs) Debtor in possession

IBC gives power to any financial, operational creditor or corporate debtor to file a complaint to the Adjudicating Authority whereas earlier, only the defaulters were in control of initiating the resolution processes. Certain exceptions include wilful defaulters, promoters/management of the company with non-performing debt for more than a year and disqualified directors. Moreover, it prohibits the sale of property of the defaulter to such parties during liquidation. The decision to accept or reject a resolution plan rests with the CoC, which is a major shift from the previous processes. NCLT has restrained the suspended directors of the defaulting companies from using the companies' brand name and trademarks as it may affect the business. For example, on 25th January, 2019 the NCLT prohibited several entities such as Precious Power Technologies, SaveAWatt Power Technologies, Tushara Energy Ventures, etc from using the brand name and trademarks of Servomax India Limited, which is currently under CIRP with debt amounting to Rs. 8.77 crores.

(2) Speedy resolution

Before IBC, it took 4.5 years on an average to complete insolvency proceedings.IBC has created a time bound process to tackle the endless extensions that used to be given earlier. It allows only 90 days extension over the prescribed 180 days of moratorium period. According to Corporate Affairs Secretary Injeti Srinivas, up till now IBC has recovered a sum of over 3 lakh crore of total debt, 60,000 crore from non-performing assets and 1.2 lakh crore at pre-admission before the insolvency petition was admitted.

(3) There are no sources in the current document.

There were several laws governing bankruptcy and insolvency, a common case went on with different judicial bodies creating unnecessary delays and complexity. For example, cases went on in different forums like High Court, Company Law Board, Board for Industrial and Financial

Reconstruction, Debt Recovery Tribunal etc. Therefore, IBC formed a single law and only two adjudicating authorities to govern all aspects relating to the insolvencies.

(4) Well defined institutional framework

Prior to IBC 2016, the insolvency proceedings would take place in an unorganised manner due to lack of proper infrastructure. Different organisations i.e. IBBI, IUs, IPAs and IPs and a well defined process (CIRP) have been established under IBC to streamline the insolvency and bankruptcy process. Currently, India has more than 1800 Insolvency Professionals registered with IBBI.

(5) Early detection

Since Information Utilities function as ready reserves for every financial record of an entity, early detection of stressed assets is possible, thereby preventing defaults from taking place in the first place.In case of operational creditors such as suppliers, vendors, employees, they can file an application for insolvency resolution if the debtor is not successful in paying their unpaid dues beyond 10 days of demand notice. Due to the existence of IBC, around Rs. 1.2 lakh crores worth loan defaults have have been resolved, even before they have been admitted. Out of 9000 cases transferred to the NCLT, 3,500 cases have been resolved pre-admission.

(6) Homebuyers as financial creditors

Homebuyers were not treated as financial creditors and so their dues were not cleared from the proceeds of liquidation. However, under IBC homebuyer's interests are protected as they are treatedas financial creditors. For example, in the case of the insolvency proceedings against Jaypee Infratech, home buyers were unable to address their concerns to the developer. However, after the amendment to the IBC in 2018, homebuyers were given a 62.2% representation in the CoC. The Supreme Court has ordered Jaypee Infratech's parent company Jaiprakash Associates Limited to pay the homebuyers a sum of Rs. 600cr.

(7) Focuses on turnaround

Unlike before, Board of directors/Promoters are replaced by an insolvency professional (IP). IP curates a resolution plan most suitable for the operational turnaround of the business. The average recovery of insolvency resolution cases have been been 46% under the IBC as compared to 26% under the Board for Industrial and Financial Reconstruction.

(8) Central Repository of Information about Debtors

An absence of a central repository of information made it challenging for lenders to recover dues. There was considerable loss of time in gathering necessary information from various bodies under acts such as Indian Evidence Act 1872, Bankers' Books of Evidence Act 1891, Information Technology Act 2000, etc. To address this delay, Information Utilities were formed. One of the very first information utilities to be registered with the IBBI was the The National E-Governance Services Limited (NeSl). It's function is to collect critical and verified information regarding any debt, claim or default to facilitate a time bound resolution.

Negatives of IBC.

(1) Significant delays in resolution

In many cases the 270 days fixed timeframe was broken due to wasteful procedural aspects and insufficiency of framework. Every delay in judgment cause lenders to lose out on interest by the day. Thus far only 5 of the prescribed 12 main insolvency cases have come to a conclusion with an average of 333 days taken to solve them.

- Amtek Auto Ltd. - Acquired by Liberty House
- Bhushan Steel Ltd. - Acquired by Tata Steel. Ltd.
- Electrosteel Steels Ltd. - Acquired by Vedanta Ltd.
- Lanco Infrastructure Ltd. - Headed for liquidation
- Monnet Ispat Ltd. - Acquired by JSW Steel Ltd.

An average more than 415 days have passed since these the remaining cases came to IBC, and so far there is no end in sight.

(2) Concerns of Operational Creditors

Operational creditors cannot file a complaint with the NCLT in case of any defaults on payments due. They get very low representation on the CoC. Due to low liquidation worth and inadequacy to pay financial creditors, the incentive due to operational creditors remains at Nil. For Example, Close to 30 operational creditors of Essar Steel are seeking payment of dues worth over Rs 600 crore. While the total admitted claims of operational creditors is Rs 4,995 crore, the resolution applicant, Arcelor Mittal, has offered to settle only Rs.214 crore of these. Orissa Stevedores, an operational creditor claimed that the financial creditors are getting lesser haircuts on their dues when compared to the operational creditors.

(3) No legal framework to enforce cross border insolvencies

(4) Single bidder--Liquidation vs Resolution

In most of the cases lenders have agreed to liquidate the company as the liquidation value is much higher than any bids. But the actual value realised later on could be much lower due to rising operational costs and inefficient cash flows.

(5) Dealing with contingent liabilities

Most companies have varied pending liabilities like - tax, statutory dues, government dues, labour litigation and other commercial disputes, which makes it difficult to ascertain to what extent the liabilities will be discharged under CIRP, and what should be the true value of the company.

(6) Alignment with other laws and exemptions

The resolution process should be in synchronization with all other laws at the time. The bidder/ resolution applicant does not get any exemption for taking over the management of the company, for example - Income tax is not exempted for tax accrued on book profits, which were generated by writing off liabilities.

(7) There are not enough number NCLT benches and Judges in comparison to the quantum of case filed for resolution.

Conclusion

Since the day it was rolled out, IBC has successfully recovered around 3 lakh crores, directly or indirectly, from various default cases as quoted by the Mr. Injeti, Secretary, Corporate Affairs. The average recovery rate in the sixty-odd insolvency cases, which have seen a resolution, in the past two years is 46% contrary to the 26% which existed under the Board for Industrial And Financial Reconstruction (BIFR) regime. India's ranking for Ease of Doing business has bumped up to 70 from 142 in 2015 which is a big leap.

Although the new code has been facing some hiccups and challenges, the government is improving it by rolling out new reforms. Any kind of opinion on the nature of the code, quality of performance, level of relevance and the working of IBC would be premature, considering it is merely 3 years old.

But after looking at the numbers and the way it is being acknowledged, not only in India, but around the world, IBC is proving to be the silver lining that India needed in the dark clouds of rising NPAs and lethargic growth rate.

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THE IMPACT OF CLASS AND INCOME ON ATTITUDES TOWARDS WOMEN'S CAREERS AND CAREER CHOICES

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Abstract

The status of women is defined by the cultural norms and not their monetary status. But if we compare their monetary status with their cultural status, we come across a very strange result. Regardless of the class she belongs to, she is free and independent only for two reasons. Either she can be happily ambitious, or she is in need of money and has no other source. Equality of gender still does not exist. It might never exist, according to the culture we follow. Male domination will still be in fashion, women will still have to act within the boundaries of cultural norms and this will continue until the women of our nation raises their son with the values of eliminating dominance of the female gender. Also, for this to happen, a woman herself needs to understand and accept her importance of existence. The change in the psychology and acceptance power of both women and men will bring about existence of 'woman empowerment', until then, these two words will merely remain just two words.

Key words : *Cultural Norms, Women Empowerment.*

Introduction

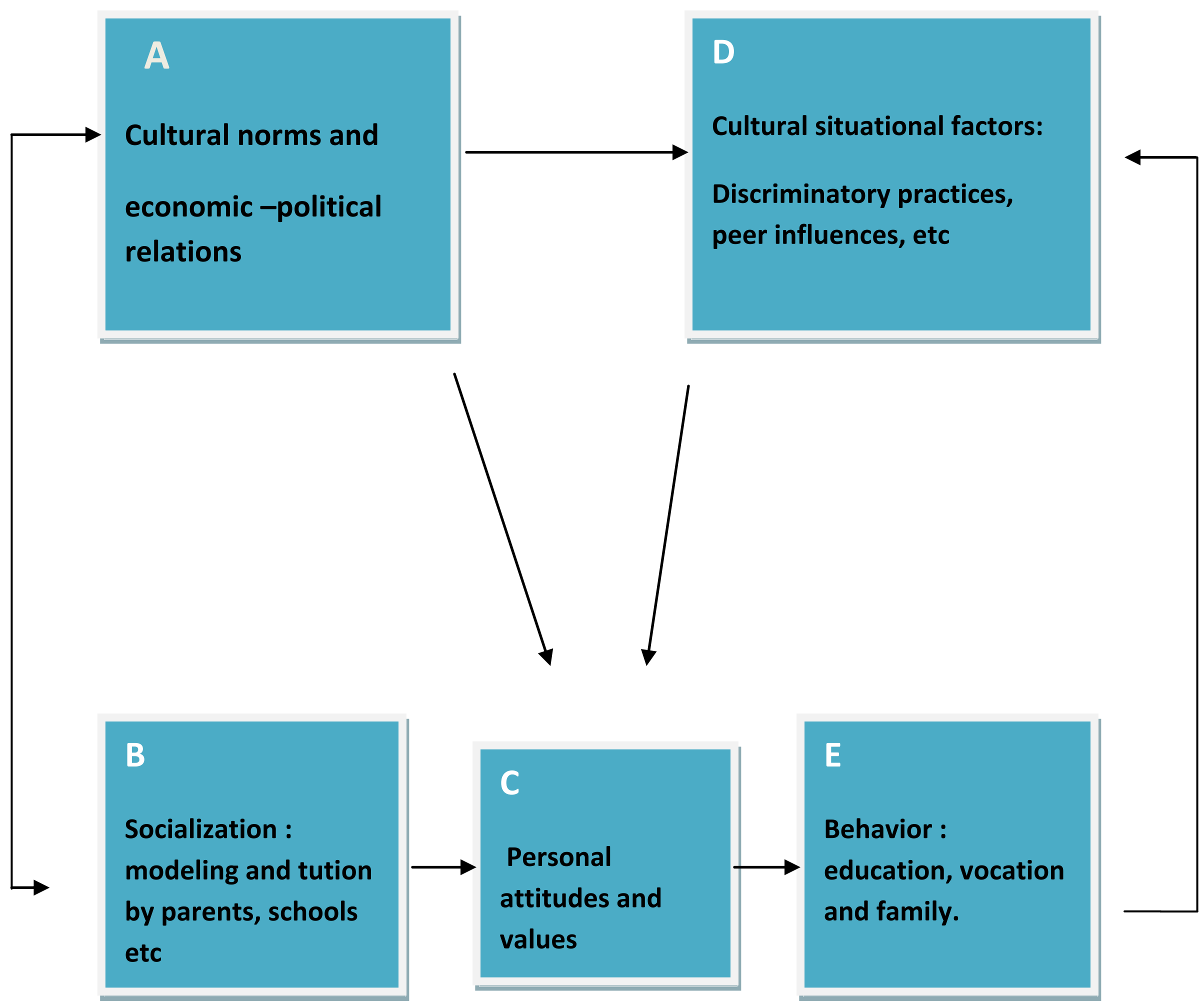
"You can tell the condition of a nation by looking at the status of its women," said Pt. Jawaharlal Nehru (Srivastava,N.K).India is very rich in its culture and heritage. We are also very lucky to have been learning of multiple religions residing in India. It is a land where women are worshiped. But it has been observed, only on a few days of the year, Durga Ma, Saraswati Ma, Mother Mary and on Diwali, they receive all the respect. Why is that not a daily routine? India seems to be the capital of rape cases these days. The sad part is even the women of our country follow the same system. Women seem to be meant to only satisfy the physical desires of only men. Even in today's time women are objectified as machines for producing kids. The dowry system is almost a means of 'trading of women' indirectly. All fathers want to do is get rid of the liability. The change will happen when they think of these women to be assets.

The fact that India is changing in all prospects still lacks in the change of social and cultural norms for women. There is a distinct number of women who have broken the glass ceiling and proved themselves in front of the world. Difficulties they faced despite of stories. Women have great potential and endurance power. But it seems as if the role of women is defined clearly by the dominating sex of our country. Any woman trying to break that line is considered a woman of no values. The entire game revolves around male ego which leads to women unemployment.

Let's examine the present status of women in different classes of public. But the thing which is common in all classes is that the women must let their husband's career be the priority compared to hers regardless of any negative financial situation the family faces in future. Practically this compromise of a woman's career makes a woman week from the inside and they start losing confidence in starting up a new business. Even today it is believed that a married woman shall be extremely educated, smart, skilful and beautiful but shall not have the nerves to be seen at a higher level compared to her husband in the society. She is supposed to take care of children all day with very little help of her spouse. The demand of modernity is leading to increase in divorces in the urban areas and I think the women of rural areas are still under pressure. The female of the rural areas (of poor class) seem to have no choice, are always objectified and end up being caged within the boundaries set by their in-laws. But the female of the urban areas (lower class to higher class) still have a choice of being educated and soar high, the only thing what they lack in is that little push of motivation. There still is a lot of difference between the different classes to which these women belong to, which is discussed further in my research paper.

Diagram

Figure 1 presents a model, based on the work of M. Brewster Smith (1968), of how various factors may interact to maintain traditional behaviors



(Figure 1)

The top cluster of variables (A and D) operates at the societal level. Cultural norms (A) provide the background against which one's choices are evaluated. Each culture has its own prescriptions of sex-role appropriate behaviors. In the process of acculturation, we come to accept these prescriptions about the roles of men and women as fact; we evaluate ourselves and others in terms of these prescriptions; we raise our children to fit the designated patterns; and we punish deviations from the cultural norms. By providing the evaluative framework for oneself and others, these cultural stereotypes affect men's and women's judgments and beliefs regarding the appropriateness of various roles.

By influencing the political realities of one's society, the cultural standards affect institutional factors, such as the existence of institutional prejudices which can either facilitate or inhabit various role choices. The existence of widespread discrimination against women has been amply documented. Women's entry into and advancement in professional careers are blocked at all levels and in a variety of ways, ranging from the blatant refusal to hire women to the subtler "stag-turf" protection mechanisms enumerated by Bernard (1976).

Although highly important, these institutional and cultural barriers are not entirely responsible for the underemployment of women. There is evidence that other factors also contribute to women's under representation in professional careers. Psychological investigations have highlighted several such factors which influence female professional accomplishments by influencing career aspirations in such a way as to predetermine the training young women seek and the skills they acquire. These factors are represented by the bottom cluster of the model.

The bottom cluster of variables in the model represents the processes involved in translating the cultural myths into personal attitudes and aspirations. Women acquire, through a process of socialization, a set of sex-role attitudes and beliefs and choices and behavior which are consistent with the sex roles they are expected to play in society. Sex role socialization, then, is key to these processes. Sex role socialization operates in several ways to influence career decisions. On the one hand, it can foster a negative self-concept. For example, both women and men have been shown to view women as inferior, passive, submissive, not skilled in business and excitable during minor crises (Broverman, Vogel, Broverman, Clarkson, & Rosenkrantz, 1972; Goldberg, 1963).Women who share this negative view of themselves must perceive fewer levels of the professional hierarchy as appropriate and should devalue what ever accomplishments they have made. Other such inhibitory attitudes include fear of success (Horner, 1971), fear of loss of femininity (Tangri, 1972),and fear of an inability to fulfill the "primary" role ascribed to women(Epstein, 1971). It should be noted that each of these mechanisms assumes that women avoid professional careers out of fear, anxiety, or lack of confidence. Career aspirations can be seen, on the other hand, as life choices selected from a large array of alternatives. Viewed in this light, women's career aspirations be positively motivated and based on somewhat more rational criteria. Within this frame, sex-role socialization can have at least two effects. First given a thorough socialization experience, women may never consider roles other than the traditional ones of wife and mother. Typically, socializing agents do not present alternative attitudinal -behavioral models nor do they require children to question the validity of their beliefs. As a result, traditional ideology is internalized by women on-consciously, as fact rather than opinion, and the restrictions it places upon self-development are accepted as "natural", (Bern and Bern, 1970). In support of this notion, investigations have demonstrated an inverse relationship between sex-role ideology and achievement aspiration. For example, Lipman-Blumen (1972) found that women who believed they should achieve success vicariously through their husbands have significantly lower educational objectives. Similarly, Parsons, Frieze, Ruble and Croke (1978)found that holding traditional sex-role values was significantly related “traditional career aspirations.” These traditional values included a belief that women should not achieve greater recognition than their husbands and, among women who planned to marry, a belief that the emotional life of the family suffers when the wife works. Sex role socialization can also influence women's value hierarchy. A woman might well desire both a professional career and a family. But if she sees these goals as conflicting then her choice should reflect her relative priorities. For example, Poloma and Garland's (1971) observations suggest that, women's attitudes regarding the demands inherent in the wife/mother role influence occupational aspirations. Professional career aspirations are more probable when career obligations are not perceived as interfering with the fulfillment of the wife/mother role. If women believe that facilitative institutions and spouse support are available which can lessen the burden of childcare without harming the child, they may choose a nontraditional life style. However, if these institutions and support are not available or if existing childcare facilitates are believed to being adequate in quality, selection of a professional career is unlikely. Additionally, if a woman feels it is important to be the major socializer of her children during the preschool period and is committed to being available to her children throughout their childhood years, then she is unlikely to select a professional career that allows for little flexibility in both career commitment and time scheduling across those years.

Objectives of the Study:

- To understand why women belonging to the Indian culture still restrain themselves from being independent and having ambitions?
- If not cultural norms, then what is that factor which holds back women from achieving their goals?
- To also examine the views of men regarding this topic.
- To examine the behavioral patterns of responses received through this study.
- To research whether there is any true emphasis on women equality or is it just superficial.
- To recommend solutions for the drawbacks of the cultural upbringing of women.

Methodology

The research is based on primary data and secondary data of married women majorly. To compliment and give support to the argument, interviews of a few men from all the different classes of the society had been taken and key observations were drawn.

A sample size of 65 women from different classes was taken, to draw conclusions about the objective of the study.

The primary data has been collected with the help of a questionnaire and interviews which were then closely analyzed.

Literature Review

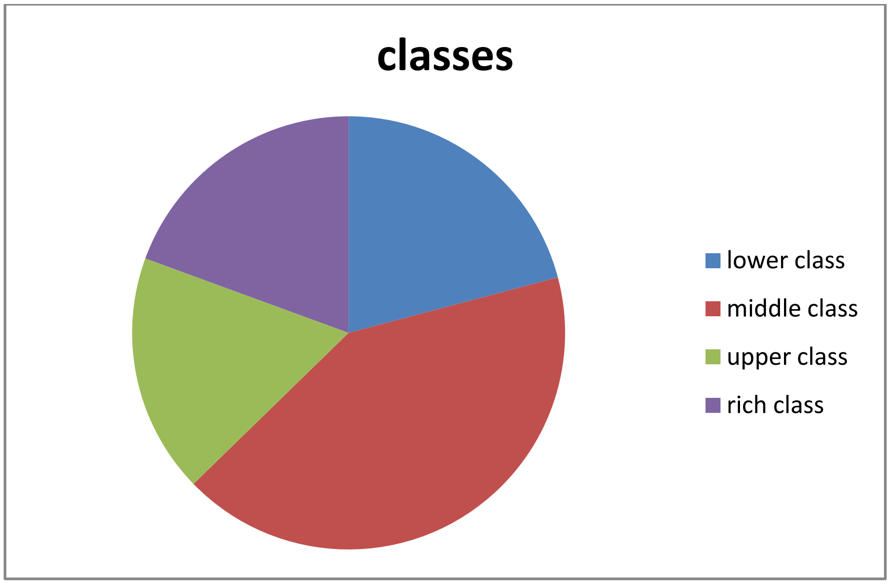
Not just our nation, but the entire world faces the issue of gender equality. It is a human's right to have equality in all forms. The major gaps of inequality are shown in access to opportunities and decision making power for women and men. Women are not considered important or suitable over men for activities in the corporate world or even for major decisions in their families. Women are not even allowed to pursue education of their own choice and are often indirectly threatened by the risk of security. A woman must know her self-worth, decision making power, access to opportunities and her power of control over her own life. (Global Issues: Gender Equality and Woman's Empowerment)

India's population in the context of women is getting better these days. Almost half of the population is female. Since centuries in India, due to cultural norms females were deprived of access to opportunities for growth and education the reason being cultural or religious norms. Before independence, women were caught under the bully of cultural norms and customs which were all set by the humans of the society. This leads to increase in the illiteracy of women who were tortured with rules like the purdah system, child marriage, violence, sati, prostitution if remarried, etc. Domestic work was the major trouble faced by women. This framed a picture of women meant only for household chores and a community of lower importance. Thinking of achieving something or dreaming of a career was out of the picture. "In childhood a woman must be subject to her father, in youth to her husband and when her lord is dead, to her sons. A woman must never be independent." (Jain *et al*, 1997: 39). A woman was meant to be a mother of a wife or a sister and was asked to play her role but was never respected as a woman alone. (Parsons, J. E. PH. D)

Our culture and the minds of people play an important role in the position of the status of women of our country. Surely there has come a change since the olden days where women faced problems, but the rules have been not eliminated from the roots. Somewhere women are still facing some discrimination, some barriers or simply being devalued. Now a days it is not the case of women being bullied but indirect forms of barriers still exist.

Findings

Q1. What is your per annum income?



I have taken responses from different classes of the society to study whether it is the class, or it is the mentality, which actually matters when it comes to choice of career for women.

The above graph clearly shows women from four different classes as the sample for this study.

The classes have been classified with the help of income status of women.

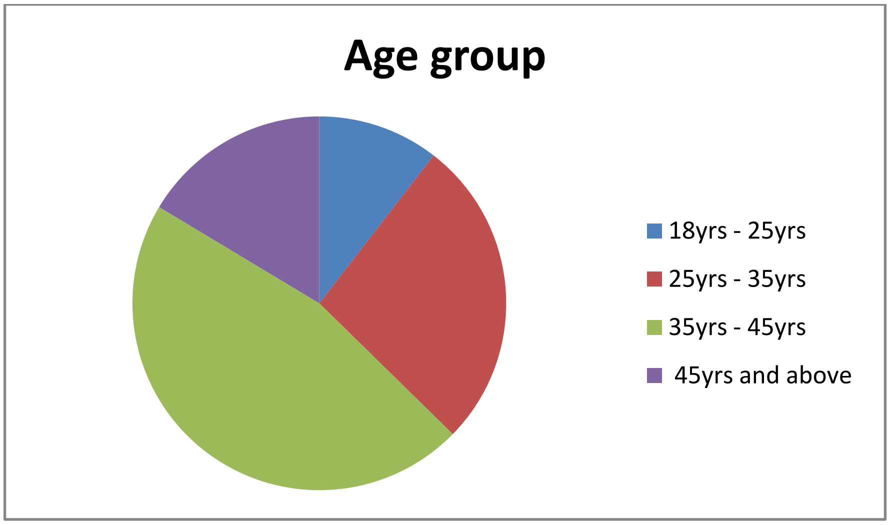
50000-100000 – lower class

100000-500000 – middle class

500000-1000000 – upper middle class

1000000 and above – rich class

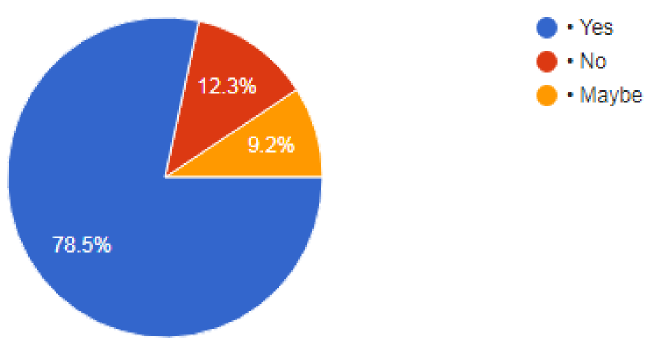
Q2. What is your age group?



This chart simply shows women from different age groups taken for this research. The real significance of age group as a factor can be well explained when the analysis of the entire result has been done, only to conclude what is the psychology of women of different age groups.

Q3. Do you think that women are capable of handling a business of any scale if given a chance?

65 responses

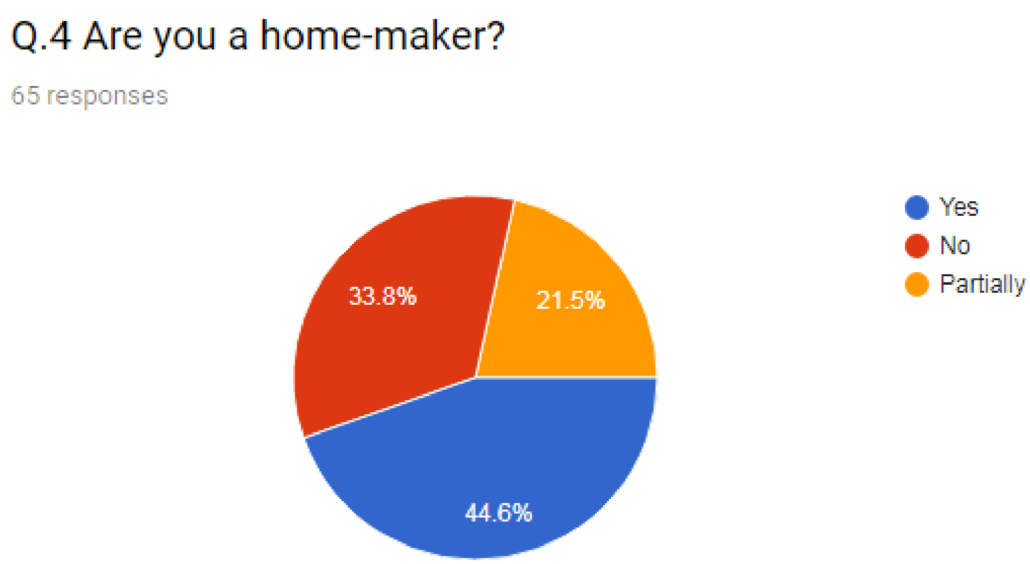


The above graph proves that many women believe in their capabilities and their community of gender. The results show that, 78.5% women as strong headed and are capable of handling business of any scale.

History has proved it with an example of Mrs. Chanda Kochhar – the former MD and CEO of ICICI Bank.

A few women (12.3%) do not have confidence. The result of the entire study also proves this by showing that they were not allowed to dream big, grow mentally and achieve their ambitions. They end up accepting the cultural norms and carry forward this norm to implement it over their children.

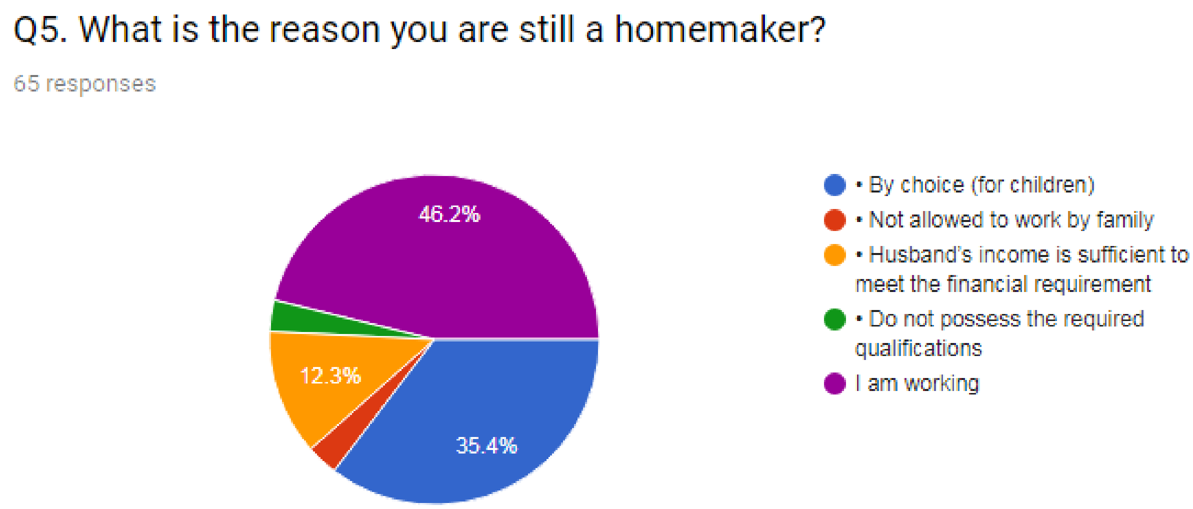
There are also a very few women (9.2%) who are not sure of their capabilities or fear risk. That maybe simply a human trait I believe. This does not mean that they do not believe that women are not allowed to pursue their careers.



The above pie chart clearly shows our culture. Still today, majority of women are home makers, regardless of whatever the reasons are. This chart is very important for the study because it can prove the reason behind the existence of the problem of my study.

The positive part here is that many women are getting independent and tend to work, regardless of their reason for working. We will study further about this, in the paper.

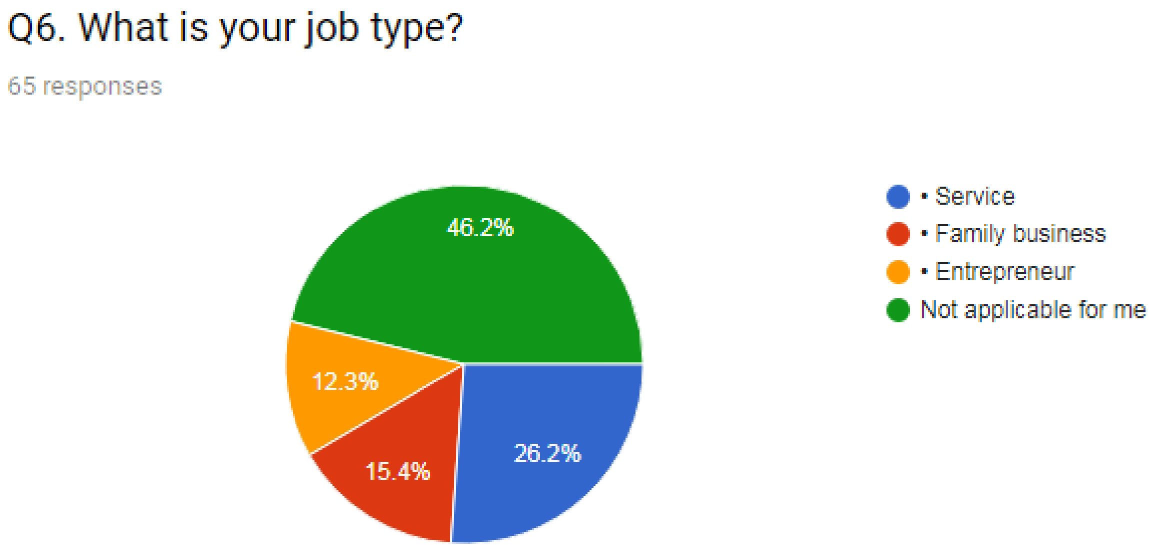
The 21.5% of women who are partially working is majorly out of self-satisfaction. This shows that a few women are acceptable with the cultural system of men earning for the family and tend to be self-occupied with themselves.



Then above graph shows that many women (35.4%) are pre-occupied by the household responsibilities and are so much in love with their children that they tends to dedicate their life to them.

Since education has been enough promoted for women of the 21st century, this graph still shows a certain amount of illiteracy which needs to be improved.

As our society and their culture suggests that women are meant to stay with only the management of the household as a responsibility that many women just tend to relax, as their husband can earn enough. They themselves are not motivated or wish to be ambitious.



26.2% of women do service which shows they are very well educated professionally.

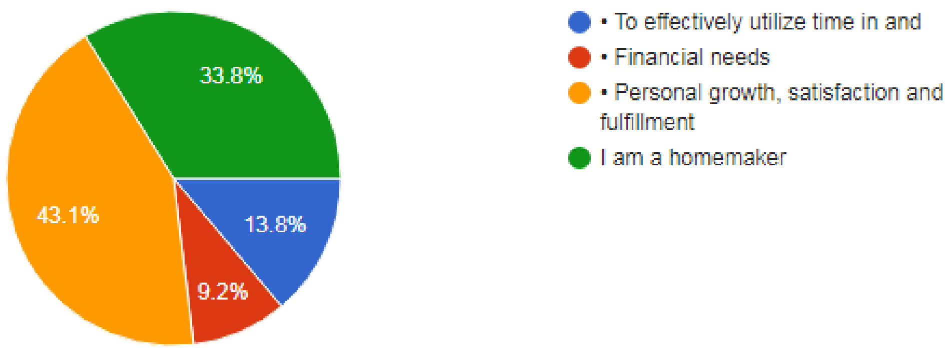
15.4% women join their family business just because they also want to give good amount of time to their children and want to really invest their time at very useful place. Their contribution to family business gives them a sort of self-satisfaction.

12.3% women are entrepreneurs which shows they have confidence aim to achieve their goals.

But the sad picture here is that most of the women do not contribute to their personal growth, but instead are bound by cultural barriers and household chores, either by choice, or by force.

Q7. What is the reason you chose to work?

65 responses



43.1% of women want to grow and learn something new which infact develops their personality.

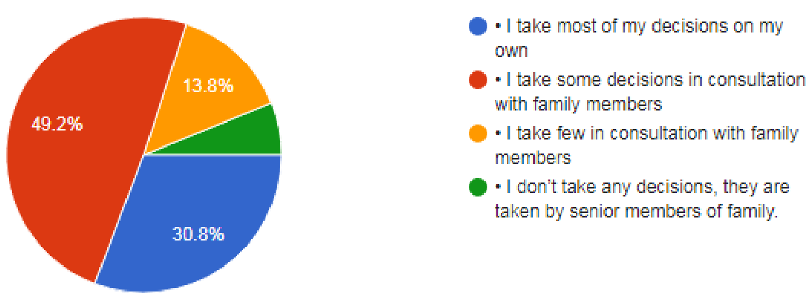
33.8% of women are homemakers may be as they are less educated or do not take interest in personal growth.

13.8% of women really want to value the time they have.

9.2% of women who may or may not be educated want to work for the family and want to support their family's financial condition.

Q8. What is the level of control over your decisions regarding your own personal growth?

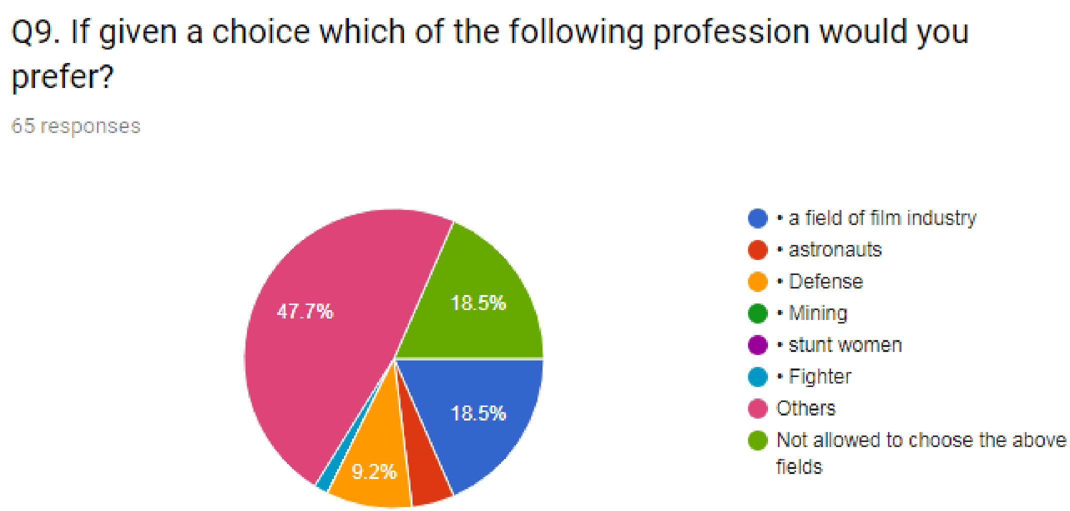
65 responses



49.2% of women think that it is better to take decisions consulting with family member as by themselves. This shows that still there is an indirect domination of the family over the woman's rights.

30.8% of women take their own decisions.

13.8% believe that there are some decisions which really needs advice of other members too. This indicates a beauty of our culture where we respect our elders.



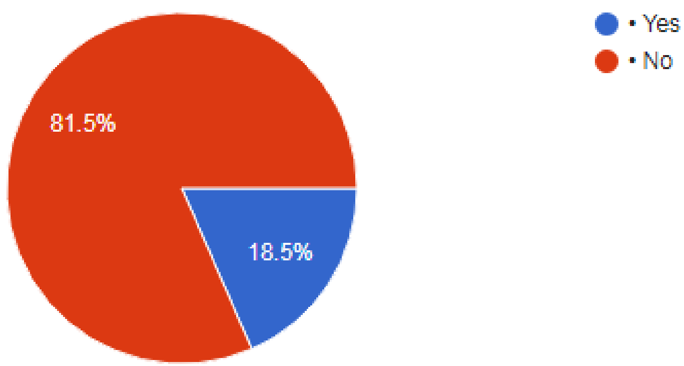
18.5% of ladies who choose to work in the film industry is because they fantasize about fame, freedom and success.

But are not allowed to work into fields where men members can excel.

But the majority of women chose other fields, maybe due to the popularity of other field or self-interest.

Q10. Does your culture restrict you to work ?

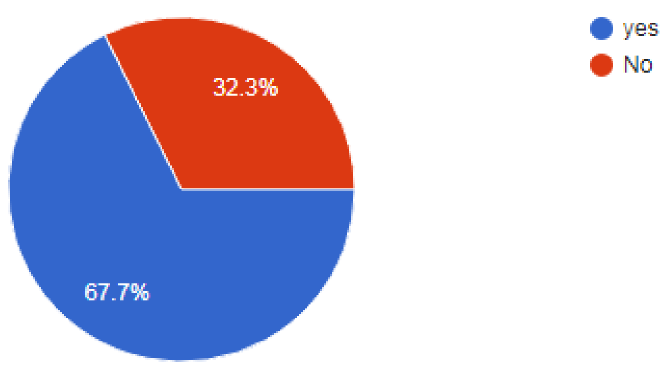
65 responses



81.5% women belong to families which are improving their lifestyles and want to cope with the new generation.

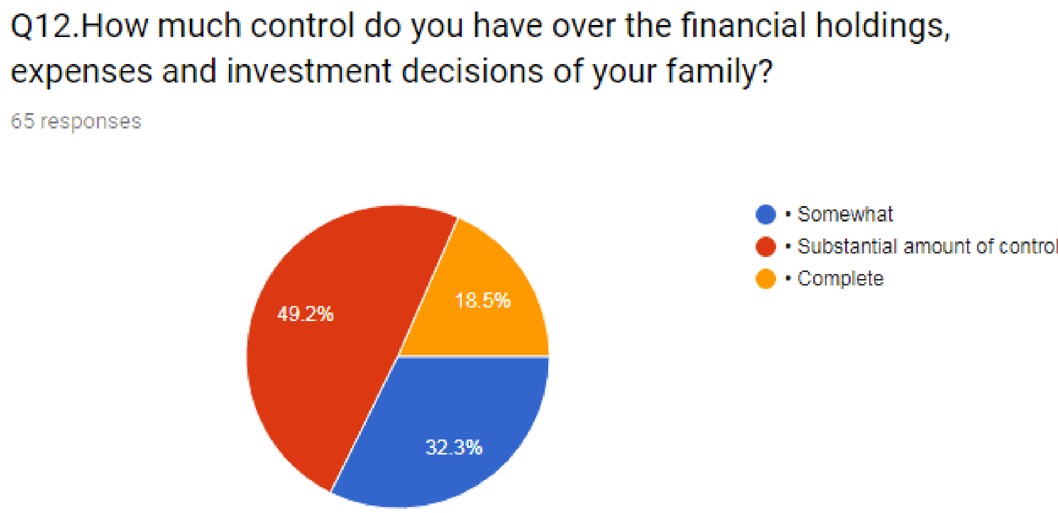
Q11. Did you work before marriage?

65 responses



67.7% women said that they worked before marriage. This shows that they faced no restrictions in their own house.

32.3% of women didn't work before marriage. This might be due to personal choice as the father's income was enough or they were not allowed to work.



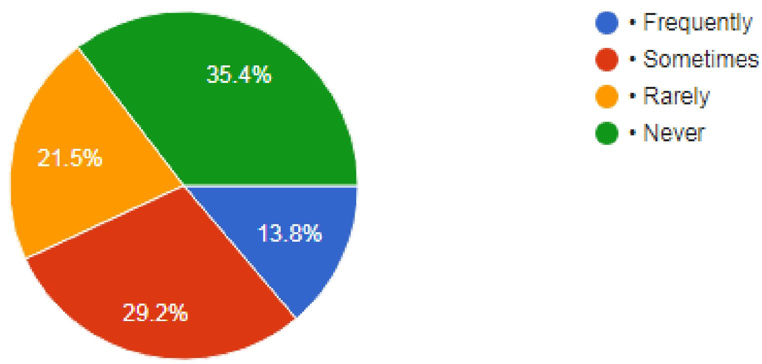
49.2% of women have substantial amount of control for which the reason can be the forces around them which influence them for such expenses though which they can have complete control.

32.3% of women have somewhat or little amount of control over finances, the main reason could be the domination of male members over the decision makings and financial plans.

18.5% women are strong enough and are capable enough to take decisions.

Q13. Have you ever experienced guilt, while neglecting your familiar responsibilities?

65 responses

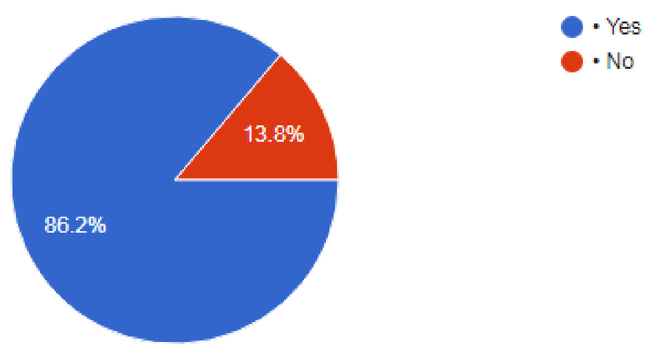


35.4% of women have never felt guilty while neglecting their familiar responsibilities.

The rest rarely or frequently have experienced guilt maybe due to the inability to focus equally towards work and home both.

Q14. Do you believe in gender equality?

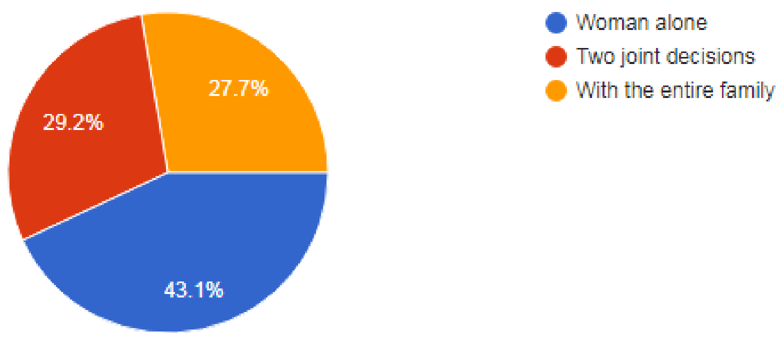
65 responses



Even if this pie chart shoes that there is a good ratio of gender equality I don't this that it is the case in real. That is explained well in the observations from the interviews that was taken.

Q15. How do you think decisions regarding woman's career should be made?

65 responses

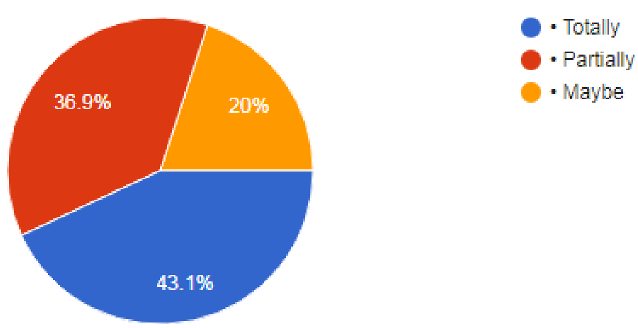


This chart shows that women still do not have substantial control over their decision makings.

43.1% feel that women should have the power to take decisions alone.

Q16. Do you think that the reason of the situation of women/ you in your country is your own mistake of not speaking up for yourself ?

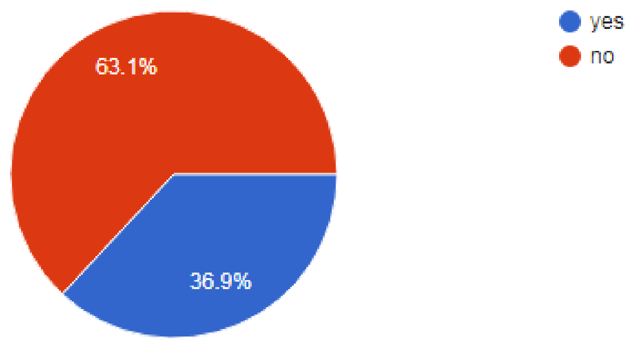
65 responses



This chart indicates that women know and believe that the reason for their status in the society is because of them not raising their voice against inequality and rights.

Q17. Do you think only a man provides security(emotional and physical)in a family ?

65 responses

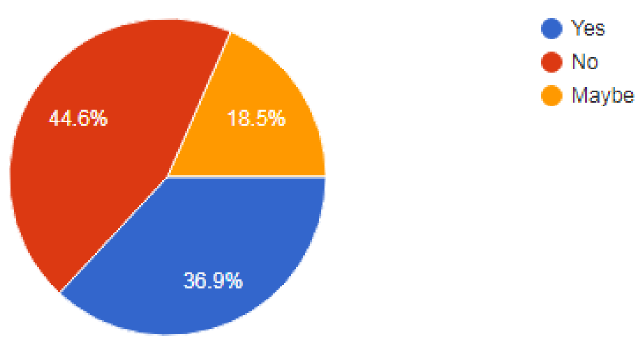


Still there are many women who rely on men when it comes to security, be it before marriage or after marriage. They do not tend to live an independent life. Once they lose the support of a male member they become handicapped.

However many women strive high to life a strong and an independent life bravely.

Q18. Do you think that the work done by women are de-valued?

65 responses



36.9% women think that, the work done by women is de-valued.

44.6% women do not feel the work done by them is de-valued due to the appreciation.

Key observation from the interviews of married men

- Male members tend to lie while they answer to save their image in the society just so that they are perceived as an orthodox.
- They assume, somewhere down the line that male dominates women in some way or the other. Most of the men believe that women shall not get into professions like mining, astronauts, film industry, army, etc, as these career fields do not suit their gender.
- One of the major observations was that regardless of any class or educational backgrounds the thoughts of many men are still narrow minded. Only a very few men believe in gender equality.
- The thought of male being the masculine gender and female being the feminine gender with more delicate features, is still in fashion. Men believe that women and men have a distinctive field of jobs. Women do not suit the activities done by the men and they are not physically suitable.
- The men of every class try to keep their family image regarding the female member up to the mark of the societal norms and customs.
- The thought of the male member's income is enough to feed the family is still in priority among the male members. They neglect the fact that the women have dreams as well. These males then gain higher decision powers in the family. The one who earns gets to take major decisions.
- Men also have a big ego clash if they confront women of higher income capability, higher decision-making powers, intellectual power and intelligence. They find it difficult to work under them.
- Men often believe that if women are ambitious about their career choices and strive to succeed then they tend to neglect their family responsibilities which are only a female member's duty.

Key observations from unmarried ladies

- They fear getting married due to family pressure and interference into their ambitions.
- Their educations status does not let them fall into hands of domination by the male gender; therefore they try hard to find a man who respects their ambition.
- Most of them are feminist, even if they do not say it.
- They believe in the power of women and are ready to raise their voices.
- Very few ladies tend to hide the truth from the people who try to dominate over them and do what they want secretly. This helps them maintain good relations as well as get self-satisfaction. They accept the fact that 'they will not be allowed'.
- Some of them also fear lack of security in monetary terms.
- Even today for approximately 70% ladies, the decisions of her personal life are being taken by the family, therefore the choice of marriage and career vary accordingly.

Key observations from interview with unmarried men

- They say that they believe in gender equality, but they seem to be diplomatic while answering this question because when it comes to their woman they become possessive or dominant.
- They cannot handle woman being better than them any ways. For example, driving a car. They believe only men can drive properly.
- A major observation was that, while I spoke about the topic of my interview a few of them laughed back on my face and said "you ladies are always talking about equality, don't you have enough of freedom? Rules are rules and you stand at the right place".
- Many men respect this study and totally agree with the fact that women shall raise their voice and make a stand in the society.

Conclusion

The society has very well spread the words about gender equality and upbringing the status of women from being dominated to being equal to their opposite gender. We all talk about how it is the 21st century and women are free enough to achieve their goals but while studying about this, very shocking results came out from this research. Also, a very interesting factor came up where marriage was a big difference in the lives of the women. Even though if they worked before marriage, somehow, they stop working after marriage due to family pressure which is in indirect, for example, they are said to be neglecting the family responsibility to achieve their goals.

Also, while getting primary data it was very difficult to get accurate data due to the diplomatic and image-oriented responses received from the respondents. A very great observation made was that the people of our society tend to show that they believe in gender equality but they deep down their minds still hold traditional views. Not just men but even women were not very true to themselves while answering to questions, thinking that they would be judged as an orthodox.

Another very important observation made was that the family culture and up bringing play a vital role in the minds of the women of their family, regardless of which class they belong to. A girl and a boy since childhood see and learn from their family the most. And if the family teaches them to dominate women or get dominated by men then they take it to be correct and continue to pass on the culture.

There are many articles uploaded online and in books which talk of the revolution of the domination which was faced by women which has not totally eroded now. But if you dive deep into the picture, not much has changed yet. One cannot blame the culture but instead blame the humans as they do not accept change with the growing generation. Instead they indirectly tend to inculcate the old culture into the newer generation if possible by them. Someone must be the first one to break the glass ceiling. There is a lot more to change to be called a nation with gender equality.

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A STUDY OF AGRICULTURE MARKETING WITH SPECIAL REFERENCE TO GREEN CHILLIES IN PALGHAR DISTRICT

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Abstract

The Research paper is going to analyse the agriculture marketing concepts which are considered important for marketing of agriculture produce in India. Marketing of agro produce has change over a period of time. It is no longer a farm output which is only consumed in the specific geographies or district or a state but it has cross the boundaries of the state and ventured in to the other parts of the country. The product can also be sold directly in the local markets or through different distribution channels across the state. The three functions which have to be undertaken before it reaches the consumer are Cleaning, Grading, Packaging and made ready for transportation to various agents at APMC markets with the help of co-operative societies. Chillies are not stored in the raw form when it is plucked from the fields. So marketing becomes essential as the product shelf life is short before it goes for consumption. Hence, distribution plays a vital role in the marketing of chillies.

Key Words: *Agriculture Marketing, Distribution Channels, Harvest, Grading & Transportation*

Introduction

India has immense potential to grow and export different types of chillies required to various markets around the world. India’s Agro climatic conditions provide scope for cultivation of 63 different spices, making India the **‘Land of Spices’.** India has produced around 1014.60 million tonnes of chilli with area of 654 million ha. and productivity 1551kg/ha during 2005-06 (Source: Directorate of Arecanutand Spices Development). The most important chilli growing states in India are Andhra Pradesh (59%), Karnataka (15%) Maharashtra (6%) and Tamilnadu (3%) which constitute nearly 75 per cent of the total area under chilli. Chillies exports from

India are mostly to Srianka, USA, Nepal, Mexico and Bangladesh. Among these countries USA, Srilanka and Mexico are the major importers of India's chillies. China has emerged as the major exporter in the world market and as a serious competitor in the international market for India. India exported 1,48,500 tonnes of chilli valued Rs.807.75 crore in the year 2006-07 (http: www.assocham.org/prels/shownews.phpid1306). In Maharashtra state area, production and productivity of chilli was around 90 million ha., 44 million tonnes and 489 kg/ha respectively during 2003-04*(Source: Directorate of Arecanut And Spices Development).*

In India the southern states grow spices like pepper, cloves and cardamom. Southern states of India together produce 30percent of cardamom and 25-30% pepper of the world. Gujarat and Rajasthan grow the spices like cumin, coriander, fennel and fenugreek. They alone produce 80 % and 90 % world production in respect of coriander and cumin. The states of Uttar Pradesh, Madhya Pradesh, Andhra Pradesh, Maharashtra, and West Bengal, are major producers of onion, garlic, mustard and chillies. Orissa, Tamil Nadu, Andhra Pradesh, Meghalaya, Assam and Himachal Pradesh grow turmeric and ginger.

Kerala contributes 96 percent of the total black pepper production in the country. Karnataka and Kerala alone grow 90 percent of small cardamom.

Chillies are pungent fruits of *capsicum annum L* and *capsicum frutescence*. It is also known as red pepper or dry chillies. Majorly used as condiment or culinary Chillies are used for taste as well as for the colour of the food . Chillies are the ingredients used for ketchup, sauces, pickles which are part of the Indian dishes. Chillies have alkaloid capsaicin which is used as a medicinal purpose along with that it is also rich in Vitamin C. Indian consumption of chillies is average per capita is between the range 50grams to 60grams per day.

Chillies are grown over the world the leading countries which produce are India China, Pakistan, Morocco, Turkey and Bangladesh. Chillies are grown in various parts of India like Andhra Pradesh, Karnataka, Tamil Nadu, Maharashtra, Rajasthan and Orissa are the states which contributes more than 60% of the chillies produce in India. In the state of Andhra Pradesh the largest amount of chillies are produce which contributes about more the 50% of the production of chillies in India.

Warangal, Khammam, Karimnagar, Guntur, Prakasham and other district in Andhra Pradesh chillies are grown Alone in the state of Andhra Pradesh the production of Chillies is about 5.50 Lakh Metric Tonnes which is about more than 50% of the chillies produce in India. Chillies in India are distributes in India as well as abroad.

In India the trading hub of chillies are in Andhra Pradesh (Guntur, Khammam & Warangal) followed by Karnataka (Raichur & Bellary) and in Maharashtra (Jalgaon). Indian Exports chillies to countries like Bangladesh, Sri Lanka, Malaysia, Nepal, Indonesia & Italy.

The marketing channel of the agriculture produce has to reach the end consumer at the appropriate price through the which the producer gets the pricing which will motivate him to be in the business on the other end the final consumer should be happy to pay the price for the product. The income generated by the farmers should be sufficient enough to take care of the cost of production and additional portion of money should be there to take care of the other needs, then only the farmers will have the motivation to enhance the production and the productivity of the farm produce.

The various intermediaries in the supply chain have to minimize, So that the smooth transit of the produce from farmers to the consumer happen which will benefit both of them.

Literature Review

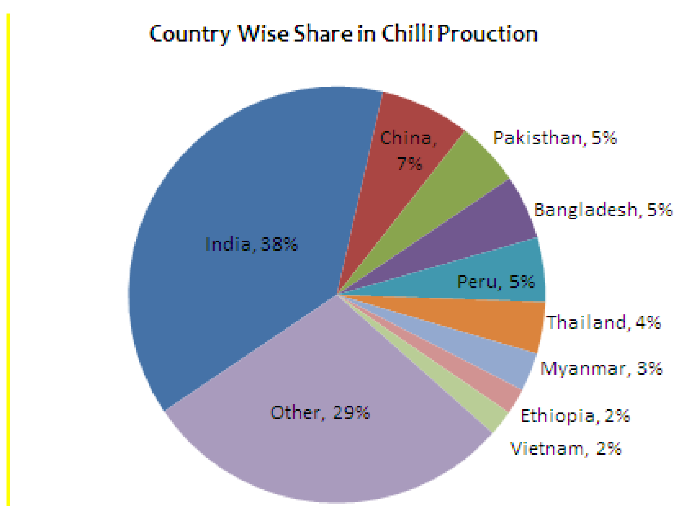
Chilli is one of the most important commercial crops of India. There are over 50 spicesproduced in India and good number of them is grown in the country which is indigenous. Among them pepper, cardamom, ginger and turmeric are important. Among spices, a few spices *viz*., clove, nutmeg, vanilla and certain varieties of chillies were introduced to the country. Many varieties of chilli are grown for vegetables, spices, condiments, sauce and pickles. India is the largest producer and consumer of chilli among other major producers n the world. India contributes 36 per cent to total world's production and remained in first position in terms of international trade by exporting nearly 30 per cent from its total production. Indian chilli is mainly exported to Asian countries like Vietnam, Thailand, Sri Lanka, Bangladesh and U.A.E. (http://www.indianspices.com).

Global Scenario

Major chilli growing countries are – India, China, Indonesia, Korea, Pakistan, Turkey and Sri Lanka in Asia; Nigeria, Ghana, Tunisia and Egypt in Africa; Mexico, United States of America in North – Central America; Yugoslavia, Spain, Romania, Bulgaria, Italy and Hungary in Europe and Argentina and Peru in South America.

India being the leader in the production of Chilli and the countries which follow India are China and Pakistan. Chillies are produced worldwide but the major chunk is produced in the Asia region. More than 60% of Chillies are produced in the world are from countries like Indian , China, Pakistan, Bangladesh & Peru. India Produce about 15 Lakh Metric Tonnes of Chilies, China has production capacity of about 4 Lakh Metric Tonnes and Pakistan has been producing about 3 Lakh Metric Tonnes rest is shared by the other countries. India's share of chilie production is about 38% of the world chillies production.

India satisfies the consumption demand of chillies which is nearly about 50% of the requirement. China on the other hand has a export share of about 19% of entire export of chillies in the global market. Peru also has a export share of about 9%, Spain is consider as fourth player in the export of chillies in the global market. The remaining chilly producing countries take care of the balance requirement. The countries which Import Chillies are USA, Malaysia & Sri Lanka.



Source: Spice Board of India

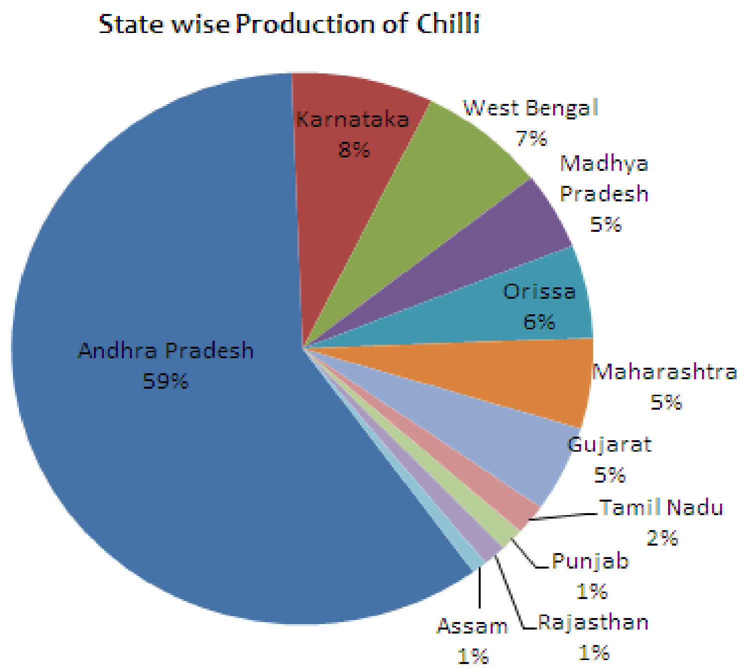
Domestic Scenario

In the world of Spices Chilli is universally accepted, Chilli is the crop which is cultivated in the larger part of the country. India is the biggest chilly producing country, not only that the highest number of chilly are consumed in India. Largest producer of Chillies in India is considers as Andhra Pradesh, the agriculture area which is covered under cultivation of Chilies is about 35 per cent of the total area cultivated in the country.

Other states which contributes are:
Karnataka has a share of 14 per cent, Orissa is about 11 per cent, West Bengal is 9 per cent, Tamil Nadu is about 8 per cent. Rest of the states contributes about 23 per cent of the total area under cultivation of Chilly.

The production of chilly is dominated by the state of Andhra Pradesh which has the share of chilly production of about 59 per cent. Karnataka stand at the second position by contributing 8 per cent of the production in the country, West Bengal is after that which has a production of 7 per cent of the total produce, Orissa contributes 6 per cent, Maharashtra and Madhya Pradesh has a share of 5 per cent each and other states combined contribution is 10 per cent.

Some of the important districts in Andhra Pradesh where chilly is grown in large Scale are Guntur, Khammam, Prakasham, Warangal and Krishna. Among these districts, Guntur is the largest district which produce chilly the total chilly which is produce in Andhra Pradesh 30 per cent is cultivated in Guntur with an annual turnover of about Rs. 800 Crore. The shift in the production of chilly is moving to the northern states of the country. It is because of the change in consumption pattern in the country. The demand for the Indian grown chilly is increasing since the price for the export is motivating, as well as the domestic demand is also helping the farmers to bring more area under cultivation of Chilly.



Source: Spice Board of India

Major state-wise area and production of spices in India (Area in Hectares, Production in Tons)								
	2014-15		2015-16		2016-17(P)		2017-18 (Est)	
States	**AREA**	**PRODN**	**AREA**	**PRODN**	**AREA**	**PRODN**	**AREA**	**PRODN**
Rajasthan	866868	618309	1014540	1056170	1004380	1391800	1004380	1391800
Andhra Pradesh	200675	918018	212730	920810	246450	1099750	246450	1099750
Gujarat	473822	1014470	508750	1077560	510750	906850	510750	906850
Telangana	122345	493930	128870	443400	184175	786950	184175	786950
Karnataka	218667	400297	225560	401110	250925	537460	246410	499390
Maharashtra	**123240**	**130094**	**41820**	**371710**	**31180**	**393190**	**31140**	**395600**
West Bengal	97555	207775	118170	329980	119820	334575	119850	334680
Uttar Pradesh	58039	221711	58590	217670	387000	281010	387000	281010
Orissa	123324	181500	123320	181500	146630	201960	146630	201960
Kerala	167293	140225.36	161500	149520	160850	130060	162660	140050
Tamil Nadu	105057	196127	113200	202530	115540	214120	42940	112600
TOTAL (INCL.OTHERS)	**3192639**	**6169901.3**	**3457000**	**6901780**	**4031700**	**8610810**	**3969390**	**8413980**

Source : State Agri/Horticulture Departments/DASD Kozhikode

Marketing Channel for the Agriculture Produce:

Once the harvest is ready to be marketed the farmer need to make arrange for the marketing channels to distribute the farm produce in the various market which is located in the same thesil or district or need to send it to the bigger market which are based at District level or State level i.e. APMC. The produce may go through the various distribution channels which includes the wholesalers, Retailers Middle Level Buyers or in some cases it is the cooperative Societies formed at tehsil, or district level. In certain scenario the distribution channel has different format like the produce which receive from the farmer may need to undergo a classification as per the grades and then again repacking needs to be done as per the quality of produce received.

The distribution channel or middle men they perform the activity of the grading packaging and arrange for the further transport to the destination of consumers. For e.g. if we consider the nearest APMC Market is located in Vashi which is in Navi Mumbai the producer sells his produce in this market from all over the state/ country. Since Vashi APMC is considered as a secondary market as this is the extension of commercial capital Mumbai so very little cultivation of vegetables are growing in this vicinity. Similarly the vegetables or chilly which is grown in the parts of Palghar District are sold by the small farmers in the daily market in the district place of Palghar and the weekly bazaar i.e. on every Friday in Palghar. They also have this kind of weekly bazaar in the other parts of the district like Manor, Boisar, Saphale etc.

The Rural Marketing Channels has various formats like Village Market for daily usage, Market located in Tehsil place for weekly bazaar or the district place were large produce are assembled like APMC market in Kalyan in Thane district and Vashi in Navi Mumbai. The marginal farmer or the farmers with the small output they prefer to sell the produce in the village or tehsil market. Farmers with the large quantity of farm produce tend to sell the produce at the district or state level market. These large quantity producers also have a Channel which is cooperative societies located at the District level which provide with the farmers the network with the wholesalers in the APMC markets. The Cooperative societies play a vital role in the marketing channel of farm produce in the rural belt.

Methodology

The present study is conducted in Palghar tahsil from Palghar the district was selected. Total five villages and 4 farmers from each village i.e. 20 farmers were selected randomly as sample size. Data collected for study pertaining to the period Jan 2019 to Feb. 2019. Personal interviews of farmers and marketing intermediaries were conducted by survey method with specially designed questionnaire. Besides data relating to quantity purchased, price paid/received, costs incurred were collected from the market functionaries. Simple tabular analysis was made to analyse data to find out marketing channel of green chilli in this region.

Findings and Discussions

The major functionaries involved in Marketing Channel for distribution of chillies are:

Market

The organised market is the major institutional unit establishes under the APMC act of the state to establish regulated market, which also creates and develops infrastructure require for the market and see that there is no malpractices during the marketing process.

Farmers

Farmers play a major role in marketing because the produce is transported from the farms after the important practices like Cleaning, Grading and Packing are done by the farmers. The process plays major role in supply chain because these practices influence the price of produce, which is ultimate goal of any marketing process.

Agents

Agents are licensed brokers in regulated market through APMC (Agricultural Produce Market Committees). The Agents normally charge certain percentage of commission (ranging from 2 to 3 %) from farmers on the sale of the produce. The competitive environment between the supply chain i.e. Wholesaler, Traders andProcessor during the purchase process from producer to consumers. This agents are not directly involved in trade process but play a role of facilitator during the process of trading by arranging certain Weighing Machines, Loading and unloading, Transportation and arranging for the credit facilities to farmer before the beginning of the season.

Traders

Traders/Exporters are the purchasers who participate in trade. They handle the produce for a short period on behalf of distantly located wholesalers, exporters and for processors. They play very important role in chillies trade then other crops because the quantity sold by the wholesale and exporter are in small quantities but throughout the year. But chillies require cold storage facilities to retain their quality (colour). These traders purchase on behalf of wholesalers and exporters by taking the orders and store them in cold storages in the vicinity of the market place and facilitate the supply throughout the year. Traders normally operate from the centralised location. They are located in APMC Market from Navi Mumbai they are connected to the farmers either through cooperative societies or the traders meet the farmers before the season begins. In the case of Farmers located in Palghar tehsil especially this comes under the Mahim Gram panchayat the farmers are connected through the Mahim Sahakari Cooperative society.

The Cooperative society arranges the free transport for the farm Produce (Green Chillies) from the various destinations to the APMC Markets in Mumbai which reached to the traders and based on the quality and markets rates they will be graded and the receipt of the rate will be communicated to the society and the farmer as well.

Wholesaler Merchants

Wholesale merchants purchase large quantities of produce (Chili's) from various parts of the districts and process them further(Grading and Packaging) before they sell in bulk quantity to the retailers. There are only very few wholesalers take part who belong to local areas. For distant wholesalers depend on traders for purchasing these products as storage is main constraint for them, because cold storage facilities are not available at their place of business as wholesalers are scattered unlike traders.

Agriculture Co-operative societies

Cooperative societies play a vital role in ensuring that the nation's economic progress confirms to the requirements of democratic planning. The institution of a cooperative society provides support and sustainability to rural economic activities.

The poorly equipped rural folk struggling to cope up with rural indebtedness and the evils of usury, need resources.Small and marginal farmers need support in the form of inputs, harvesting, storage facilities, distribution channels and a network of market information system. Technical guidance is required to help agriculturists in processing their produce and reap benefits through value addition.

Agricultural processing cooperatives provide support towards paddy milling, oil seed crushing, processing fruits, vegetables and so on. The farmers, gain through value addition to their produce.Agricultural marketing societies enable farmers to benefit from increased bargaining strength. By removing intermediaries, they help farmers to have a direct interaction with the consumer. The National Agricultural Cooperative Marketing Federation of India (NAFED) is an example.

Agricultural service cooperatives are instrumental in arranging cheaper transportation, storage facilities and similar such services.

Mahim Vivid Cooperative society which is operational in the Palghar tehsil arranges for interest free loans for the first financial year to the farmers in the Mahim Region. They provide the Loan to the small and marginal farmers and the society also makes arrangement for the transport of the produce from the farm to the Market located in Navi Mumbai (APMC Market).The society has tied up with TDC Bank (Thane District Cooperative Banks) which provides the loan to the farmers has a membership with the Society.

Middle level Buyers

Middle level buyers who work in the rural sector especially in the region where we have small and marginal farmers. The small or marginal framers sell their produce in a smaller quantity either in the local market to the local middle level buyer or trader. Who procure the chillies in small quantity from the different part of the thesil / taluka or district. Post procurement the chillies are grade based on the quality and repacked in the bigger quantity to be transported to larger markets or to the wholesalers. The middle level buyer has his own transport system. Sometimes several buyers together arrange for a common transport system.

They assist the small farmers with the initial finance before the season begins, so that the produce is sold to the requisite buyers only. The profit margin is higher in this channel because the farmers don't have a say in the rate offered to him for his produce, since they have a small quantity to be sold. The buyers dictate the terms during the sale of the produce and earn the extra pie out of the transaction.

Retailers

Retailers who finally deliver chillies to customer in the daily market or the weekly market the farmers themselves sales the produce in the market or they sells the produce to the local retailers at the wholesale price. Farmers get the best price only when there is less supply especially in the beginning of the season. Once the flow starts from the various parts of the regions around the market the rate starts collapsing and then the farmers have to accept the rate in the market. Chilli's from the wholesalers are assembled from various parts and graded based on the quality of the produce and packed and transported in the other parts of the state or outside the state for the further consumption.

The Farmers who grow various vegetables need to classify their products based on the grades of the produce The chilly which is grown in the district are graded by the farmer in the farm after the harvest ,once it is graded then it is packed in the gunny bags which has an average weight of 50 to 70kgs per bag. The farm produce are then transported to the retailers in the Teshil or district place. Transport facility are arrange individually or a group of farmers do it collectively. The retailers normally weighs the produce and grade them as per the quality and then price for produce is decide based on the market conditions. The retailers grade them once and then either sell the same produced to the wholesaler or sell it to the local vendors for the final consumption.

Below mentioned Marketing Channels are identified in trade of chillies in Palghar District

- Producer (Farmers) – Traders – Wholesalers – Retailers
- Producers (Farmers) – Cooperative Societies – Wholesales in Markets (APMC)
- Producers (Farmers) – Middle Level Buyers - Traders – Wholesalers – Retailers

Constraints for Marketing of Chillies

During the survey some of the constraints at the level of farmer, Agents and Market which important part of the marketing channel are mentioned below:

- Non-Consistencyof Transportation facilities from the farm.
- Inadequate Pricing information about the current market.
- Need to send the produce to the agent or Market because of Non-Availability of Storage facility at the district Place
- Inaccurate weighing Practices
- Delay in payments from agents
- Collection of excess commission
- Lack of storage facilities at District level
- Distribution chain eats up the profit margin
- Absence of Grading
- Flow of finance at the beginning of the season
- Facilities for farmers at Market place is insufficient

Conclusion

- Price fluctuation of the farm produce normally benefits the marking intermediaries since the farmer is not updated on the same. Hence the middle men take away the additional profit from the price fluctuation.
- Farmers receive negligible amount of profit from the share of rupee from the distribution channel, the middle men and the intermediaries take away the bigger pie out of the profit.
- The current marketing channel is not sufficient enough to decide to sale the produce to the best vendors because they are nominated or the farmer doesn't have much choice for his produce.
- Inadequate Post harvest practices like, cleaning, grading, and packaging of farmers are rendering the quality of chillies.
- Agents, wholesalers and Traders decide the market price, farmers who sale the farm produce through co-operative society have lesser choice of buyers.
- Storage facilities if made available to various location in the district would help the farmers to take decision for the sale of the produce.
- Availability of interest free loan to farmers for the first year through the cooperative societies gives a big boost to the farmers in the region
- Cooperative societies had tie up with the District level cooperative banks to provide loans to farmers
- Payments need to made to the farmers post the sales so that they can repay the debts and expenses incurred till the harvest.
- Technical education and training pertaining to the crop and market need to be provided to the Farmers from time to time.
- If the processing units is established in the region will make the marketing channel more efficient

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P2P LENDING: BRIDGING INDIA'S CREDIT GAP

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Abstract

With the financial meltdown, new financial innovations and alternative investment products made their way to India. The concept of Peer to Peer lending is an alternative financing option available to the unbanked section of the population or people with limited institutional credit exposure. Developments in new digital tools, alternate credit models enabled bridging of the credit gap. With RBI devising a regulatory framework and stringent policies, these NBFC-P2Ps have been given a needed push to the cause of financial inclusion in the Economy.

Keywords: *Peer-to-peer lending, Financial Innovation, E Finance, Alternative lending*

Introduction

Peer to peer (P2P) lending is a financial innovation where borrowers and lenders come together on a common platform via internet. It is a kind of a business model which recently gathered momentum globally, and is now flourishing in India also. Although it is still nascent in India, with its potential benefits, its promises to its stakeholders and the risk association to financial system cannot be ignored. This model is contrary to centralized network where the financial institute conducts the transaction with every user directly. It is a decentralized financial network where P2P users borrow and lend directly. The term often used is crowd funding, but with different aspects like that of investment and loans instead of charity or some social cause.

It is a debt financing tool where people want to borrow, get finance from individuals who tend to invest. The whole concept is centred on getting higher rate of interest by lending rather than saving, and borrowers get loans at cheaper rate of interest.

Most of the Fin-Techs that continuously research for financial innovative products clubbed with technology may have potential to disrupt the financial system of a country. These new technologies seem to gain faster market shares in lending to emerging, than in developed countries. Fin-techs provide novel financial services and also lead a way to new startups out of which few grew to the remarkable size like Alibaba and Amazon.

Literature Review

Peer to peer lending mainly involves investors, borrowers and P2P lending platforms. In 1983, Mr Yunus had taken an initiative to open Grameen banks to fund small and micro enterprises. Later, there was a huge development in Micro- credit companies.It offers funds to the small enterprises who cannot stand to have high credit ratings as required by traditional banks (Agarwal and Hauswald, 2008) but also provides an opportunity to avail high interest benefits to investors (Slavin , 2007). The borrower's credit rating has positive impact on interest rates and vice versa (Wang and Liao, 2014).Investors can identify certain risks on the basis of information provided by the borrower through the platform (Huang,2015). And the main risk taken by the p2p platforms are the operational risk and financial risk (Gai, 2016)

Magnetism of P2P Lending innovation

Investment Tool: Investments of surplus are often done in Equities, Mutual Funds, Real Estate and Deposit schemes. But what next? Investors can diverse their portfolio by adding lending to other Asset class. The traditional investment tools generate the returns which are low in comparison to the returns on P2P lending.

Returns not related to Stock Market conditions: Most of the market investment tools are related to stock market conditions, and return also varies. As the returns are not directly related to market conditions, a portfolio can be diversified in a better way. Mostly market related tools yield around 12 to 14% while it can offer higher returns.

Power of Compounding: Another important aspect is it has the power of compounding. Lenders are receiving back a proportion of their investment every month, can reinvest and can counter the inflation through compounding effect.

Risk Mitigation: Being a debt based investment tool, there is a risk of default. Just like other debt instruments risk can be mitigated by diversifying the different types of loans and borrower categories. Lenders can ensure consistent returns by carefully diversifying debt.

Steady and quick returns: The most distinct feature of P2P lending is that returns are quick and steady. In P2P lending process the entire process from loan application to disbursal is done online. Hence reduction in operational cost and quick returns.

Global Perspective

The technological advancements opened new doors for many startups, and the concept of FinTech surfaced. In 2005, Zopa was founded in UK as many banks failed to fulfil the demands of borrowers. In 2007-08 the financial crisis hit the debt market and banks began to tighten their lending prepositions due to stringent capital reserves. This created a debt funding gap and many companies like Zopa started to launch their peer to peer lending platform. According to a report by CBInsight and KPMG, FinTechs gained momentum since 2013 where most of the investments were made in US. However, since 2014 there has been a significant increase in investments in Asian countries also. The biggest deal traced back in 2016 with Ant Financial (USD bn) a subsidiary of Alibaba.

The previous studies reflect that most of the FinTechs focus more on developed countries like UK and US. But there is a remarkable expansion of FinTechs in developing countries also. According to a report by KPMG, China is the market with most peer to peer lending platforms, amounting to around 2,300 as of March 2017, with a lending volume of CNY 9,210 bn. A report by McKinsey Global Institute (2016) states that Fin Techs could also boost economic growth in emerging economies. For China they calculate a possible 4.2% increase in GDP until 2025, due to digital financial services.

The explosive growth of P2P industry gave rise to many incompetent and dubious companies to play in the market. As a result, investors started withdrawing their funds and platforms started to collapse. The reason behind was the regulation system.

At present, Australia, Argentina, Canada (Ontario), New Zealand, United Kingdom, France, Germany, Italy and USA, it is partially or fully regulated .It is banned in Israel and Japan. Although China has the largest P2P market in the world, with number of platforms offering varied services, the sector is still not regulated currently.

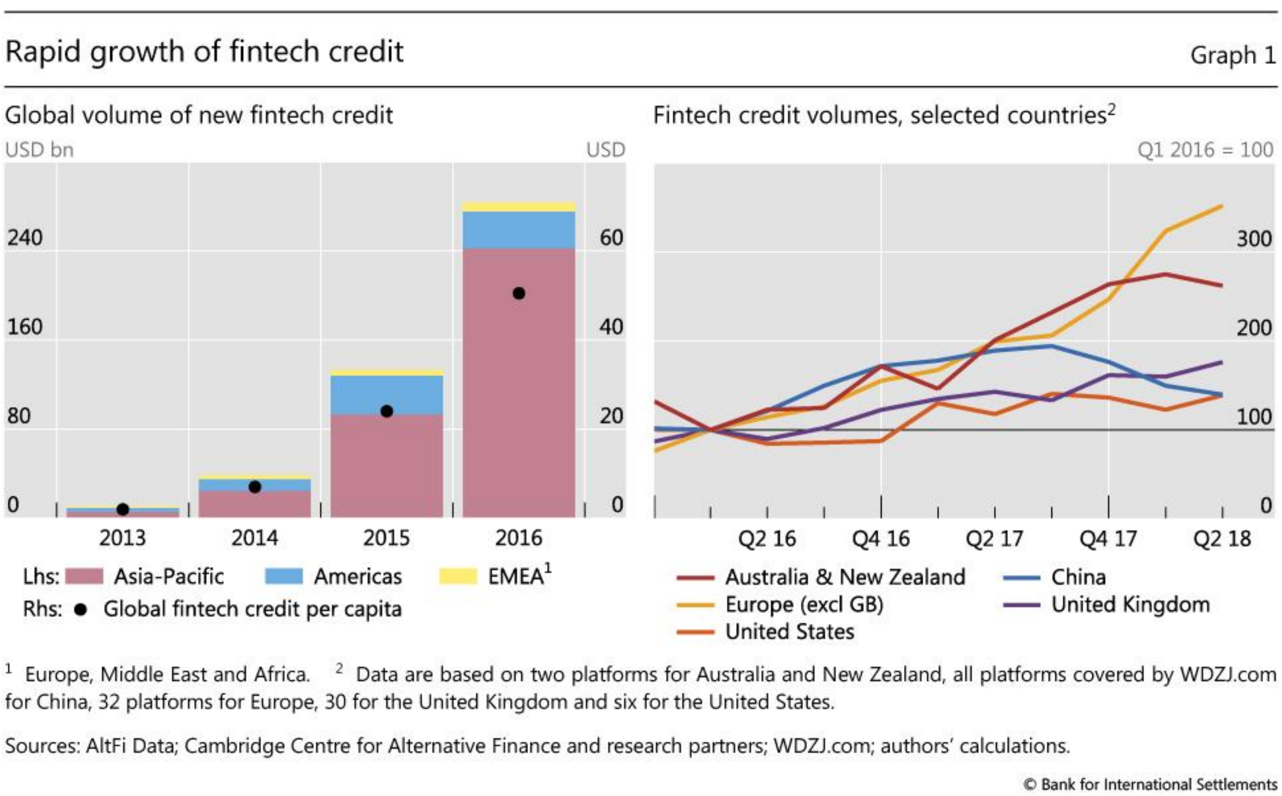

Figure 1.1 : Growth of Fintech credit of various countries

Financial Innovation backfires

According to the Bloomberg report, 4500 P2P platforms were closed in China since 2013. The reason for crisis of China's P2P market was a fallout of regulations which leads to issues like high interest rates, misuse of funds and inadequate credit information. Many platforms shut operations instead of complying with the regulations. This leads to withdrawal of confidence among the investors. Due to high default rates, non- performing assets rise which is not good for the financial health of the platform. In China, platforms become the intermediary between lenders and borrowers, i.e money is firstly invested with platform and then deployed to borrowers. The absence of regulations leads to major conflicts.

Indian Scenario

Peer to Peer lending has seen a tremendous growth in countries like US, UK, Germany, France and China. The massive growth and popularity influenced the market in such a way that these countries have given it a status of mainstream financial and investment product. India is also now ready to officially recognize this Fintech innovation.RBI has announced that peer to peer lending companies will be treated as non banking financial companies (NBFC's)in gazette notification on 18 September, 2018.

Paisa Dukaan got the first certificate of Registration from RBI in peer to peer lending market in India. In 2019 Rupee Circle and India Money Mart also got the license from RBI. Both these companies started their business in 2017 and have already disbursed multiple crores to unbanked customers. These platforms are backed up Oracle Global Startup Ecosystem and Mahindra Finance and others.

	Regional Office	Company Name
	Bengaluru	
1	1	Etyacol Technologies Private Limited
	Chennai	
2	1	Monexo Fintech Private Limited
	New Delhi	
3	1	FAIRASSETS TECHNOLOGIES INDIA PRIVATE LIMITED
	Hyderabad	
4	1	FINCSQUARE FINTECH PRIVATE LIMITED
5	2	Luharia Technologies Private Limited
,	Mumbai	
6	1	BRIDGE FINTECH SOLUTIONS PRIVATE LIMITED (NBFC - P2P)
7	2	BIGWIN INFOTECH PRIVATE LIMITED (NBFC - P2P)
8	3	OHMY TECHNOLOGIES PRIVATE LIMITED (NBFC - P2P)
9	4	Innofin Solutions Private Limited
10	5	NDX P2P Private Limited
	Lucknow	
11	1	RNVP Technology Private Limited

Table1.1: List of NBFC P2P registered with RBI as on December 27, 2018

However the number of P2P lenders registered is quite low as in comparison with their actual existence in the market (Table1.1). One of the foremost reasons is the stringent conditions imposed by the RBI. One such condition is the requirement of net owned funds of Rs 2 crore which weeded out the small market players. Even the online platforms with non serious business also exited.

Impacts of Regulation

Cap sized Funding: P2P lenders who are registered with RBI have to adhere to regulations of NBFC's. The new regulations cap the lender's exposure at Rs 10 lakh. This regulation has extended to all lending and borrowing P2P platforms. But at the initial stage cost of operations are high, and margins can be improved if volumes are increased.

Logistical problems: P2P operators have to appoint a bank promoted trustee to monitor the fund flows between the escrow accounts of borrowers and lenders. At present, IDBI trusteeship is enjoying the monopoly in offering such services.

Confidence built up: Registration with RBI boosted the confidence of both borrowers and lenders. The ticket size of loans also improved as the platform is under the surveillance of RBI.

Access to Credit Data: Being registered, P2P lenders have the access to the data from credit bureaus which provides the pool of potential customers or borrowers who were rejected due to less credit scores or due to risk profile.

Conclusion

Peer to peer lending is a financial innovation which bridges the credit gap. In a global scenario the rapid growth of the sector also brought some drawbacks, as most of the platforms were deregulated and no proper credit evaluation of borrowers forced the investors to pull back their money. In India though it is at an early stage but seeing its potential growth, RBI has decided to regulate this market and stage peer to peer lending as one of the investment tools for investors and bridge the gap of credit by funding unbanked potential customers.

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DIGITAL MARKETING STRATEGIES FOR RURAL INDIA

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Abstract

Digital marketing is dominating the market now. Though traditional marketing has not yet turned obsolete, digital marketing is surpassing traditional marketing. Digital marketing refers to advertising through digital means such as websites, social media (such as Facebook, Instagram, Snapchat, YouTube etc.) emails and so forth. This is digital era and no one can deny the fact that there are immense possibilities in digital marketing. Social media marketing, email marketing, affiliation marketing, on-demand video streaming, the website, SEO, SEM etc. are attributes of digital marketing.

Currently, according to the report in rural India, 78 million users or around 48% use the internet daily, while 140 million, or around 83%use the internet at least once a month. Rural India contributes to over 60% of the country's GDP and with the staggering increase in internet usage, there is expected to be a significant uptick in digital commerce. Consumers are aware of the alternatives available to them, due to the internet. Digital marketing just aims at potential customers, making them aware of the products and services in the market thus consumers get familiar with the opportunities and choices handy and take sensible decisions. With digital marketing, consumers of the rural area have gained awareness about the brands.

The paper aims at finding out what digital marketing is all about, and how companies are adopting digital marketing strategies in rural areas to promote their products and make consumers aware, and also to gain a competitive edge over others. The paper describes the current scenario of digital market in rural areas and explores the challenges and opportunities businesses have with the companies going rural with digital marketing. Why are companies adopting it? What is the future of digital marketing in rural India? It concludes that digital marketing is something that will continuously grow in both practice and demand in rural areas.

Key Words: *Social media marketing, Affiliation marketing, SEO, SEM*

Introduction

This is a digital era and no one can deny the fact that there are immense possibilities in digital marketing. Social media marketing, email marketing, affiliation marketing, on-demand video streaming, website, SEO, SEM etc. are the attributes of digital marketing.

Digital marketing has contributed a lot in changing the world. If we talk about shopping, technology has changed the complete essence of shopping. From offline shopping, shops have marked their presence on a virtual domain as well. Thus, digital shift is noticeable. Following are the effects of digital marketing on small towns:

Approach: With everything going digital it is now easy for consumers to get the most of the resources available online. Where physical barriers like roads and transportation hinder the path of marketing, digital marketing helps in approaching far-flung consumers. Digital advertising is a boon for marketers, especially small-scale businesses as they can tap their target audience easily.

According to the report in rural India, 78 million users or around 48% use the internet daily, while 140 million, or around 83%use the internet at least once a month.

The report mentions that internet growth in India is currently fuelled by the rural sector, with the urban user base starting to show signs of levelling out.

Awareness: Consumers are aware of the alternatives available to them, due to the internet. Digital marketing just aims at potential customers, making them aware of the product and services in the market; thus consumers get familiar with the opportunities and choices handy, and take sensible decisions. With digital marketing, consumers of the rural area have gained awareness about the brands.

The central government expects to nearly double the number of existing Internet users in India by 2020 due to fast adoption of digital technology, according to the minister of communication.

Growth: Digital marketing has succored the small-scale businesses in expanding their profitability by going online. Earlier the businesses in small towns had the immense headache of marketing their business through traditional marketing including billboards, and the magazine that was way too exorbitant; but digital marketing being cost efficient has contributed a lot to growth as now the reach becomes easy.

Contribution to the economy: With the possibility to set the business on virtual platform and availability of digital marketing, it is now possible for even small residents to start their own ventures without any geographical barrier, which was impossible during the time of traditional marketing. Digital marketing acts as a boon for rural marketers. Furthermore it contributes to strengthening our economy. Increasing application of digital technologies can help India's GDP to grow by $101 billion by 2020, global consultancy major Accenture said.

Entrepreneur: You even can start a new website and earn money through advertisements you show on your website; not just this, freelancing comes intact with digital marketing. Digital marketing has escalated innumerable entrepreneurs in rural areas as cost of investment is not much.

Internet reaches every house where even roads don't reach, people watch videos on their mobiles or laptops. It is the reason why brands will emphasize on digital marketing. So, when a start-up defines its marketing plan it should tell its robust digital strategy. We can't say that traditional marketing should be waived off because, after digital marketing, traditional marketing comes into play. Thus, it is evident that both the marketing tactics go hand in hand.

Literature Review

Edward J. Malecki (2003) worked on the potential and pitfalls of digital development in rural areas. Clearly there are potential benefits of the digitalization in rural area which increases the efficiency of the work, but it also has downfalls, For instance, it would be the cause of shortage of human capital. As there is increase in technology, goods and services are a click away from people, and that has reduced the human interaction. Internet and mobile have become integral parts of our life, whether in case of telecommunication, entertainment or marketing. There is increase in the digital economy also.

Laura Gallowayetal (2005) have concluded that there is much evidence that information and communication technologies (ICTs) are drivers of economic growth. As a result, government is keen to promote ICT take-up, particularly where there is economic development need. The rural economy in most countries is regarded as that which requires intervention in order to foster sustainability and development, and there have been many empirical studies of both the value and the use of ICTs in rural areas. These are, however, highly disparate, often being industry, country-and, indeed, type-of-technology-specific. The main aim is to draw together the highly eclectic literature on the use of ICTs in small to medium-sized enterprises (SMEs) in rural areas in order to provide an overview of generic issues, relevant to policy.

Erda CV (2008)studied the comparative buying behavior of rural and urban customers on mobile phones. The study highlighted the difference in terms of consciousness about price, quality, style, function and brand. It was concluded that rural segments pay less attention towards the quality, function, and brand and are more conscious about price and style. It was concluded that minor modification or extrapolation of urban marketing strategies might fail in rural marketing.

Michael Trusovetal (2009) studied the effect of word-of-mouth (WOM) marketing on member growth at an Internet social networking site and compared it with traditional marketing vehicles. Because social network sites record the electronic invitations from existing members, outbound WOM can be precisely tracked. Along with traditional marketing, WOM can then be linked to the number of new members subsequently joining the site (sign-ups). Because of the endogeneity among WOM, new sign-ups, and traditional marketing activity, the authors employ a vector autoregressive (VAR) modelling approach. Estimates from the VAR model show that WOM referrals have substantially longer carryover effects than traditional marketing actions and produce substantially higher response elasticity. Based on revenue from advertising impressions served to a new member, the monetary value of a WOM referral can be calculated;

this yields an upper-bound estimate for the financial incentives the firm might offer to stimulate WOM.

Objectives of the Study

Following are the objectives of the study: -

1. To provide an understanding of the concept, and importance of digital marketing in rural India.
2. To study the initiatives taken by Indian companies for venturing into rural areas by digital medium.
3. To determine the future of digital Marketing in rural India.

Research Methodology

- The present study is exploratory in nature, intended to provide a clear guidance for empirical research.
- For this purpose, secondary data were collected. The secondary data were collected throughnewspapers, magazines, books, journals, conference proceedings, Government reports and websites.

Digital marketing strategies adopted by the companies to go rural

About Hindustan Unilever Limited

Hindustan Unilever Limited (HUL) is India's largest Fast-Moving Consumer Goods (FMCG) company with over 80 years of existence in India. It is the market leader in consumer products with a presence in over 20 consumer categories such as soaps, tea, detergents and shampoos amongst others with over 700 million Indian consumers using its products. The portfolio of HUL consists of Lux, Lifebuoy, Surf Excel, Rin, Wheel, Fair & Lovely, Dove, Vaseline, Lakme, etc. HUL has the strongest distribution network, as it covers 2 million retail outlet across India directly and its products are available in over 6.4 million outlets in the country. The data published in Neilson market research shows that every two Indians out of three use HUL products.

Business Objective – Reaching Media-Dark parts of the Country

FMCG has a bigger percentage of share among the consumed categories in both rural and urban India. One of the most significant sales for FMCG companies comes from rural India. For HUL, as any FMCG company both its products and brand need to be successful in rural market. Bihar being a big state in northern India, it's also important for HUL to take its brand awareness to both of its rural and urban parts. Vast areas of Bihar are still 'media dark' considering the penetration of newspaper and television. In Bihar, television penetration is only 20% which is considered very weak among the other states, the frequent power cuts add to the cause of not being able to use television medium effectively. Due to the aforesaid reasons HUL had to come up with a different concept for taking its brand awareness to its consumers.

Strategy Adopted – Dedicated Mobile Radio Station

In the year 2012, HUL launched a new campaign for their detergent brand Wheel asking the consumers to give a missed call to a certain number which kept them engaged with romantic husband-wife jokes and entertained them. The campaign ended up well with over 3 lakh missed calls from 25,000 unique numbers in the first month of launch. The success of this activity led to one of the biggest rural market campaign of HUL – Kan KhajuraTesan (KKT)in 2014 and it eventually became India's first free and on-demand entertainment mobile radio station for the company for three consecutive years. In KKT the user is asked to give a miss call to 18003000123 number and the system automatically gives a call back within 15 minutes providing the user with a variety of entertainment ranging from music, news, jokes and latest from Bollywood. During the call, HUL interspersed with its advertisements which included its mass consumer brands such as Lifebouy, Ponds and Close Up. This entire KKT campaign help HUL communicate directly with its consumers in rural markets and also resolve the persisting problem of low penetration of conventional media.

Result Achieved – Fastest Growing Media Channel

KKT enrolled around 8 million subscribers in its first 6 months becoming and instant hit in rural masses. By August 2014, the channel was already operating in UP, Uttrakhand, MP and Orrissa. As per recent stats it claims to add 40000-50000 new subscribers daily and has over 1.85 crore subscribers already to its network. With all the data that KKL provides, HUL uses this information to gauge the frequency and time when the calls arrive, repeated callers and exact point when the user hangs up the call. As the brad advertisements are part of the call it also provides HUL the ad impression numbers. Kan KhajuraTesan provides HUL insight into a unique segment which is seen by FMCG companies as consumer base of the future.

Learning

Mobiles phones in the current age have a very high penetration thus making it a very useful media to reach out to rural customers. Companies should look to use mobile users as a major part of brand communication given the fact that today's mobile users are willing to spend more money on downloads for entertainment and infotainment. As the reach out for this medium is limited, content is of utmost importance. The content is customized to incorporate local flavor, along with Bollywood which is very popular among users of all ethnicity. To increase KKT's penetration it has tie ups with Bollywood movie launch campaigns. KKT is also being used PR activities to get user reaction on common social media evils. For e.g. In an appeal against corruption KKT invited users to give a miss call on its toll free number 1800-30-000-123. Since corruption is a well know issue in every household KKT received over 72 lakh missed calls from over 32 lakh Indians, pledging against corruption within 120 hours between 13th August and 17th August 2014, creating history by setting a World Records of Maximum Number of Missed Calls.

ICICI Bank announces launch of 'MeraiMobile', India's first mobile banking application for rural customers

India's largest private sector bank ICICI Bank Ltd., by consolidated assets, has launched a unique mobile app for rural customers which allow them to access the banking services as well as information on agriculture services. The best of this app is the people who don't have account with ICICI bank can also enjoy the services of this app which is available in 11 Indian languages.

'MeraiMobile' has allowed the users to avail 135 services out of which some they would not have even ever experienced before. This app helps them to save time by not visiting the bank and avail the services like Kisan Credit Card, Gold Loan, Farm equipment Loans and loans to Self help Groups (SHGs) and also frequently used banking services in a single click by sitting anywhere using smart phones that too without using mobile internet services.

First app in the banking sector which offers cropwise mandi prices of nearly 230 crop varieties across 460 mandis. It also provides regular and frequent updates on weather for close to 3700 talukas over 300 districts, which help farmers for sowing and harvesting activities. These value-added services have been provided only on MeraiMobile app.

One of the core belief for ICICI bank is to invest in innovative technology ahead of its time. On these core beliefs the bank has built reliable solutions for customers which are Mobile, Tab and 'Touch Banking'. As India has been rated as the second largest country for internet usage and smartphone market, the next wave of growth is predicted to be from rural India due to cheaper handsets and internet data plans.

The new 'MeraiMobile' offers rural and semi-urban customers new ways of experience in their interaction with the bank. It's a result of extensive research and first comprehensive offering for rural customers on smartphones with 135 services in eleven Indian languages. Any user can download the app and get access to agri related advisory on mandi prices and weather. The app has all the features which will resonate well with the needs of rural india and the aim is to have half million downloads in next six months.

'MeraiMobile' is specifically designed to be lightweight enabling rural customers to download and run it easily even with low internet speed. To have quick downloads Bank has introduced 'Wi-Fi' enabled posters' both in rural and semi urban branches. To start with 700 bank branches will have these posters. Also plans are being made to mount these posters on vans and cycles at places of high footfall and common village areas.

Any android phone user can download the 'MeraiMobile' app and avail agriculture advisory related services. Users who have a rural savings account / Kisan Credit Card / Gold Loan / Self Help Groups / other agri loans with ICICI can use the app for its related services.

The key services of 'Merai Mobile' are:

Integrated offering of rural banking accounts in the app: Rural bank services like Kisan Credit Card (KCC), gold loan, loans to SHG and tractor loans are only available in this app for the banking sector. Customers can view details including outstanding interest, available limit, account statement among others on the app. Payments can also be done within the app from their links savings account. App will also have an upcoming feature to renew loans withinthe app.

- **Value- added services of agri-information:** Any user who downloads the app can get information on weather and prevailing crop prices. Such services are provided in no other banking app. Initially this information is made available in agri dominant districts.

- **Availability of services without using mobile internet services:** Fourteen most frequently used banking services are provided by the app which even works without mobile internet services. This is the improved version of SMS based services that can be done from 'MeraiMobile' available in feature phones. Customers can complete their frequent transactions by simply adding few details as pre-formatted templates are available which can be used. The many services provided include fund transfer, bill payment, cheque book request, recharges and balance enquiry.

Offers the app in multiple languages: The app is available in eleven Indian languages which include English, Hindi, Marathi, Gujrati, Tamil, Telegu, Kannada, Malayalam, Bengali, Odia, Assamese and Punjabi. It's the first app in banking sector to offer UPI services in multiple languages.

ICIC bank has been doing its continuous effort in providing a robust digital system. Across the country. Recently the bank announced the largest village promotion programme in the country transforming 100 villages into 'ICICI Digital Villages' which encompasses digitization of transaction & commercial activities.

Parle G

Parle-G appealed to the rural demographic driving brand awareness. In just over 3 months, the campaign touched 222 towns in 59 cities and villages, reaching over 674k users.

The campaign by Parle G combined geographical presence with mobile interaction. Aimed at driving sales in the rural segment, the 'Parle G Truck' visited villages allowing consumers to download free vernacular content via Bluetooth onto their feature phones.

Tata Sky

Incorporated in 2001, Tata Sky Ltd is a joint venture between Tata Sons and 21st Century Fox. The satellite television service aims to empower the Indian viewer with choice, control and convenience through its wide array of programming choices and interactive features Tata Sky offers customers interactive services as well as a variety of channels ranging from entertainment, sports, movies and music to news and documentaries in DVD quality picture and CD quality sound. It has redefined the television viewing experience for thousands of families across India.

Objective

Direct to Home subscription base in India is 6.2 crores, Tata Sky share currently stands at 6.2 Crores. With the ever maturing urban markets, Tata Sky has been looking to target Rural India- where a large chunk of TV viewers still depend on analogue services.

The challenge facing the Brand in the rural market was accepting that a monthly subscription model did not fit the requirements of the consumer. They sought a model where they could pay for their limited consumption which was largely short term, keeping in mind lengthy hours of power cuts.

With this understanding, Tata Sky introduced the Daily Recharge- a sachet size recharge voucher offering a minimum 8 Rs recharge coupon providing a user access to their DTH service for a day.

The challenge for the brand was bringing out a path breaking campaign which would emphasize the everyday nature of the brand and the benefits of it.

Strategy Adopted

Tata Sky along with Ogilvy and Mather came up with a campaign called 'Daily Dillagi' that would have 13 TVC's strewn together to tell the story of a young couple that meet whenever the girl comes to the boy's store to buy a daily recharge coupon, and how their every day meeting eventually blossoms into love. The brand promise being: "Daily Milengetohpyaar to hoga hi"

The agency created 13 commercials of 1 minute each and was set against a small town close to Srinagar. The campaign was launched to coincide with IPL 8.

The first episode that was launched on Tata Sky's Youtube channel titled PehliNazar has 620K views.

Apart from the TVC's a huge social media marketing campaign was also launched simultaneously. The brand built engagement and interaction with customers through conversations asking for advice for the lead character (Mannu) who is confused about what to wear on his first date. The customer was invited to help him out through a video.

There was another video with Neelu's dad talking about Neelu's change in behaviour.

In addition to this, lots of interactive competitions were held asking viewers to answer questions after each video either on their Facebook, twitter or website and stand the chance to win a Tata Sky connection

The Facebook and Twitter pages were also redesigned along the lines of the campaign with creative visuals and hashtags like #thingspeopledoinlove and #saidalldadsever among others.

The lead characters also created their own personal profile pages as Neelu and Mannu to create a personal touch and give the brand an identity to connect with customers.

All things considered , Tata Sky took a bold step in redefining the age old mantra of stand alone TVC's and ad campaigns, choosing to make a 13 episode long love story to convey the everyday nature of Tata Sky's chota recharge along with the tag line 'Jis din tv dekhousi din ka recharge karo'

Result Achieved

The first episode that was launched on Tata Sky's Youtube channel titled PehliNazar has 620K views, and all the 13 videos together brought in over 5 million views.

The Tata Sky website witnessed a 30 % surge in visitors during the first run of the campaign during IPL. Facebook & Twitter also witnessed massive increase in followers and interactions, thereby increasing customer engagement and awareness around the campaign.

The message of the campaign "Daily Milengetohpyaar to hoga hi" was very well received and Tata Sky is already growing rapidly in the rural market with this offering as was the intention behind this campaign.

Learnings:

An emotional connect with customers was brought forth through the 13 TVC's which broke the clutter in terms of execution it's both online and offline.

Personalized Facebook and Twitter pages created a bond between characters and customers

Engagement through youtube videos and contests allowed users to be a part of the campaign, thus extending recall.

While competitors might look it as a gimmick campaign, it will go down in memory as a bold move by Tata Sky to promote a product via story telling on TV and then further tying it with digital. In doing so Tata Sky has reached its IPL watching TV audience and by building conversations on social media it has also gained eyeballs from netizens. The daily recharge is a path breaking product so far unheard of in the DTH space and required a path breaking campaign backing it. Which was what we got and the #DailyDillagi will remain in the hearts of viewers all over the country.

Conclusion

From the above we can conclude by saying that the reach and affordability of the mobile medium allows personalization and Geo-targeting.

With affordable smartphones and mobile internet, brands can now experiment beyond messaging or missed calls. Mobile website, banner ads, text campaigns and a variety of other options available to marketers can be highly effective whereas SMS-powered communication can work with even low-end devices.

Long-term or short-term; stand-alone or integrated campaigns work better.

Most brands employ long-term mobile programs and integrate into other media channels as it allows them to enable maximum touch points. As mobile is far-reaching, brands are inventing diversified ways of using mobile as a communication channel to create customer relationship that will help drive the sales.*Combining the reach of mobile with appealing content is usually a winning combination.*

Entertainment in the form of video and audio content drives the internet consumption in rural parts of the country. To connect effectively with the otherwise media-disconnected rural audience, mobile marketing is the key.

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RESIDUAL VALUATION OF LAND PARCEL AT AIROLI

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Background

In the absence of comparable sales, the development approach to valuation (also known as residual valuation) is considered an acceptable method to determine the value of land. The method involves considering the value after the completion of the development, then by deducting the cost of such a development, the remaining amount (residual amount) is the amount that a developer would be prepared to pay for such a property in order to obtain the development potential (Boshoff, 2011). Currently, Airoli real estate market is saturated and recently there has not been any transaction related to land parcels, so to derive at a land value application of residual valuation approach is appropriate as it take into consideration current real estate market trends, which directly rely on the proposed mix of development conceptualized by developer.

Introduction

Property owners or buyers often require an indication of the amount for which the property could be sold or purchased. Reliable methods of valuation such as the comparable sales method or income capitalized method are majorly used to determine the value of a property (Boshoff, 2011). Residual method of valuation is adopted when the other methods cannot be applied. To understand the methodology of residual valuation, a land parcel located at sector 20 of Airoli is the subject property to be transacted for a residential development. Airoli is the northernmost node of Navi Mumbai and is an established locality in the Mumbai Metropolitan Region. The determination of the land value depending upon the development potential can be derived from the development approach to valuation method. It would involve conducting market analysis to input accurate values related to cost of construction, current market trend, etc. The subject location falls under Navi Mumbai Municipal Corporation (NMMC) and hence the development would follow NMMC development control regulations.

Research question

1. Is residual valuation approach an appropriate valuation approach to derive at a land value in a saturated market?

Objective

The objective of the study is to apply the residual valuation method to derive the market price for the subject land parcel and validate with the current market value.

Research methodology

1. Conducting market analysis to collect and analyze data for the proposed development.
2. Assess the value of the assumed development on completion.
   Value of the completed development is the market value of the proposed development assessed on the special assumption that the development is complete as at the date of valuation in the market conditions prevailing at that date. This value is referred to as Gross Development Value (GDV).(RICS, Valuation Information Paper No. 12: Valuation of development land, 2008)
3. Assess all the cost of completing the assumed development scheme
   Costs could be broken down into pre-construction, construction and post construction.
4. Estimate residual land value.
   The costs are added together and deducted from GDV to arrive at a Gross Residual Value (GRV).

Analysis

Location Analysis

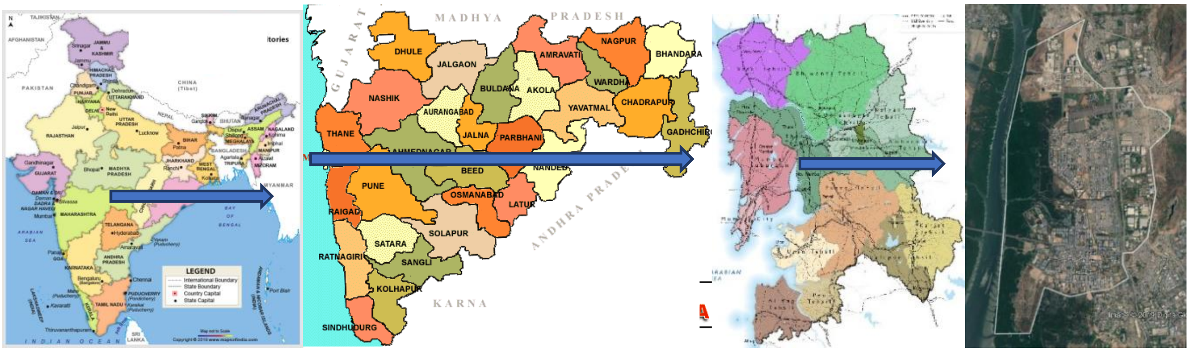
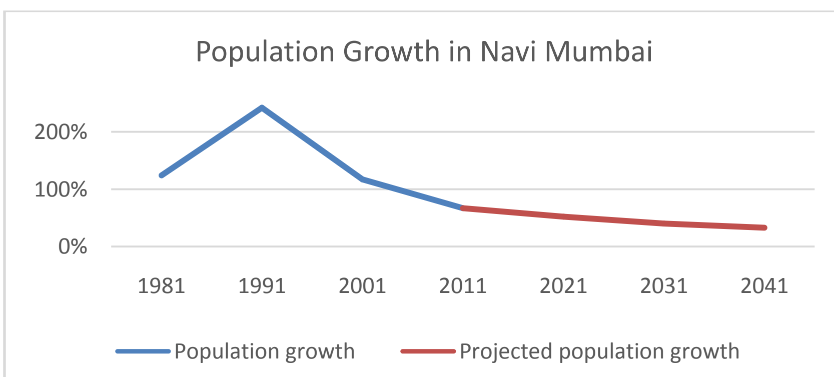


Figure 1: Location of Airoli. (Source: Google earth and Google Images)

The population of Navi Mumbai according to the 2011 census is 11,20,547 and household size is 4.10. The projected population for the year 2021is 17,03,298. The Graph 1 below shows the population growth over the past 50 years and the projected population for the next 30 years (Mumbai Metropolitan Regional Development Authority, 2016). The graph below shows the decadal percentage increase in population in the Navi Mumbai region. The projected population growth percentage shows a decreasing trend due to these areas reaching almost their saturation levels.



Graph 1: Population growth of Navi Mumbai

Airoli is divided into 28 sectors shown in the map below. The Navi Mumbai node, referred to as the "Gateway of Navi Mumbai" has shown rapid development due to its location and developed infrastructure. Its proximity to central business district of Powai and BKC further makes it a strategic location. Airoli has developed to become an IT hub with the presence of major IT Parks of Mindspace, Reliable Tech Park and MIDC. The Existing IT parks employ over 70,000 people (Mindspace, 2019).

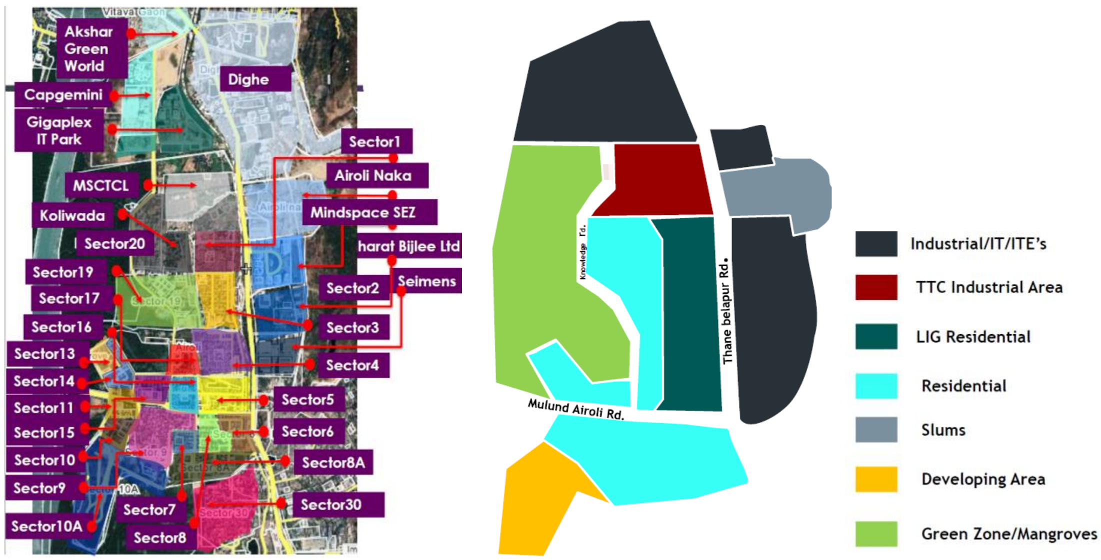


Figure 2: Sector distribution and Land use plan of Airoli (Source: Google Earth, Wikimapia)

Thane-Belapur road and Mulund-Airoli road facilitates rapid connectivity to the rest of the city. Local trains connect Airoli to Panvel and Thane. Distance to CSIA (Mumbai) – 25 Km and NMIA (Navi Mumbai) – 24Km (proposed).

Figure 3: Connectivity of Airoli (Source: Google maps)

Aroli has an established social infrastructure. Well known international schools like Vibgyor, New Horizon Public are present in Airoli. Educational Institutes like Dutta Meghe College of Engineering and colleges offering management and science courses have their presence in Airoli. The maps belowindicate the available amenities of educational institutes, hospitals and malls at Airoli.

Legend: Schools and Colleges Hospital Retail Malls

Site analysis

The subject land parcel location at Airoli is in Sector 20. The area of the land is 9600 Sq.ft. It is accessible from the 30 m wide Knowledge park road and an internal road that is 11m wide.

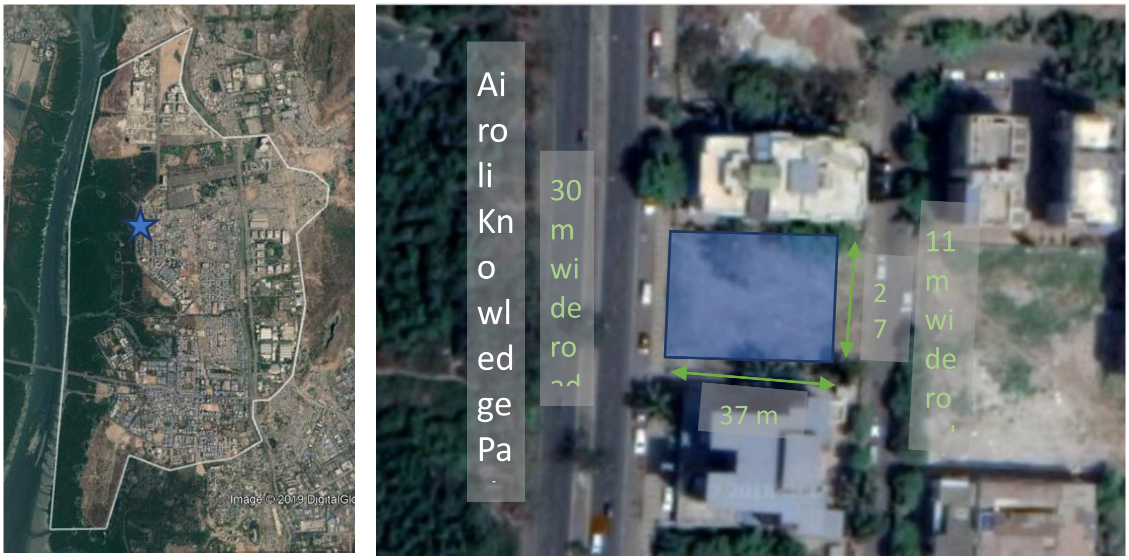


Figure 4:Location and accessibility of the subject site. (Source: Google Earth)

Sector 20 C of Airoli is predominantly MIG residential neighborhood with a few small retail stores.The subjected land parcel has the exposure and the frontage of the Airoli Knowledge Park roadand faces the expansive mangroves and the creek.

Figure 5: Pictures showing the surrounding of the subject land parcel.

Findings

By conducting a primary research by visiting the subject land parcel in person and studying surrounding vicinity of the subject land parcel, it was found that the real estate development was more of MIG level (Middle Income Group) residential.As the real estate market in Airoli is saturated there is high demand in the residential sector and alsodue to corporate establishment of commercial and IT Business Park in sector 20B of Airoli, such as Mindspace and Capgemini, which are located at a distance of 1.5 km via Mulgasan road from the subject site. By studying the Nodal development plan of Airoli, it was found that the subject property is Residential. (CIDCO, Nodal plan of Airoli). The maximum permissible F.S.I applicable to subject land parcel is 1.00 (CIDCO, GENERAL DEVELOPMENT CONTROL REGULATION, 1975).

Observation

The development proposed for calculating the land value is mix of residential and retail development. By studying the Development Control regulation norms (CIDCO, GENERAL DEVELOPMENT CONTROL REGULATION, 1975) the proposed development is of 8400 Sqft of residential and 1200 Sqft of retail. By calculating the GDV (Gross development value) and all the cost related to development of the subject land parcel, the land value observed is Rs 5,700.

Cost of Construction - Residential (Rs/Sqft) Source:- Renox.in	1,500
Cost of Construction – Retail (Rs/Sqft) Source:- Renox.in	1,800
Average Configuration Size- Super Built up area of 1 BHK (Sqft) Source :- 99acres	650
Average Configuration Size- Super Built up area of 2 BHK (Sqft) Source :- 99acres	800
Average residential value (Rs/Sqft) Source:- Primary survey, 99acres,magicbricks	11,500
Average retail value (Rs/Sqft) Source:- Primary survey, 99acres,magicbricks	15,000

Calculations

Site Area (Sq.ft.)	9600
F.S.I	1
Total Built up Area(Sq.ft.)	9600

DEVELOPMENT PLAN	

Residential Units	
1 BHK	8
2 BHK	4
Total Units	12

Residential Unit Size	
1 BHK (Total Built up area) - Sqft	650
2 BHK (Total Built up area)- Sqft	800
Rs/Sqft	11500
Value/unit	
1 BHK (Rs)	7,475,000
2 BHK (Rs)	9,200,000
Total Residential Sale Value (Rs)	96,600,000
Retail	
No of Unit	3
Sq.ft/ Unit	240
Rs/Sqft	15000
Value/ unit (Rs)	3,600,000
Total Retail sale value (Rs)	10,800,000
Parking	12
Hurdle Rate	10%
Project Value (Rs)	107,400,000
Maximum Supported investment (Rs)	97,636,400

Hurdle Rate: A hurdle rate is the minimum rate of return on a project or investment required by a manager or investor.(Investopedia, 2019)

COSTS

Building Construction	
Residential (Rs/sq.ft.)	1500
Commercial (Rs/sq.ft.)	1800
Sub total (Rs)	9,096,000
(Total Construction Cost) (Rs)	9,096,000

Indirect cost	
Design and Engineering (5% of Construction cost) (Rs)	454,800
Real Estate brokerage fees (5% of Value) (Rs)	5,370,000
Financing fees and taxes (2 % of construction cost) (Rs)	181,920
Contingency (10% of Construction) (Rs)	909,600
Developer's Profit (25 % of Project Value) (Rs)	26,850,000
Total Costs of Development without land (Rs)	42,862,320

Residual Land Value *(Maximum Supported investment less Total Cost of Development* ***Without*** *Land)(Rs)*	54,774,080
Land Cost (Rs/Sq.ft.)	5,705.63

Conclusion

It can be concluded from this study that residual valuation or developer residual valuation method is suitable for the Real Estate Developers or the individual who are bidding for a land parcel respective of their design mix. Residual valuation method is suitable for establishing a land value where there has not been many recent transactions.

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MARKET ANALYSIS AND FEASIBILITY STUDY OF COMMERCIAL OFFICE SPACE IN MICRO-MARKET OF PANVEL

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Abstract

Panvel city is an upcoming real estate investment destination due to its excellent connectivity to major cities like Mumbai, Navi Mumbai, Thane and Pune. It has wide scope of development due to proposed infrastructure projects and presence of Industrial hub. This study aims to understand the robust nature of this city along with the sustainability of the real estate business here. Various research methodologies have been used which include primary and secondary research. The analysis carried out gives us an idea of the scale of challenges pertinent to our micro-market and their prospective solutions. These theories have been translated into potential future scenarios for sustainable economies.

The final output of the research is to present the approaches based on urban theory model and Impact Assessment study of upcoming Navi Mumbai International airport which would boost the commercial real estate business in sustainable manner by taking into consideration factors of sustainability which aresocial (recognising the needs of everyone) and economical (maintenance of high and stable levels of economic growth and employment).

Keywords: *Sustainability, Micro-Market, Real estate, Infrastructure, Commercial.*

Background

Panvel is a city in Raigad district which is in western belt of Maharashtra. It is divided into two parts i.e. Old Panvel and New Panvel. Old Panvel is a 300 year old city where as New Panvel was developed in 1970 under City and Industrial Development and corporation (CIDCO) due to the presence of Maharashtra Industrial Development Corridor (MIDC) which was major industrial growth centre that managed various industrial centres like Patalganga, Roha, Taloja, Bhiwandi, Khopoli and Nagothane. "One of the key driving forces of Panvel's growth other than affordability is its good connectivity. Panvel is known as the gateway of Konkan region. Some of the major highways providing connectivity to Panvel include NH-4, NH-4B, NH-17, Mumbai-Pune Expressway and Sion-Panvel Expressway. Sion-Panvel Expressway connects the area to the Mumbai International Airport" (Karthik Kashyap, Shankhadeep Chaudhuri, Priyanka Kapoor, Meha Singla, 2018).Panvel is connected to other parts of Maharashtra via the commuter railway network from CSTM, Mumbai, Thane, Diva, Karjat and Konkan Railway. Due to its geographical location, Panvel is destined to become a main centre for transportation and residential activities. "The Airport site is accessible from the existing Mankhurd-Belapur-Panvel & Thane-Panvel commuter rail corridors from Khandeshwar Railway Station and from the Kharghar Railway Station on the Nerul – Uran Railway line presently under development. CIDCO is working on improving connectivity of the Airport by starting Passenger Water Transport and extending Metro Railway routes to NMIA" (Joshi, 2016). Apart from NMIA upcoming infrastructure projects in and around Panvel includes,

- Mumbai Trans-Harbour Link (MTHL) that is a proposed sea link between Nhava Sheva and
- Proposed Navi Mumbai Metro line from Vashi to Panvel.
- Proposed Panvel-CST elevated train corridor
- A new passenger railway line connecting Ulwe and Nhava Sheva

Economy

Panvel is surrounded by Maharashtra Industrial and Development corporation (MIDC) managed regions like Patalganga, Taloja, Nagothane, Roha, Bhiwandi and Khopoli. Major industrial developments are found in New Panvel. Companies like Hindustan Organic Chemicals, Reliance Ltd., ONGC, Larsen & Toubro Limited, IPCL established to provide employment to masses.

Hotel Industry is also one of the contributors to the economy as there are many budget hotels located in city and along the national highway.

Kalyan, Pune, Thane, Taloja, Vashi etc., provide excellent backward and forward linkages with support industries and suppliers of intermediates, to the units that would come up within Navi Mumbai SEZ. The unique feature of the project is it will implement walk to work concept. This requires development of housing facilities and related infrastructure in the SEZ area" (Joshi, 2016)**.**

"Wholesale markets (APMC) and warehousing are concentrated in Eastern Vashi and Kalamboli. Alarge proportion of land has been set apart for the service industries in Dronagiri as it is to accommodate several port-based industries. Navi Mumbai has a strong economic base. It is situated adjacent to the Thane Belapur Industrial belt developed by MIDC, which is the largest industrial complex in Asia. During the last 30 years of development, Navi Mumbai has attracted significant economic activity projects; few of which are shifting of wholesale APMCs from Mumbai to Vashi, development of a wholesale steel and large warehousing at Kalamboli, IT Parks at Vashi and CBD Belapur. The new projects like the international airport, the NMSEZ at Dronagiri; and the Industrial Park at Kalamboli, are the new economic activities projects coming up in Navi Mumbai" (Navi Mumbai: A profile).

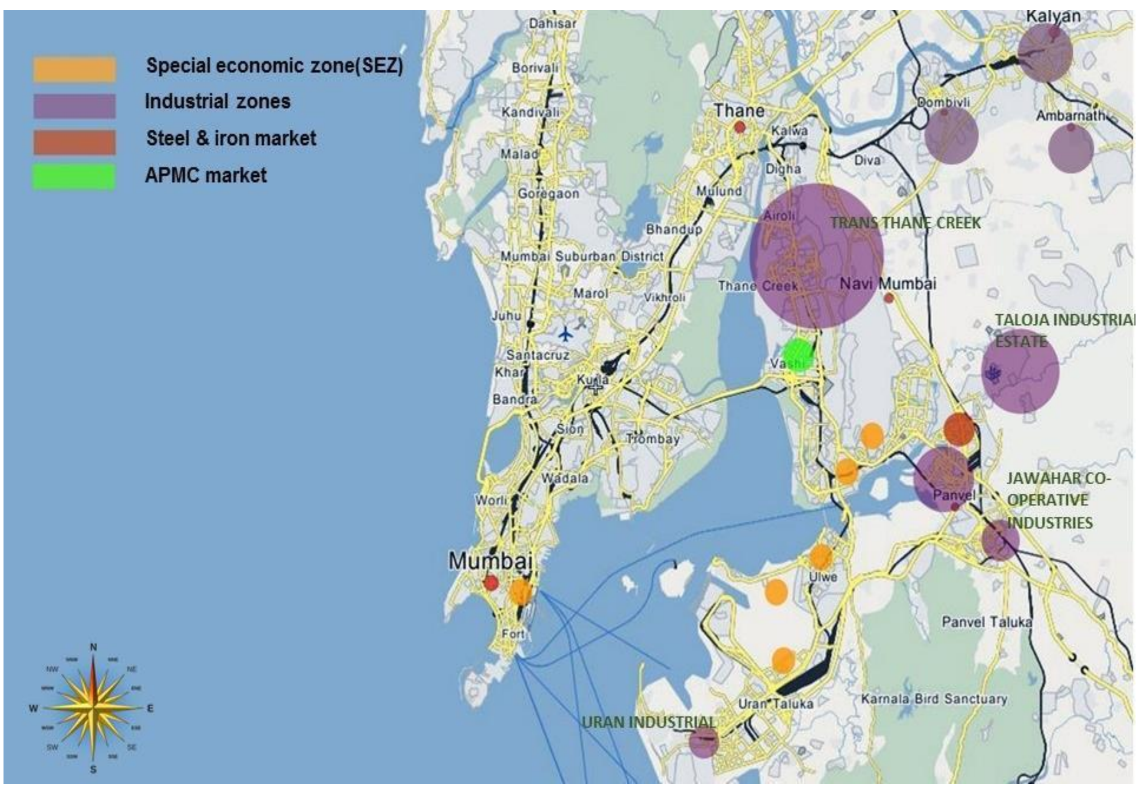

Figure 1: *Mapping of Economic Activities in Navi-Mumbai (Researcher's Mapping, 2018)*

Introduction

The subject-site is located right next to Panvel railway station. The site has an access from Mumbai Bangalore Highway (NH4), Mumbai Pune Expressway and is surrounded by the access roads on all its four sides and strategically located at the centre of Old Panvel and New Panvel. Kalundre river flowing in South acts as a natural barrier. Subject site admeasures around 10.35 acres of land. Site is under the development jurisdiction of CIDCO.

There is no dedicated parking space demarcated for the residents of this area, but a 1.50-acre space of railway parking lot is located at 25 m from the subject site. Site is easily accessible as it surrounded by access road from all its four edges, and close to public transport system, that is Railway station and Bus Depot. Since it is surrounded by the Access road, the site is clearly visible, overlooking Residential G+7 buildings and K mall from its main access road that is towards the west direction and overlooking railway colony right in the opposite direction that is towards its east direction and the southern part is overlooking the green space which is marked as open space in the DP, towards the north direction is Panvel railway station. Low rise budget hotels are concentrated along the arterial road that connects the NH4 from the west direction of subject site. The shape of the subject site is trapezoidal where the narrow width is of 80.5m and maximum width is 150m. The subject site comes under the HFSI zone owned by CIDCO.

Figure 2: *Selected Site Map (Researcher's Mapping, 2018)*

3. Research Question

Is Commercial grade A-office space development Legally permissible, Physically possible, Financially feasible and Maximally productive?

4. Research Objective

To identify feasibility of Commercial grade A-office space development on selected site in Panvel Micro-Market.

Methodology

- Identification of Research Problem
- Literature Review
- Six-Step Market Analysis
- Study of Scientific and Theoretical Models
- Financial Feasibility

Analysis

Property Productivity Analysis

A. Physical Attributes

Terrain	Flat land
Land Cover	Wild shrubs and trees
Shape	Trapezoidal
Area	10.25 acres

B. Locational Attributes

Connectivity – Railway Station	The site is located adjacent to Panvel Railwaystation.
Accessibility	• Road on all 4 sides
	• Major road 12m wide (overlooking
	K-Mall)
	• 9m wide road on two sides
	• 6m wide road on one side

C. Legal Attributes

Commercial	
FSI	L
TDR	0.5
Permissible B.U.A(sq. ft.)	901692

Height of the building (in metres)	Minimum setback (in metres)
<10	3
10-25	8
25-30	10
>30	16

Height of the building	Minimum no. of lifts
Exceeding 16 m	**1**
Exceeding 24 m	**2**

Market Delineation

The subject site is strategically located at the intersection of boundaries of old Panvel and new Panvel. The time-distance gravity model is used to determine the time required to reach major infrastructure from the subject site by considering the concentric circles of distance of 2.5km, 5km, 7.5km and 10 km from the centre of subject site. NH4C, NH66, SH54, Mumbai Pune Expressway, Sion-Panvel Highway, Palaspa-Phata are the major road linkages that are accessible within 2.5 km radius of the subject site.

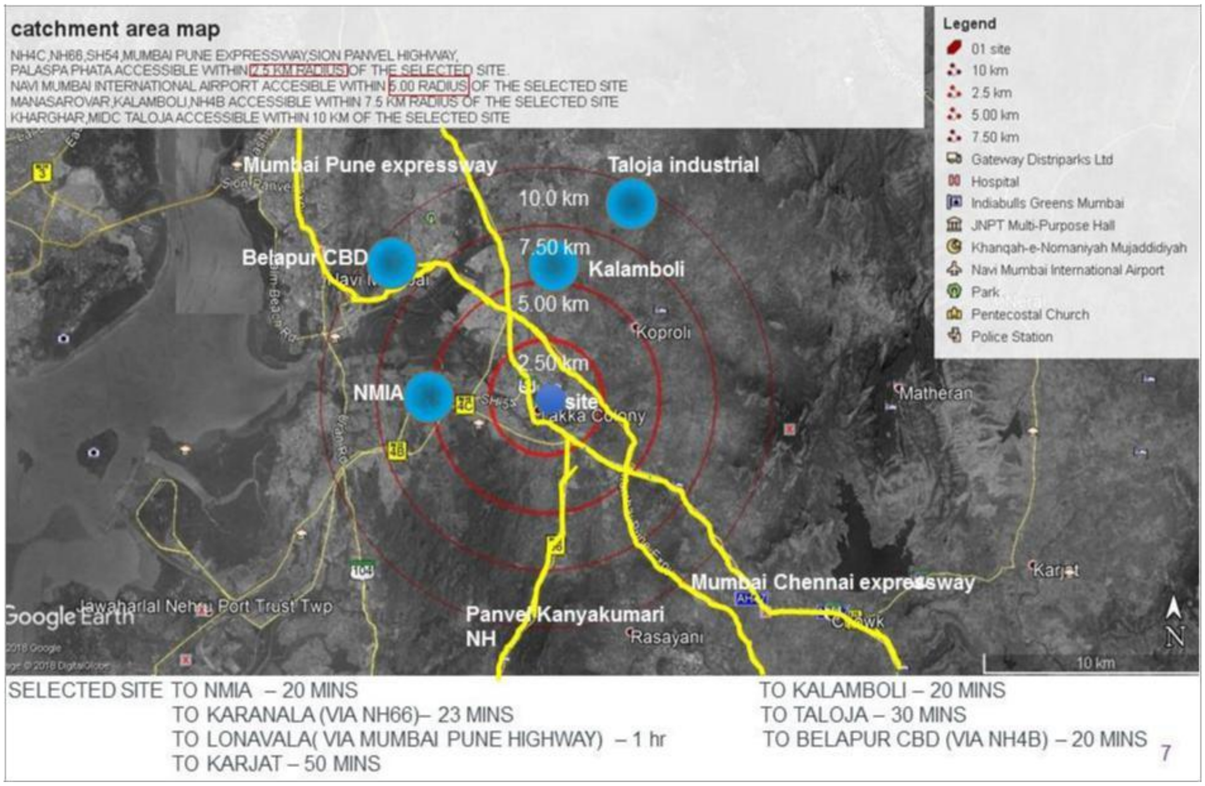

Figure 3: Catchment Area Mapping: Panvel Micro-Market (Researcher's Mapping, 2018)

Navi Mumbai International Airport is accessible within 5 km radius of the subject site in 20 minutes. Manasarovar, Kalamboli, NH4B is accessible within 7.5 km radius of the subject site and Kharghar, MIDC Taloja is accessible within 10 km radius of the subject site in 30 minutes. Major tourist spotand hill station such as Karnala can be accessible in 25 minutes via NH66, Karjat in 50 minutes and Lonavala can be reached in 1 hour via Mumbai Pune Highway from the subject site.

Demand Estimation

"Road, rail and air connectivity are important in the consideration of locations for office development, the proximity to good public transport is important for office locations in the central areas. In relation to office development in local towns and 'out-of-town' business or office parks, proximity to the national highway and airports are important. At a specific level the locational choiceof an office occupier is determined by such diverse factors as: tradition, proximity to markets, staff availability, quality of housing, complementary businesses, availability of parking, individual preferences by directors. Since the advent of IT and with the introduction of more work–life balance options for employees, many companies have introduced 'hot-desking' (i.e. several employees share a desk or workstation) or 'teleworking' (i.e. employees working from home via computer and telecommunication links with head office). There is debate about how such changes in working patterns and the advances in IT will affect demand for office requirements in the future" (Sara Wilkinson and Richard Reed, 2008).

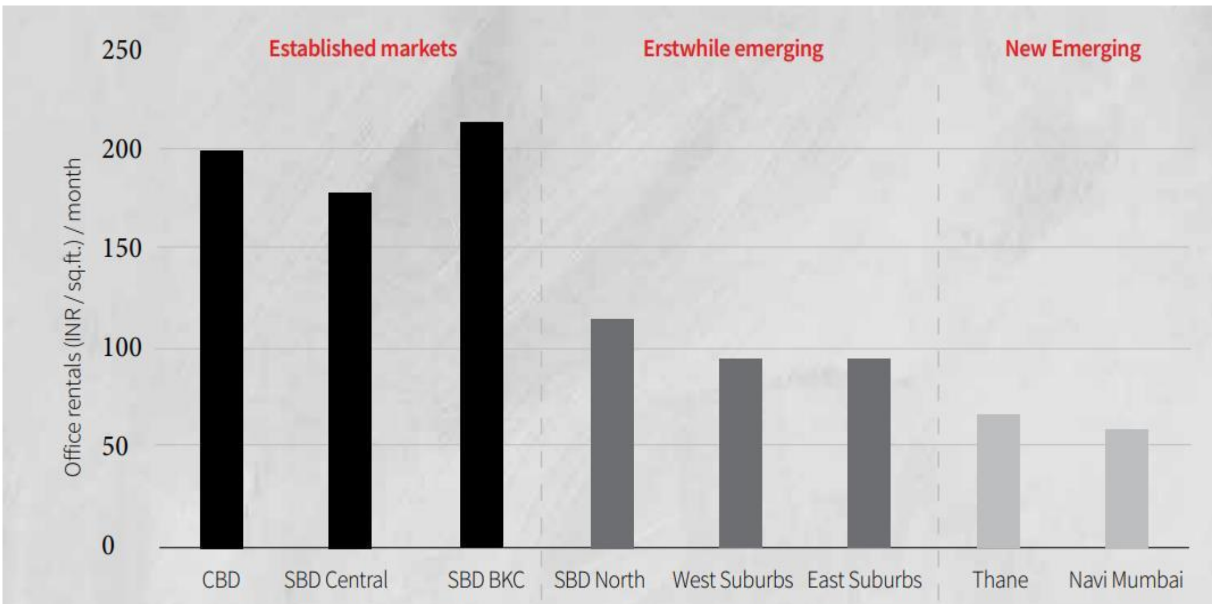

Figure 3: Office rentals in micro-markets across MMR (Real estate Intelligent Service, JLL India, 2018)

Profession	Count	%
Professional/Doctor	38	3%
Industry Owner	1	0%
Trader/Shopkeeper	110	10%
Service Industry	105	9%
Broker/Real Estate	6	1%
IT Professional	15	1%
Service manager/Supervisor	516	45%
Clerk	178	15%
Skilled Worker (Industrial)	16	1%
Unskilled Worker	23	2%
Teaching	36	3%
Transport Operator	11	1%
Household maid servant	1	0%
Skilled Workers (non-industrial)	96	8%
Total Sample population	1152	100%

Figure 4: *Percentage division of population based on profession (Socio Economic Profile - Navi Mumbai,2010)*

Supply Analysis

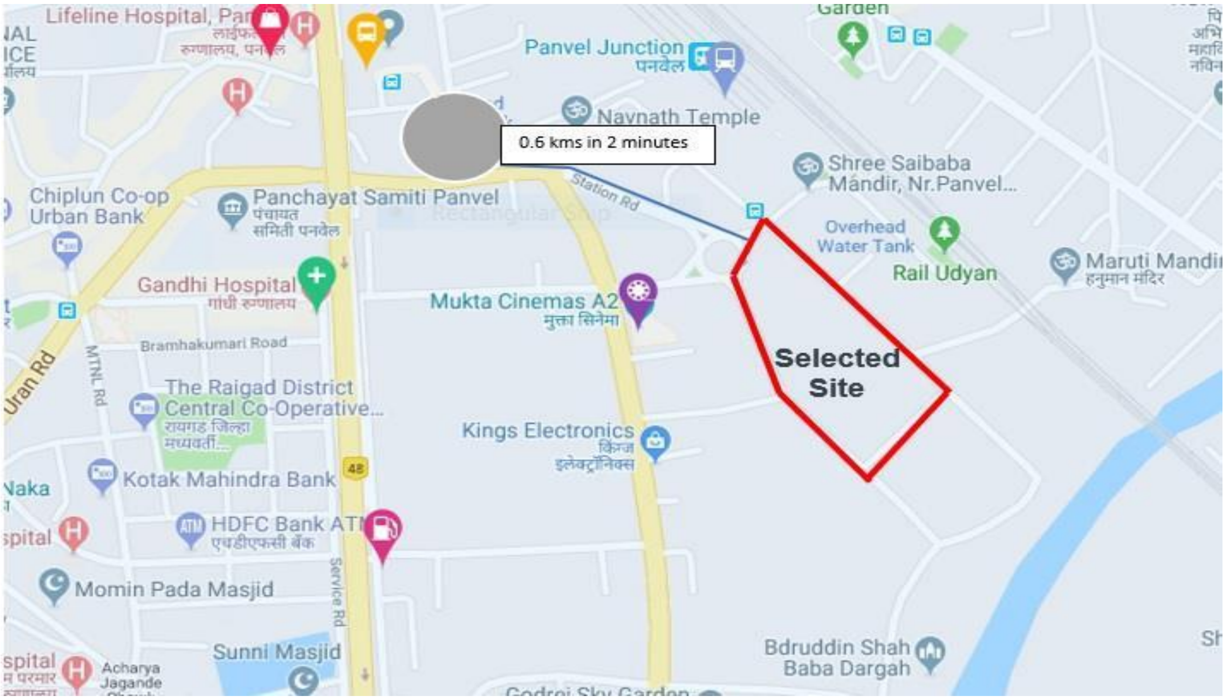

Figure 5: *Map showing distance between selected site and upcoming commercial space in Panvel (Google Maps, 2018)*

Figure 6: EV City Centre Artist's impression and actual construction

Project name	• EV City centre
Construction status	• Under construction
Total Project Area	• 0.40 Acres
Product Mix	• 1 tower, 46 units, 6 floors • Configuration: office spaces and retail shops
Units	• Office spaces: 36 units • Area: 14 -524 sq.m. • Commercial shops: 10 units • Area: 12–44 sq.m.
Price	• 29 lakhs to 1.13 cr. • 10,311 Rs. /sq. ft. to 16000 Rs. /sq. ft.
Amenities	• Car parking, Lifts • 24/7 water supply • Well equipped with fire fighting system

Figure 7: *EV City Centre Project Description*

Commercial Grade-A Office space price trends near Panvel

Neighbouring micro market	Minimum price (Rs/sq.ft/month)	Maximum price (Rs./sq.ft/month)
CBD Belapur	Rs 50	Rs. 80
Vashi	Rs 50	Rs 110
Kharghar	Rs 45	Rs 120

Observations

Figure 7: *Catchment Area*

According to a research report by Liases Foras, Navi Mumbai International Airport is one of the most influential and critical Projects on the development of Panvel and its neighbouring region. The key question here that will the development of Navi Mumbai International Airport have any substantial amount of impact on the subject site? To answer this question, a spatial analysis of existing Mumbai International Airport and its influence on the neighbouring region was carried out by Liases Foras research team."

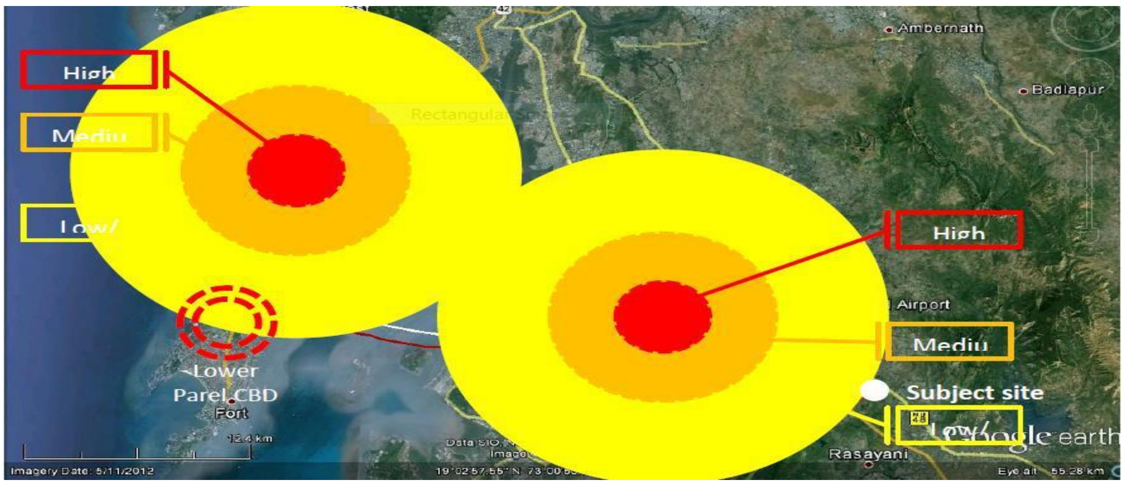

Figure 8: *Impact zone catchment area mapping*

"The study inferred the impact to 1 km-5km from Airport- the high impact zone will cater all the necessary demand for Airport to perform such as hospitality, retail, offices, etc. The medium impact zone has the probability of attracting few tourists at lower lease rental- this zone impact will be up to 9 km while the remaining region will only have an advantage that they have accessibility to airport which is defined as Low/ No impact zone" (Liases Foras). Nature of demand based upon the proposed Airport, it will bring in demand mostly related to the hospitality sector, closely followed by housing, commercial or other sectors

Sector	Radius(kms)
Hospitality and convention centre	1-5
Housing for Airport Employee	5
Office for Cargo consultant	5-7
Regional offices of International consulting firm	7-9

The analysis suggests that the maximum distance for percolating demand will be limited to 7Km to 9Km. Taking this into account our subject site is located around 5 km-7 Km, which means at present condition in Panvel city, it is quite clear that the demand of offices for cargo consultant would rise according to the impact assessment study. Since the subject site is located at the extreme periphery of radius of 5km – 7 km zone, the impact zone of 7 km- 9 km could also be taken into consideration which suggests the development of regional offices of International consulting firms for the subject site.

Conclusion

A. Feasibility Calculations

Land Area	450846	Sq.ft.
Built up Area	901692	Sq.ft.
Land Price	2200.00	Per. Sq.ft.
Commercial	100%	
Construction Cost-Commercial@Rs.3000/sq. ft	270.51	Crores of Rs.
Total Cost of Project	270.51	Crores of Rs.

Note:

The cost of land is not taken into consideration while calculating project cost as the value ofland will always appreciate unlike a built structure. Rs. 3000/sq.ft.is the observed market rate which includes all the cost required for delivering it to clientele in lock-and-key condition.

	2019	2020	2021	2022
% of Construction	25%	25%	25%	25%
Construction Sq. ft Built up Commercial	67,62,69,000	67,62,69,000	67,62,69,000	67,62,69,000
Land Cost	-	-	-	-
Total Cost	**67,62,69,000**	**67,62,69,000**	**67,62,69,000**	**67,62,69,000**

C. Revenue Schedule - Commercial

	2027	2028	2029	2030
Total Rentable area	541015	541015	541015	541015
Rent per Sq.ft./Month	129	141	156	171
Occupancy %	85%	89%	89%	89%
Total Rentable Months	12	12	12	12
Gross Rent	710,458,445	820,579,504	899,205,225	989,125,747
Escalation in Rent per year	10%	10%	10%	10%
Rent from Commercial Property	710,458,445	820,579,504	899,205,225	989,125,747
Administrative & General (2%)	14,209,169	16,411,590	17,984,104	19,782,515
Revenues after Operating Expenses	**391,234,207**	**451,875,509**	**521,916,213**	**602,813,22**

C.2. Revenue Schedule - Commercial

	2031	**2032**	**2033**
Total Rentable area	541015	541015	541015
Rent per Sq.ft./Month	188	207	288
Occupancy %	85%	89%	89%
Total Rentable Months	12	12	12
Gross Rent	1,088,038,322	1,196,842,154	1,316,526,369
Escalation in Rent per year	10%	10%	10%
Rent from Commercial Property	1,088,038,322	1,196,842,154	1,316,526,369
Administrative & General (2%)	21,760,766	23,936,843	26,330,52
Revenues after Operating Expenses	**1,066,277,555**	**1,172,905,31**	**1,290,195,842**

D. Financial Summary

Pre-Tax Net Cashflows	1290195842
Post Tax Net Cashflows	864431214
IRR Pre Tax	24%
IRR Post Tax	18%
NPV Pre Tax	$328,112,248
NPV Post Tax	**$10,706,615**
Net Yield on Investment	46%
Breakeven Year	**8 Years and 31 Days**

Rationale

From above market research and above financial analysis (DCF Method), it is proved that 100% commercial development is feasible on selected land parcel. The development will take place in 5 years and cash inflows will be generated 8 years after construction ends.

Annexures

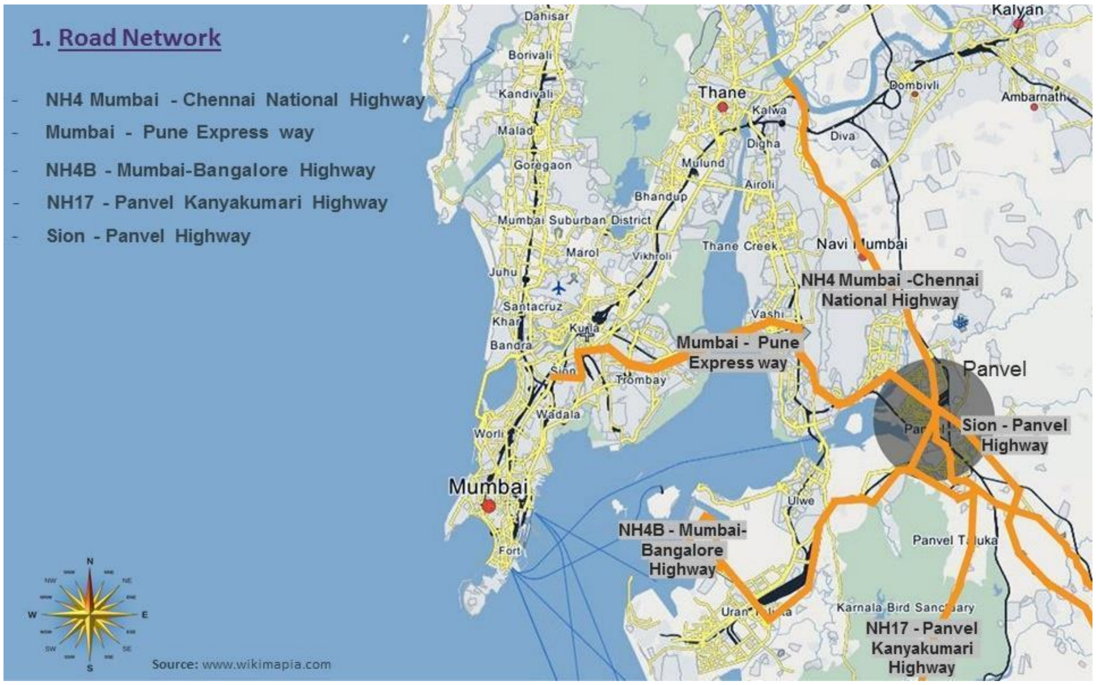

Figure 9: *Road Linkages Map of Panvel, Maharashtra (Researcher's Mapping, 2018)*

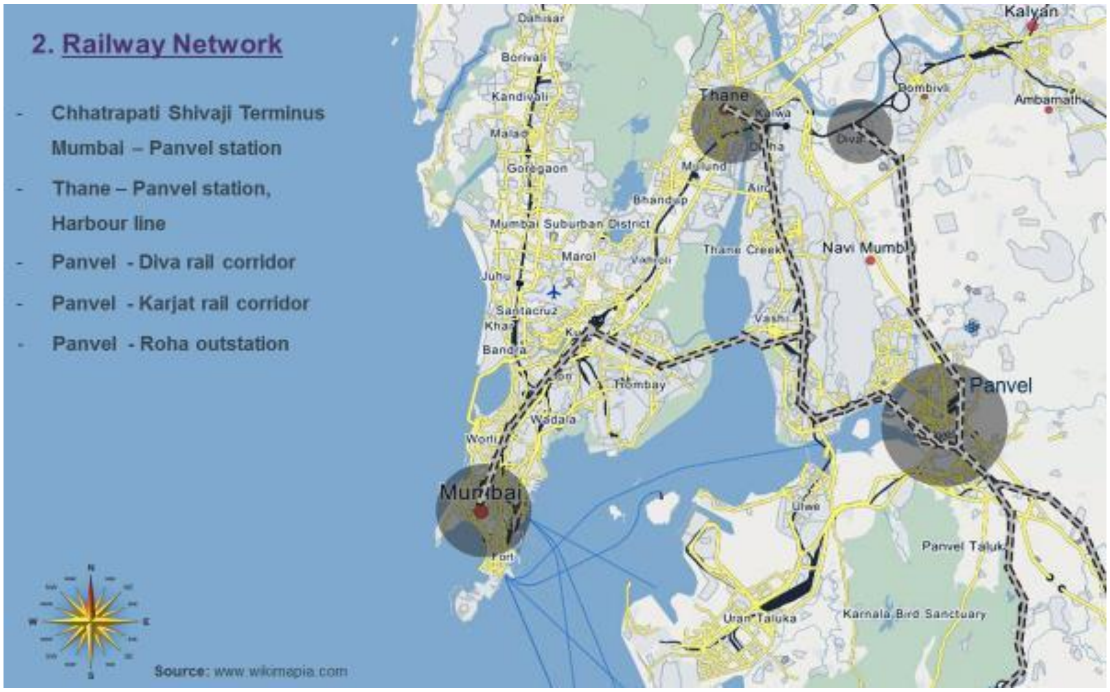

Figure 10: *Railway Linkages Map of Panvel, Maharashtra (Researcher's Mapping, 2018)*

Figure 11: *Site delineation (Researcher's Mapping, 2018)*

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THE ARTIFICIAL INTELLIGENCE ERA ITS SEISMIC POTENTIAL TO CREATE A JOB DISPLACEMENT CONUNDRUM

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Abstract

The AI era research paper takes a deep dive into the other spheres of work apart from tech that AI and machine learning will impact. For the paper, I have taken a top down approach,by understanding the global scenario of how AI is working its ways through the world in general before moving onto AI in India in particular. The intention was mainly to signify the employment plight that will be a concerning matter for all of us in the not too distant future. The reforms of digital India and the continued development of the AI institute of Hyderabad coupled with increased competitiveness in market would ensure that automation may become a daily adversary of ours. It is important to understand the principles of automation by supercomputers like IBM Watson or basic AI software that are efficient and cost effective in cases. The census shown that in a need to gain more market share the companies would not hesitate to cut any loose ends.The global factors of brexit, trade wars and especially tech start-up growth have ensured technology a more AI centric approach. Other technology also works hand in hand with AI in the form of block chain, IoT or even big data analysis will be the future pillars driving nation-wide growth. Such changes are especially harmful to people with blue-collar jobs, not mention the fact that India is predicted to grow as the largest economy in the future and have the highest population in the world. An AI imprint will certainly become a recipe for disaster in this case. Thereby I considered what could be the macro as well as micro implications of this in all our major sectors and finance in particular.

Keywords: *Artificial Intelligence, Technology, Job Displacement*

Introduction

Innovation and evolution are two partners that always move in unison, matching each other systematically. This is the DNA that has been infused into humans since the Stone Age, to perfect anything that seems imperfect and push the boundaries of innovation to its maximum. So no wonder there will come a time when we ask ourselves is this enough? When will we reach a level that curbs our limitless thinking and prevents us from self-imploding ourselves? Well, given the recent market indicators, such a time may be upon us sooner than we expect. The advent of Artificial intelligence and machine-to-machine learning is changing market dynamics, making companies use the mediums to cull the competition and zero in on maximum profits. This modern day warfare obviously is creating several casualties, the most worrisome being that of the job market, something that may start a different kind of war in the not too distant future. The gaping link that is being missed here is that, behind the glitzy world of gizmos we live in, there are emerging technologies arising. In an economist's, sense, that creates tremendous demand for a service or product that has the potential to disrupt. Therefore, its constant innovation is phasing the human touch, thereby creating a scenario where tech is the creator and assembler of major devices that one uses, creating a massive void in emerging markets in particular and the world in general.

Advent of Article Intelligence (AI) and Tech; AI was long considered a visionary advance, something that was a fantasy at best and the mere practical application of it wasn't to be entertained by many. However, these days it has blossomed into a marvellous design, something that new age businesses run on. Its applications have spread from IT to education and aviation. The AI systems work on decision-making and key strategizing areas of businesses, some places where humans would be used to make critical decisions. Several top brands and industrial names are utilising its applications to replace or phase out the working strength of the firm with the efficient entities of the tech space. The current chatter in the crowd has been surrounding the wondrous gizmo that is AI and machine learning. From innovative new applications and large online traffic, people party enjoying the gift of is AI. Yet we seem to forget that every innovation comes at a price, this one is being sold to us with a doom warranty spelled upon it. Countries that are forecasting a booming economy for the future are currently suffering high unemployment rates. China, for instance, has recorded its slowest growth rate in 28 years, with the rate having decelerated to 6.6% recently from the 6.8% earlier. Its prime problem has been unemployment. Yet we see Chinese investors pooling in vast sums of money into foreign ventures by record sales guaranteed via robotics and AI based softwares for their companies. The other governance factor for concern has been the pressing problems elsewhere around the world from Brexit, trade wars to global terrorism; nations have led their tech speak for themselves. The shuteye to let tech operate seamlessly is bound to create certain repercussions in the economy. Robotics and machine learning have enabled to increase the economies of several countries. Recent studies from the EU data have summarized that more than 47% of jobs are likely to be lost to tech in the future, with several experts summarizing a major disruption in the offing. An Oxford University analysis has suggested that this displacement will most certainly affect several sectors, creating 47% of US employee's jobs to be automated in the next 20 years. McKenzie has dubbed such an event the jobs lost vs. the jobs gained scenario with 375 million workers at the risk of having their jobs automated by 2030.

The finance frontier; the sector that takes up prime focus right now is the finance space and the job department in particular for it. The analysis and numbers always highlight the efficiency that is created within the financial space. So in order to create a model whereby, one can create higher efficiency and reduced costs with limited space; AI is working its way in.

The financial world of stock markets and technical analysis are being pushed towards the new AI frontier, creating a scenario where there will be critical hands on skills being imparted based on machine learning and tech improvement. Firms near Wall Street and Silicon Valley have begun testing the AI waters to search for improvements in the finance space in particular. A big Wall Street investment house like Morgan Stanley has begun implementing AI to manage its clients' money, a profession that is giving wealth managers a real scare. Morgan Stanley too has employed robo advisors, to explore new avenues such as algorithm trading, data mining and natural language processing to make their clients wealthier. The technology works by evaluating the communications a client makes with the position he wants to be in. The system then evaluates other ideas that can be suggested to the client.

Such a system would enable the advisor to be warned when a certain stock is on a downward trajectory. Mr Jeff McMillan, the chief analytics and data officer at Morgan Stanley Wealth Management said the machine serves up those ideas to the advisor which he consults with his client and takes a decision whether to act on it or not. It utilizes the data available to make suitable decisions based on the needs of each particular client. A few companies have also used the AI tech coupled with data mining systems to make future financial projections for the client. Wealth front, an advisor company in AI, has come up with its new software called Path, which uses third party data machine to provide answers on savings, retirement age and the luxuries you can afford. It was implemented in real estate financials, when it advised someone who wanted to buy a Condo in NYC's East Side in 5 years' time, that by buying it for a set amount then will be able to retire a couple of years earlier. It analysed the past data trends to predict the future financial trend lines and real estate price. The AI application is ascending at a rapid rate forward, something that is unprecedented, though the stock market operates on a closed system primarily fuelled by buy and sell agenda. A key insight on how AI will operate in the future took market world, was highlighted by the technology director at Goldman Sachs who mentioned how the value of AI is going to be driven up through big data. The more mature companies shall create a more compiled database using AI and then implement the software's using these data driven models. This approach is further highlighted by their stance that states how machines were earlier used to follow rules, although now they will be programmed to run through problems and solve them on their own. A warning sign is being certainly sent to the various individuals involved in the buying and selling off shares and securities. Since financial institutions primarily operate with a lot of data and numbers daily, the big guns in the financial markets soon picked up this technology's application. It made them realize how AI can be utilised to crunch up to millions and millions of dollars. They realized how in theory, AI would harness historical data and utilize the same data to create and evaluate the past decisions made by clients, thereby allowing determining their future decisions, something that enables companies to create high-level volume and revenue for their business.

In order to streamline the commodities market, AI tools are being implemented to ensure high volume trades are being connected, ones which have a higher certainty of yielding good returns.

Price suggestion has been a great motivator to the AI push. Utilizing complex derivatives, they are now able to make much more assured decisions. This also gives them a quantitative perspective on how to read the correct indicators in the market. Marcos Lopez of AQR Capital Management fund has suggested that the AI models in their firms are being utilised to create better algorithms and better AI usage theories. These theories shall help to create more accurate price determination models. Mr Lopez further added that this system could help pick up questionable trades that occur in commodity markets as well. He states algos can uncover the footprint a human leaves when manipulating markets. Therefore, a machine can sift through huge volumes of data to pick out the questionable trades that can then be more deeply scrutinized at a later stage by the authorities. The main aim and objective in commodities trading AI is fuelled to inject past data records of commodities into code lines and make the AI software identify the ideal commodities for the future. In essence, use past records to create large volumes of future profits.

The risk management space in the financial frontier also faces itself being at cross roads; from creating a sense, the best hands for risk management are their own, to deals with constant rumours surrounding AI's accuracy. Risk managers and decision makers clearly need to become more educated about the threats that continue to be produced from artificial intelligence and machine learning. A few organizations are better than others are devoting resources intended to develop these systems internally, but major ones appear to not think they are of a greater importance, much less allocate resources specifically designed to address such threats. Risk managers do play a critical role in ensuring that management is aware of the potential threats while proposing solutions on how to combat these threats and implement a viable safety net, to ensure their smooth execution. There are three major cornerstones, which risk managers are seeing as a sign that their world maybe not be at a shrinking stage.

I. The first strike: The first one involves in the human biases that a machine may have been adapted from the data it has been inputted, if the data is based on someone making bias decisions. The system will adopt the same and create same decisions, though it will be in a more efficient manner. This would be hard to find and create problems for the company. However, recent software bases are being made to eradicate the bias component completely.

By programming, the system to overlook any questionable decisions made in the past by a certain individual.

II. The second strike: A second risk is that, unlike traditional systems built on explicit rules of logic, the AI's neural networks deal with statistical truths rather than literal certainties. That can make it difficult to prove with complete certainty that a system will work in all cases, particularly in situations that were not represented in data profiles. Yet some systems at a prototype stage have shown signs of creating own thoughts and making decisions. This is a dangerous yet nonetheless viable solution to ensure that its decisions are full-fledged and are borne of certainties, provided they can be controlled aptly.

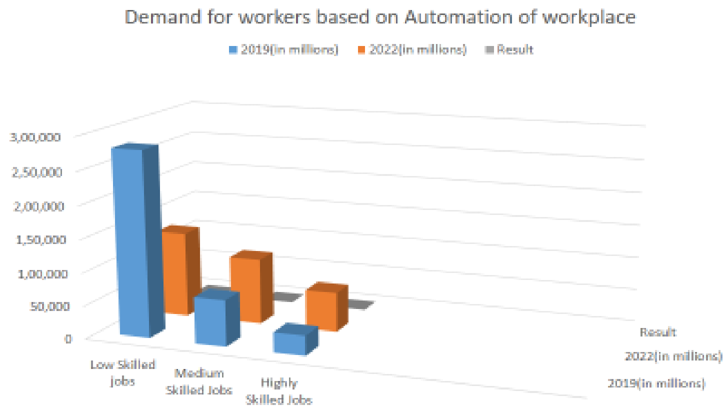
III. The third strike; this risk is that when machine learning systems make errors correcting the precise nature of the problem can be difficult. This leads to the solution set that may be unimaginably complex, may create a need to find an appropriate benchmark to find out. Since the pursuit, the fund managers are undertaking not the pursuit of perfection, but rather the best available alternative. One that can enable them to create a sustainable model that can aid for the future scenarios that they will be dealing with.

It has become imperative for Risk management companies to create a fool proof planning model, which they can use to create a competitive stand in their market. Allianz's risk management wing has laid down the floor plan, of how strong AI applications in the future will be able to generate un-paralleled accuracy, when it comes to problem solving methods and creating sustainable solutions.

AI and its Indian impact: To understand the Indian scenario when it comes to the perception of Article Intelligence (AI) we must understand how the current demographics are working on the matter. The government has taken a two-phase process, the 1st step being the Indian government actively trying to scale up the national labour numbers, by giving more employment to youths and creating more jobs. Although the catch comes here when they also are endorsing AI and machine learning applications, as part of their digital India initiative. In the recent Union budget, interim Finance Minister Mr Piyush Goyal had a special mention for the continued growth of AI in the Indian landscape. The highlight point was the push being given to digital India. With $480 these is a million push being given to AI, machine learning and Internet of things. AI in particular was given a special mention amongst this trio, a state of the art national centre to be opened soon. According, to a recent report from Accenture, AI that can perform tasks such as visual perception and decision-making without requiring human intervention has the potential to add $957 billion to India's economy by 2035. The country's AI industry is currently estimated to be bringing in $180 million in revenue annually.

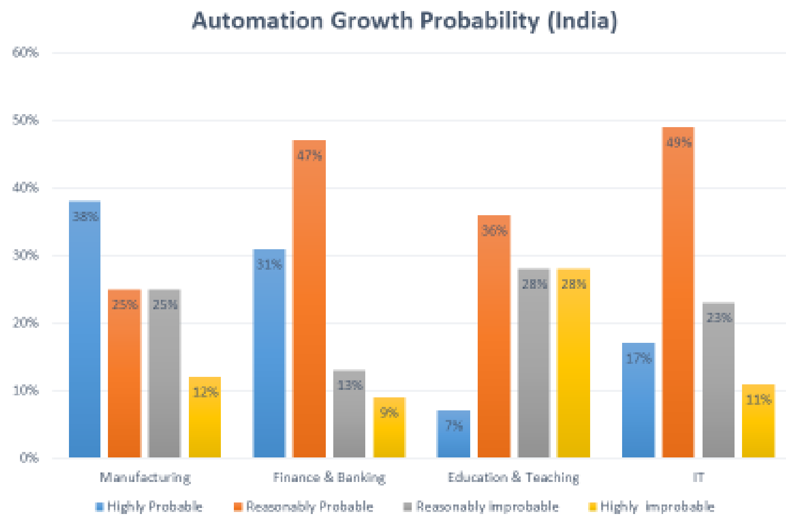
Furthermore the government has promised to intensify its push for growth in the robotics and quantum communications avenues of technology. Arun Jaitely had mentioned the same point last year by saying "Digital technologies have played a key role in providing benefits to the poor. The global economy is transforming into a digital economy thanks to the development of cutting age technologies like ML, IoT, AI and 3D printing. Initiatives like Digital India, Make in India, Start-up India will help to establish itself as a knowledge and digital society." These views and reforms are coming at a time when the opposition voices its views at how the unemployment rate is his a 45 year high at 6.1% highest since 1971-'72.

Another indicator that boosts AI's increased presence in India is how 38% of AI professional in India are employed with large-sized companies such as Accenture, Wipro, Adobe, JPMorgan, Amazon, thereby, creating a scenario wherein the entire workforce management and operations would be under the AI given banner. Seeing how these hired professionals are vocal to create complete AI based management in the organisation, even start-ups have begun hiring AI professionals who can streamline their lower scale operations. Hence, we are creating a scenario wherein the major labour workforce in large-scale companies and in start-ups would be made completely redundant. A chart on this matter also shows how the real impact to the job market will be greatest for the low and middle skilled workers. The better skilled ones, who in most case will be proficient in AI, will not be majorly affected by these winds of change, hence creating a job crisis scenario in the country. This can be seen in the following table;



The following table shows how automation will affect the workspace environment following AI's entrance into the finance markets. The data was collected through analysing the demand for workers currently and future estimates over a 4-year period. This will enable the low skilled workers to be massively displaced as compared to high and medium skilled ones. Their demand in fact will be on the rise. This is the reason because the basic level work of data maintenance or organisational logistics will be given to the AI base, it'll be the key mechanisms of planning and strategizing that will give the medium and high skilled workers an ace up their sleeves, provided they prove themselves to top management. This is evident from the graph that shows how demand for low skilled jobs is solid, given the number of mid scaled, start-up and few large-scale firms yet requiring low skilled tasks to be completed. Nevertheless, the demand is predicted to fall 4 years into the future with AI cementing a footprint in many of this mid-sized and start-up bases, not to mention completely take the large firms. This has thereby shifted the demand to the medium skilled and highly skilled employees, given their higher expertise and skills. To keep up with AI, firms will need these individuals in a larger supply.

Economies of AI in India; the AI factor has still dominated into a niche market in the Indian segment yet its continued development has created a demand for skilled individuals to rival it. There is a need to grow on being less risky and more reliant on safe patterns while trading or investing in markets. AI has shown enough promise and skill to instil a phase of vitality and creativity into the financial sector. Through its early implantation, one fact has become evident to its installers that there is a lack of talent in the Indian market to compete with AI applications. There is not a need for everyone to be a data scientist, but the capability to be able to match with AI's performance is harder to extract as of now in India. The Ricardian model in economics proposes that labours performance is matched with its productivity and wages. For greater a wage rate there can be an equal increase in influx of demand and productivity. Therefore, for mid and large-scale companies that may adopt an AI based framework in the future, there will be payment cuts meted out to the employees to balance out the costs. Hence, such a decision results in employees having a sense they may no longer be wanted in the company, also leading to a move out of employees from the company. Given the rise to a position where the unemployed numbers maybe more than the employed, AI and Machine learning technology could transform many jobs in the Indian economy However full automation will be less significant than the reverse engineering processes that will be undertaken for a particular industry, once the technology is inducted into it. This is the trend of late, for Indian economists, but even those around the world,are in the pursuit of innovation and technological change. They are now working on statistical application that AI can have for the future markets and what this technology will actually reduce the cost of. These economists propose that usage of these machines work on prediction principles. These predictions make decisions for companies better and faster and cheaper; this creates two scenarios. The first is that there is a lot more prediction that takes place. The second being we will think of new ways of doing things for problems where the missing component was in fact prediction, self-driving cars being the prime example. Another factor being considered is the self-automation factor installed to create systematic trade patterns for investment banks; leading big players in the market are practising this. AI's new landscape change has resulted in the following assumptions made on job sector impact.47% of participants that were surveyed by PWC felt that job automation was within their sector and reasonably likely in the near future. Partial automation would be undertaken gradually and certain humans would be retained for specific expertise. The highest probability of automation was perceived to be within Manufacturing followed by Banking, Financial Services sector. The table below highlights this, taken from a consensus of people. The question is which sector is likely to have highest probability and lowest probability of automation.



The highest probability is based on Manufacturing, followed by Finance and then IT. Education though seems to fall the highest on the improbable chart, with most people seeing education being in humans hand for the immediate future. The reasonable probability chart shows that automation is likely and only certain skills of humans will be retained. The chart is based on people's individual opinion of how they see the future panning out. The reason why IT does not get a huge percentage of the chart in most probability is due to the growth path. Most people see automation growth more in sectors where it has not grown. Compared to one where it has expanded seamlessly, has got IT a lesser share in that column.

Indian Impact point, the key factors that were seen as to why jobs could end up in the automation cycle and AI is in need to replace current human jobs. Since many participants are in favour of AI automation for they guarantee greater process efficiency and greater standardization. The two factors that still give human employees an edge is the human touch in interactions and contextual ability to analyse situations on a case-by-case basis. The other reasons vary along the survey lines taken by PWC were increased efficiency in the business workings, more scalability and growth for a company, lower dependency on workers, and biases can be eroded. Another major point that the survey spoke about was decreased scope in malpractices and erosion of erroneous judgements. In addition, the HR personnel who undertake recruitment for the companies said 55% of participants who identified as being responsible for hiring talent, maintained a dialogue that recruitment is now being done to select individuals with skill-sets in AI. Out of the total 100% interviewed, only 17% have succeeded in providing application on the AI frontier. This highlights a vital point on how important it will be to know the tech environment for anyone in the coming times. An interesting pick these recruiters shared on the topics that will be required for the future are applied mathematics, probability, statistics. A certain number of soft skills to be had on hand were business intelligence and analysis skills, data governance. Along with a potentially boosted field in privacy and security, along with machine learning was considered to be at the top. It also has to be said that these skills and job roles would be upon us at an alarming rate. Given the digital invasion/age that India is moving towards; it will become imperative to be in knowhow of things, in order to ensure a survival. The risk management sector as well to reduce any gaps in productivity and to ensure maximum guarantee will create an AI reliant system, one devoid of human errors. This leads to many avenues in the financial markets itself condensed down severely. Creating the finance sector where jobs will not be of abundance, but actually of luxury. This makes the required skills mentioned above an imperative task to be known by all. Although, it is great to have these particular skills mentioned at your disposal, one could also survive by never missing an opportunity to make an impact in the workplace. A strong impression of any individual with his superiors and colleagues leaves a great impact for their cause. This makes the top management realize that though he may lack in AI skills, it is imperative to not let go of such an efficient worker. Such an impact can always balance you out in adequate skills that one may have along the AI base.

The art of fine decision-making: AI and its various applications will ensure accurate decision-making processes. This process will act as a guidance mechanism to ensure decisions are swift, precise and absolutely on point in getting in results. In an era where there is a growing importance for data analysis, growth, judgement and action, it has become important to instil a fine decision making system. This is where AI moves its foot forward especially in fields of strategy and planning. The prediction-based workings are imperative to determine a collective base on which one can make sound decisions. Though we may fight and try to prevent this from happening, eventually machine prediction, will take over human prediction. The manner in which human prediction works is based upon biases, a fatal flaw that prevents growth and development from taking place in decision-making. The AI based system applies itself through a pool of past data mines to analyse and reach a clear conclusion. When it plugs in the algorithm, this enables the system to select the distinctively clear path to follow, and this is then instructed to the company to execute. Effectively, the machine has learnt the most favourable solutions by analysing past trends and signs, thereby predicting an effective future pathway to follow for the company in which it yields maximum revenue and gains growth. IBM's Watson programme is an AI based computer that is known for its interactive base to communicate with humans, has specified it out that AI can make informed decisions for organisations that are accurate and effective. It has been worked to use not only the data from the past, but also the data it receives from various human interactions to ensure a systematic decision is being taken on matters that it has been asked to solve. Thus, we see the power tool that AI can become in a modern world where the human touch could be lost to us. Although there is a vital catch in this process, the predictions made are only useful as long as there is someone there to execute them, without action, it is of value. That is where the human touch makes an all-important contribution, for it is here that humans are required to put choose whether to put this prediction into action or not. This brings to another important part apart from selecting whether or not takes up the prediction, its human touch required to enact what the decision taken. This action requires human skills to be implanted and to execute to customers. For instance, if an AI system predicts the period where a fruit stays fresh it is the company's decision to select how many units to buy, that is where action comes in. Hence, even though AI controls the decision and planning phase it requires an action to execute the order, where the human touch is still of prime importance.

India and Watson: The financial world to can be hit with a Watson like model in the financial space that will displace the work environment. IBM's Watson AI base primarily works as a supercomputer that uses natural language processing and machine learning to break down large units of unconstructed data. The system can also be applied into revealing key insights for these large data and clarify on hand doubts regarding this data which has been collated. The use of this application in the financial world can be utilised for the purpose of conversion of paperwork usage into a defined digital content. Although, such usage can be seen applied to other places as well, in several new fin-tech start-ups and existing finance firms, this will be a major reform. The simple reason being that, for one it reduces the huge chunks of basic data companies receive in the form of either job applications, loan processing forms, customer contracts and vendor registrations, etc. All these variables can be condensed down into a metadata coalition on a cloud system that can be managed by an AI base and provide timely record of all data. From experience, it can be said that while working at a leading finance institution, there was a sizeable chunk of paperwork that existed in the workplace. This reduces the efficiency to perform a certain task, as there was often time taken to source the paper work and process it through. AI promise is a speedy and efficient manner to solve this matter out. In a financial space, it is also key to keep important paperwork safe, along with making sure the context and importance of the document is known. Working with AI tools, documents can be used to not just extract the text, images and signatures, but also learn their context and importance. This can then trigger workflows to either file the documents away in a secure folder or regular folder (by giving the user an option), or send it to either a case management system or a accounts receivable for immediate attention. This reduces any time lapse in the document safely reaching a document to the concerned department in time and provides proper organisation to the distribution process. Such changes bring greater efficiency and will greatly reduce the tasks of workers in the lower halves of any organisation and finance in particular.

Another important aspect where AI can be successfully implemented is in the HR and hiring mechanisms. AI makes the recruitment process more data driven, by conducting not only screening of the resume, but adding context based on reasoning and relevant inputs for the designated job in the application process. AI works on taking the next step in terms of HR management by recommendation future career pathways for current employees. This is done by considering the interests and aspirations of the individuals, then proper motivation, building mind-set and other characteristics are inculcated. In a finance firm, in particular, this will help the individual to grow immensely. For it is great to get a valuable employee, but retaining him later on is achieved on a part art form and part algo form.

AI giving India a Robostic economy?

Under the recent indicators given by the government in its budget de-brief it has been shown how vital AI will become for the Indian landscape. This muddled with the fact that most companies adopting AI into the fold leaves the economy in the shape of a major upheaval. This will come in with more jobs becoming automated. It is believed by 20–30 percent of employers in India, that they anticipate a decrease in headcount, due to automation taking over low-skill, monotonous jobs. At Infosys, 11,000 workers have already lost their jobs to automation and 3,000 Wipro employees faced the same fate after the company deployed Holmes, its AI project. These occurrences leave no doubt that IT will downsize sooner, with job losses predicted to reach 6.4 lakh jobs by 2021. The government is thereby also adopting a policy of adapting and innovating AI in sectors beyond IT and consumer goods. The PM has briefed his cabinet members that AI inclusion strategies have to be introduced while formulating their policies. India understands that to make sure their economy continues to grow in the manner that it is, AI and Machine learning development as well must on the forefront. Foregoing it will run the risk of falling on the GDP and in turn lagging behind to China and US. Moore's law further explains why AI will create a robostic growth chart for itself in the country. The law states that the number of transistors in computer chips doubles every two years, meaning that computer power increases and the relative cost of computer hardware decreases at an exponential pace. The outcome here seeing faster and cheaper computing power coupled with the diminishing price of computer hardware has attracted several buyers in the Indian markets. Such low cost and high efficiency base on AI models allows calculations to be made readily by AI frameworks and given the fact that some are capable to store billions of data points within themselves, thereby accessing past performances and rectifying flaws, if any, that was to be made by them. AI has already created a sizeable penetration in the Indian Landscape by exposing Indian users through digital economy bases of Netflix and Amazon to suggest products and services to the liking it's made a footprint in the economy itself. From the financial base viewpoint, AI can certainly expand on creating a sustainable and efficient organisation environment one that has low risk and high returns. The government has certainly worked on creating initiatives for humans to skill up as well and contribute in the future economy. There is infusion of cash from National

Skill Development Agency, NSDC, and Directorate General of Training. There are over 200 Pradhan Mantri Kaushal Kendra's, in 28 states that provide skill-based training. More than 13,000 in Industrial training institutes, both governmental and private, they are supporting over 23 lakh studentsin modernised and upgraded institutes of great standards and technical support.

There is also a need to conduct internal training between employees in the organisation; this makes sure that workers, mainly in the medium skilled and low skilled workers, can even skill up. An interesting viewpoint around the AI impact in finance firms around the mid skilled and high skilled employees displays something one should take notice of.

Future trajectory; the future trajectory of artificial intelligence is bound to spread throughout the world as I have mentioned previously. Its reach in India is quickly picking up as well, not only in various sectors but in our daily lives as well as shown by the Amazon example. Its roots are beginning to cement in the Financial space as well and thereby creating a serious scenario of job shrinkage. Thus, change is natural and its movements are swift and precise. However, we maybe on a future journey to reach new economic heights. The fact that a storm is brewing on the horizon must not be overlooked by any of us, it may lead to a collisional course damage we did not expect. The future of the financial space in the country that is gearing up for change is broken down into a 5 year and 10 year scenario.

The 5 year planned prediction: The 5-year plan in India displays the initial effects of how India will warm up to AI's influence but similar to a life cycle it will spread out of its larvae stage and cocoon round the financial workspace, picking of each department with a bottoms up approach. The evidence is there to see with lower demand being expected for basic jobs. The analysing and trading but will yet be left to the pros but AI's prototypes mixed with big data analysis resources will be able to map out opportunities for a firm. The shift will move from organisations being labour intensive to slightly leaning towards a more capital incentive perspective. Data driven models and efficient lower level management as base of operations will create banking and insurance agencies to adopt AI at a growing pace. The digital India initiative will further boost AI into finance firms and also spread its web into other sectors.

The 10 year planned prediction: In this phase, the cocoon that AI has spun around has come out as a winged creature full of vibrancy and brilliance. AI has stamped its authority as being here for the long run and is now way up the organisational food chain. It has made itself into the medium level skills base and taken over the aspects of trading and analysing how the stock market operates. This model has already been implemented in the US. With trading being left completely to Article Intelligence (AI) and the only employees the company hires are the technicians to fix the programme, in case any problem in them ever arises. The model seems to have taken its place in a few large-scale organisations but will require greater funding to grow into the financial hubs of start-ups and fintech. This period will manifest India and AI into a new beacon for the financial world, one wherein there can be maximum development being made and greater revenues generated. However, this period will also mark a large job displacement crisis if the trends continue like this. Hence, this calls for adequate measures to be in place for risk, wealth management firms and brokerage institutions, not to mention banking and insurance.

Note; This is a predicted analysis of what the future may hold in store for us, based solely on current indicators and signals that this predictive pathway has been formulated.

Conclusion

In the closing stages, it must be said that this type of technological change is on the horizon, run from it or fight it, the future will arrive faster. But even though it may send shockwaves to you seeing how your survival depends upon it, there is an escape hatch to this situation. Just like an army general does not think about the inner battles that happen with his army and the enemies, but about the bigger picture ahead which is the war, it becomes imperative to think about the long haul and realize how you can sustain yourself throughout this wave of change. AI can be outsmarted by being an impactful and resourceful individual, one who calculates each of his decision along each step of the way. This will create a special impression about him in the minds of his senior management and realize that he is someone who is too vital to be lost. So we must remember that even though the world moves into an AI era, it is a new dawn for us as well to take the challenge head on and remain steadfast and strong.

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MILLENNIAL WORKFORCE: PERSONALITY TRAITS AND MOTIVATING FACTORS

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Abstract

Children born in the 80s and 90s, the Millennials are today's 20 to early-30-somethings, poised to make up the majority of the workforce by 2025, and already an important part of the working population. The Millennials, also known as Generation Y, Gen Y and at least a dozen other labels, is now the largest single generation (35%) in the workforce. That makes Millennials a force to be reckoned with. That is a problem for companies who are still trying to figure out how to attract, manage, and retain a younger generation with very different values than the Baby Boomer. Millennials can no longer just be a buzzword thrown around the board room like a hot potato—it is time for organizations to embrace the new workforce majority and start understanding millennials in the workplace, and as a result, embrace the new world of work.

Keywords: *Millennials, Workforce diversity, Attract, Workplace*

Introduction

In the next two years, half of the workforce will be made up of the millennial generation. This generation has changed and influenced almost all aspects of the world-politics, media, communication, and business. This generation is continuously marching towards change while driving growth for organizations around the world. Millennials have entirely influenced the way businesses to innovate, market and engage with customers.

Millennials have a drastically different outlook on what they expect from their employment experience. Millennials are well educated, skilled in technology, very self-confident, able to multi-task, and have plenty of energy. They have high expectations for themselves, and prefer to work in teams, rather than as individuals. Millennials seek challenges, yet work life balance is of utmost importance to them. They do, however, realize that their need for social interaction, immediate results in their work, and desire for speedy advancement may be seen as weaknesses by older colleagues.

Millennials appreciate and work for organizations that function as social enterprises and businesses that do not operate just for profitability towards C-suite executives and stakeholders. Abhishek Humbad, Founder of Goodera, shared, "Millennials have access to a lot of data, they want mission and impact from their work, and their values are different from Gen X. They believe in credibility and credibility comes from how they contribute to the society." Active engagement across systems, not following a single path and accessing different aspects of succeeding are the critical drivers for millennials. Learning from mentors and experienced professionals to seek purpose and wanting to be an essential part of an organization creates the impact in attracting and retaining the new task force.

Literature Review

"The millennials," a wistful F. Scott Fitzgerald might have written today, "are different than you and me." Managers accustomed to using certain practices to engage boomers are going to have to change their ways – and practices – if they hope to engage and retain the newest heavily scrutinized employee cohort, the millennials. This author recently completed an important study and he offers valuable advice that managers can use to make millennials feel wanted and respected.

For years, employers have been aware of employee engagement and retention issues in their workplaces. These organizations have engagement policies that typically address engagement for the organization under one policy, without any differentiation for the generations of employees. As the millennial generation (also commonly known as Gen-Y and includes births from 1982 – 2000) grows in the workforce and baby boomers retire, managers and human resources professionals will need to develop new engagement models that take into account the generational differences between baby boomers and millennials. This paper will highlight some of the characteristics that differentiate millennials from other generations and explain why employee engagement should be top of mind for managers.

The Millennial difference

Millennials - the most influential generation of our times as also the most populous in the Indian workplace are changing the corporate landscape as never before. Born in or after 1985, they are over 700 million in number and account for 40% of the Indian workforce. The liberisation, privatization, globalization wave and the tech revolution characterized their formative years. Research suggests that in another 5 years-time, by 2020, they would constitute more than half of the entire working population in India.Much has also changed the way work gets done across the globe. Work ethos has changed, workforce has become as diverse as it has ever been, and subsequently workplace dynamics today is multilayered. Thought leaders who helm high growth organizations in India are faced with a critical challenge - of managing a generationally diverse workforce and catering to their distinct career aspirations. And the most dominant of all generations at work today are millennials. In this research piece, specific emphasis will be placed on strategies for managing talent from this generation most effectively, averting conflicts of interests with their co-workers from other generations while ensuring the entire workforce is at its productive best.

In a 2014 study, the workforce was found to be comprised of five distinct generational cohorts identified, namely:
Free-Gens (Born between 1945 and 1960)
Gen X (Born between 1961 and 1970)
E-Gen (Born between 1971 and 1980)
Gen Y (Born between 1981 and 1990)
Gen Z (Born after 1990).

Conforming to this definition, millennials are constituted by one half of Gen Y and Gen Z in entirety.

Millennials are creating a change in how work gets done, as they work more in teams and use more technology. Their social mindset, however, is also a significant factor. As Leigh Buchanon writes in *Meet the Millennials*, "One of the characteristics of millennials, besides the fact that they are masters of digital communication, is that they are primed to do well by doing good. Almost 70 percent say that giving back and being civically engaged are their highest priorities."

Coupled with the socially minded millennial comes their desire to be creative. Millennials have grown up in a time where information has become available instantly. Through a Google or Wikipedia search, answers to even quite complicated questions can be found. As such, millennials have developed into a group that wants to work on new and tough problems, and ones that require creative solutions. In a 2009 article by Tamara Erickson, a millennial who had been struggling in her role, admitted to peers that, "I guess I just expected that I would get to act on more of my ideas, and that the higher ups here would have figured out by now that the model's changing." (*Gen Y in the Workforce*, Tamara Erickson, Harvard Business Review, February 2009).

The millennial employee is interested in feedback on his or her performance. But traditional semi-annual reviews are too infrequent for millennials. They want to know that they've done a good job, and they want to know now. A 2008 article in *Nonprofit World* provides readers with a checklist on the topic of providing millennial feedback. The list includes: give them checklists, offer plenty of help, reward them for innovating and taking appropriate risks, engage them with frequent feedback, provide them with mentors, create a collegial and team-oriented culture, etc. Feedback must also be given in such a way that millennials are receptive.

Not only are the timing and frequency important, but so too is the way in which feedback is framed and delivered. In Joanne Sujanski's article "Don't be so touchy! – The secret to giving feedback to millennials," she writes, "Instead of feeling appreciated, however, the few short accolades of "good job" were overshadowed in the employee's mind by the more frequent criticisms he received – without guidance as to how exactly he could improve." (SuperVision, December 2009). Sujanski reaches an insightful conclusion: Whether positive or negative, feedback needs to be structured in a way that leaves no room for misunderstanding. Feedback needs to be clear and specific to be effective.

Objectives

1. To study the personality traits of millennials
2. To understand the motivating factors of millennials at workplace

Research Methodology

This research paper is descriptive in nature and is based on the secondary data attained from the various secondary resources such as websites and other available sources. A systematic review of collected literature was done in detail.

1. Personality Traits of Millennials

1. Millennials Are Motivated by Meaning

Millennials are constantly on the lookout for a job that provides more "meaning".

77% of Millennials stated that their ability to excel in their job is contingent upon deriving meaning from their work. Unfortunately, less than half report feeling that they actually get this sense of "meaning". Clearly, the structures currently in place by most organizations to motivate Millennials simply aren't cutting it.

According to the 2013 Millennial Impact Research Report, organizations will know their message is resonating when Millennials are compelled to share their content. It is an instant feedback loop that tells organizations what this audience finds interesting and worth disseminating. Sharing, in fact, is a form of indirect advocacy, in that it furthers education about the cause and draws other people to the issue.

2. Millennials Challenge Hierarchical Structures

Millennials are not afraid to share their opinions and ideas, nor challenge those of their superiors. This comes not from a disdain for authority, but from the notion that the best possible outcome for the company will come from listening to everybody's point of view.

They prefer a cross-functional way of working that transcends the constraints of rank, genuinely believing this is better for the business than blindly following orders passed down from the top of the totem pole.

3. Millennials Want a Relationship with Their Boss

Millennials want a manager that they can regard as a mentor, even a friend. They want to feel comfortable asking for feedback and advice and establishing a rapport of frequent communication. They work best in companies where they feel they have a "work family", with co-workers and superiors looking out for them as individuals, not just trying to retain them as a "resource".

4. Millennials Are Tech Savvy, To Say the Least

Millennials *breathe* technology – though that may be an understatement… 53% of millennials said they rather get rid of their sense of smell than their digital devices! These "Digital Natives" grew up playing educational games in middle school and expressing themselves on social media in high school. In the work setting, Millennials don't just approve of using social media; they insist on it, with 56% saying they would not accept jobs from companies that ban social media. They disagree with the notion that social media is a productivity-suck, having a keen understanding of the many ways that it can support a company's business goals. Millennials have a firm grasp on how to use these tools to do things like build relationships, crowd source solutions and research information on demand.

5. Millennials Are Open to Change

Millennials don't agree with doing something a certain way just because that's how it has always been done. They recognize that the business and technology landscape is constantly changing and that our ways of working should change with them.

This gives them the reputation of sticking their nose up at the status quo, but with how quickly things are changing.

6. Millennials Are Task (Not Time) Oriented

69% of Millennials say they believe office attendance on a regular basis is unnecessary and 89% prefer to choose when and where they work rather than being placed in a 9-5 position. This is because they measure productivity by work completed, not by time spent in the office. They see no point in tracking an employee's "facetime", finding more importance in the actual value that he or she delivers to the organization. They are comfortable telecommuting and don't mind working late nights and weekends, while recognizing the importance of taking personal time to recharge, for themselves and for their work. The ability to be flexible with when and where they do their work allows them to make more room for family and personal pursuits, aspects which they hold in high regard. For this reason, 45% of Millennials will choose a workplace with more flexibility over one with higher pay.

7. Millennials Have a Hunger for Learning

Just because Millennials are out of college, doesn't mean they want to be done with learning. They are eager to continue expanding their skill sets and amassing knowledge, holding intellectual stimulation as a top factor in workplace motivation.

Beyond understanding how to perform a task – Millennials want to know *why*. 95% said that they are motivated to work harder when they understand the importance of a particular task within the context of the company's big-picture goals.

Also, social media is a key channel for learning and information transfer. According to the 2013 Millennial Impact Research Report, Millennials who want constant updates on an organization no longer rely on or return to websites to receive that information. Instead, they use websites first to learn about the organization, and then to connect with its social networks to stay updated. The smoother and more integrated the online experience, the better.

8. Millennials Crave Constant Feedback

80% of Millennials said they want to receive regular feedback from their managers. They don't want to have to wait for their mid-year review, preferring to receive bite-size feedback more often. They want to have clarity on how they are doing day-by-day, seeing performance management as an ongoing journey, vs. a one-off event.

9. Millennials Want Recognition

Millennials alsoexpect recognitionfor their hard work and accomplishments, with 89% saying a reward should be given for a job well done. This isn't because this generation is needy and self-centered, rather – it is because they crave indications that their superiors approve of their work. Unlike previous generations, they are not holding off for the promotions and raises promised down the road – they want to know if they are being successful today.

10. Millennials (Don't Just) Want To Have Fun!

Arguably, everyone wants to have fun – but Millennials want and even expect it in the workplace. With their less formal, task-oriented approach to work – they want to be able to have light moments in the workplace. This shouldn't be confused with laziness or lack of professionalism – indeed, Millennials find business value in bonding with teammates and taking a break for creative inspiration. Not surprisingly, 90% of Millennials want their workplace to be social and fun, and 88% say that a positive company culture is essential to their dream job.

2. Motivating factors of Millennials

The keys to motivating this generation can be found in harnessing these aspects of the work relationship: Work Direction, Personal Development, Social Interaction, Feedback and Praise and Meaningful Rewards.

2.1 Work Direction

Millennials want and expect to be constantly excited about how they are spending their time at work. They are consummate multi-taskers, very capable of managing a multitude of activities at once. Easily bored, they want and need to be challenged, which is a blessing for managers who want to take advantage of their energy, skills and resourcefulness. Provide clear work expectations, but allow Millennials to bring their own imprint to their jobs. Show them the "big picture" as to how their jobs relate to the mission, strategic objectives and core values of the organization. Ask for and use their ideas as much as possible or encourage them to pursue their own ideas when those have merit. This generation is very socially conscious, so linking them as directly as possible to the mission of your non-profit organization would be highly impactful, likewise for volunteering. For example, if the organization was Meals for Wheels, let the Millennial go on home visits to see directly who the organization is helping and hear their appreciation or task them with helping to increase the organization's online presence to expand the reach of the organization's mission.

2.2 Personal Development

Millennials are committed to constant learning and personal development and growth and their manager can easily serve as a coach and mentor to meet them at that expectation. Talk in terms of "development opportunities" and in long-term time frames that exceed any given task or assignment. If you shape the context for your relationship with a Millennial as extending years into the future in how you will help them grow and gain experience they will be more likely not to look to change jobs at the first sign of frustration or disappointment. A Millennial's manager needs to take the time to help coach Millennial employees and in the process show them how they can make a positive, meaningful impact at work. Redefine the timeframe for this generation's focus and show them how the things they are doing now can lead to things they want to be doing later. Talk with them about their interests and ways they can apply their skills; talk about career paths and needs of the organization; discuss opportunities that they can pursue, and help them get prepared to meet future opportunities.

2.3 Social Interaction

Millennials are very social and perhaps more peer-group oriented than previous generations. Most of their upbringing and educational experiences were in groups as was the bulk of their social experience, be it playing video games, group sports, or connecting on Facebook with their friends. Use these generational preferences to your advantage by allowing them to work together on projects and assignments and set up frequent non-work social situations such as team-building activities and celebrations. If they tend to work best with others and the way they get into a project is to talk it through with co-workers –great, let them do that. Make it clear what you need the end result to be, but let them bring the imprint of who they are to the task so they can be excited about the work and even have fun getting it done. You may not need to have your job be fun to get it done, but don't fault them if that is their preference.

2.4 Feedback & Praise

One of the most defining characteristics of this generation is their significant need for constant praise at work. This can be frustrating for other generations to understand, e.g., "I just told him last week that he was doing a good job, do I really have to tell him again?" and easy to dismiss as being a symptom of a generation whose parents spoiled them, showering them with constant praise and protecting them from any of the harsh realities of life. Instead, consider this perspective: The Millennials have learned in times of change one needs a constant source of feedback (think "video game") to be on the mark and adjust their performance accordingly. Since job requirements and expectations are constantly in flux, yesterday's feedback may no longer be relevant today. Constant feedback, thus, is not to pump up a frail ego as much as to assure the employee is on track to continue to do good work day after day for their employer. Feedback and praise serve as reinforcement as well as a corrective mechanism for this generation.

By this we don't mean "micromanaging," a negative term that is almost always associated with an ongoing stream of negative feedback and corrections that a manager makes in working with his/her employees. No one feels micromanaged when his/her boss tells them in explicit detail what he/she most liked about a great job the employee did. As such, we'd recommend making it a high priority to provide greater and more frequent praise and recognition in a greater variety of forms. Equally important, but far less often (quarterly?) would be having "developmental discussions" in which you can focus on ways the employee can improve. When you build on a strong foundation of ongoing positive feedback, employees are more likely to trust that you are on their side and thus be willing to accept constructive criticism from you when it is offered.

2.5 Meaningful Rewards

Millennials want rewards that are meaningful and exciting to them when they have done good work or an outstanding job. This includes financial incentives, and, of course, EVERYONE wants to make more money, not just the Millennials. The Millennials, however, may have the least realistic expectations as to what is needed to earn more money (especially if their role model is P. Diddy, Lindsay Lohan or A-Rod) and that is where you can help them out. Show them the skills they need to learn and the contribution they need to make in order to make more money, and show them the path as to how they can get there working for you in your organization.

Conclusion

There are many reasons to be frustrated by the newest generation in the workforce, but a greater number of reasons to be excited about what they have to offer any employer that is willing to meet them at their expectations in the workplace. In many ways, what this generation wants is what all employees want. Perhaps now is the time to consider making your work environment more meaningful and exciting for Millennials and every other employee as well.

Corporate landscape has always been under evolutionary influences of the times and with millennials becoming the majority in the workforce, a definite paradigm shift has happened with regard to the average employee's approach towards work - what they aspire for, what drives them to a career, how they prefer to work and what alienates them at work. To conclusively comment, scope for rapid growth is the primary career aspiration of millennials. They are less conservative about work values and are most effective in autonomous, flexible settings. For discerning organisations to leverage the in-house millennial talent for their best interests, leaders who lead millennials need to be inclusive - be flexible and adaptable, encourage collaborative working and be open and authentic. And rest assured that the future of organizations is secure with a generation that is perhaps the most collaborative and social of all.

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COMPETITIVE MARKET CONDITIONS: HOSPITALITY IN THE UPMARKET NEIGHBORHOOD OF JUHU

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Abstract

Sustainable development (SD) was defined for the first time in 1987 in the report "Our common future" as "Development...that...meets the needs of the present without compromising the ability of future generations to meet their own needs". In today's competitive business environment where technology pays a large role in enabling the business to be held locally and overseas, it becomes easier to win customers. The goal is to focus on productivity by generating more sales and margins compared to its market rivals.

By continuously keeping a balance among the social and economic dimensions, this paper will focus on the need to extend an already existing management system or develop a new one in order to improve sustained development as well as cover the principles of sustainable development to achieve the factor of sustainability in the changing market scenario.

Market delineation and Sustainability Analysis of Juhu to identify the most profitable and competitive use of real estate property such as hospitality which is legally and physically possible, financially feasible, maximally productive while the micro- market should be able to absorb this property to show its highest value in terms of use and profitability to the investor as well as stand at large in fulfilling the major aspect of sustaining.

Keywords: *Feasibility, Sustainability, Market delineation, financial feasibility.*

Background

Feasibility and sustainability report focuses on highest and best use of a potential site in Juhu. The site selection is done by analyzing property productivity & market delineation through gravity model, time distance model, Huffs model, etc.

Estimating and analyzing the Demand and Supply of the market is done for different real estate segments such as residential, commercial, retail & hospitality. Financially validating the different forms of real estate and creating scenarios which also include analyzing the discounted cash flows, NPV- Net Present Value, and IRR- Internal rate of return.

Finally we have proposed property with highest NPV, IRR, BCR, Payback period which is supported by risk, sensitivity and scenario analysis that accounts for stating a certain real estate's sustainability in the changing market scenario which is feasible in terms of the micro-market, operation and financially.

Introduction

Mumbai, being the hub of finance and a city of multi- culture has been one of the fastest growing cities of India with the various pockets showing their uniqueness in their own effective way. Juhu is one among the opulent pockets of Mumbai. It is a combination of residential, commercial, unorganized retail, hospitality and film studios and is famous for beach, beach vendor's snacks, film shoots, restaurants, pubs and celebrity residences. The report is on highest & best use study of a potential site in Juhu which is one of the important and developed micro markets of Mumbai and finding land parcel here becomes difficult. The Development Plan 2034 shows varied pockets of Juhu up for redevelopment. The proposed site remains hypothetical and the selection of this lead to the following objectives mentioned below.

Research objectives

- The evaluation and analysis of a proposed project to determine and technically suffice with supportive data if it is practically realistic, is within an estimated cost and if it is going to be profitable in the near future.

- Well evaluated and designed management feasibility will take into account the target market and the consumer behavior with the sole purpose of sustaining in the changing market scenario.
- Studying Juhu in terms of various developments and trends in terms of infrastructure, residential, commercial and hospitality.
- Analyzing the gap between demand and supply becomes essential.
- This helps us to determine if the project has the potential for sustaining thus leading to gain potential investors by showing a financial model.

Study area

The boundary below marked in red on the map is the demarcation of Juhu's study area that is considered to analyze various factors of development as per land use and the demand- supply within the micro- market that is spread across 437 sq. km. The site is of 10 acres and is hypothetically chosen with part of the site where Hotel Tulip Star exists and part of it has mixed land pattern.

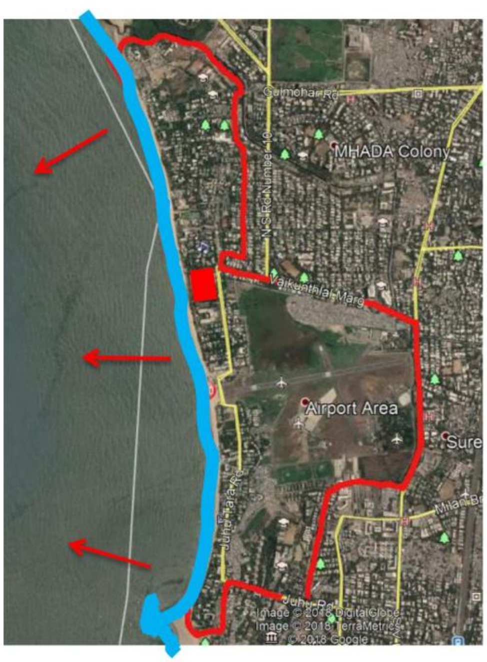


Figure Google Earth image showing the extent of Juhu, Figure Google Earth image showing the extent of site the site and natural barriers

Methodology

Market analysis in the appraisal process has two basic functions with the first analysis that provides the data input to identify the highest and best use of property and the second major function is to provide data input and identify the key factors of value that are to be measured by applying the three approaches to value i.e., the property use, market support and timing (absorption rate) an market participants who are the probable users and buyers.

Two steps of analyzing the micro- market:

- Market Delineation report
- Feasibility report

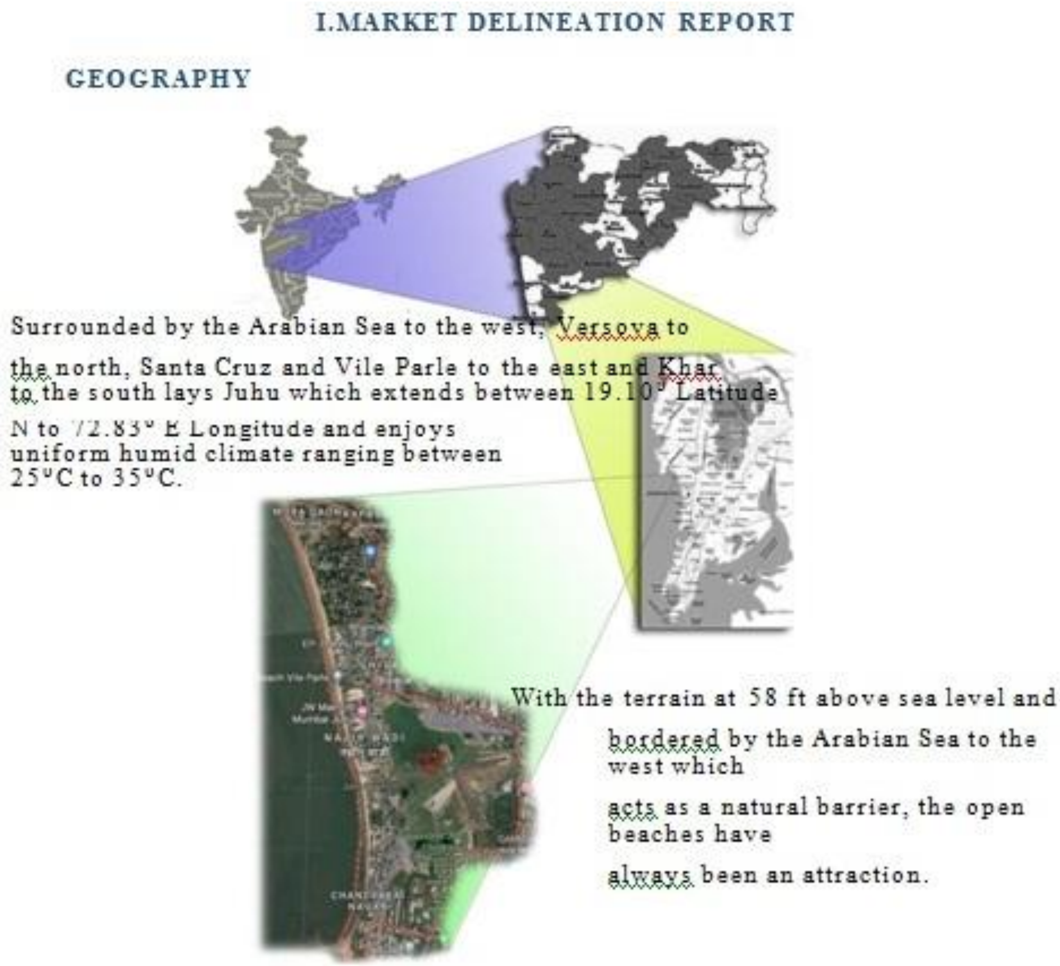


Figure Rendered compilation by Pranav taken from multiple websites

Demographics

As per the Primary survey in the study area and Census 2011 data (https://www.census2011.co.in/) and ward wise population, following are the highlights of demographics:

- As per census reports ward wise population for year 2011 is for K/W ward is 749000 and micro market (Juhu) population is 99002. Calculating future population for study area by arithmetic mean for year 2018 is 119140 by considering the density as 29700 p/ sq. km.
- *Figure 4 Population Growth, Figure 5 Population Growth Potential*
- Slum population 15190

- Household size 4.3 persons/ household
- Population density is 29700 p/sq.*km Figure 6 Total Population: Literate Population*
- Sex ratio 720:1000; as per Census 2011 Section 51, Juhu has the lowest sex ratio compared to other 50 sections of District. *Figure 7 Sex Ratio*
- Literacy rate is 89.7% *Table 1Literacy Rate*
- Work participation ratio 58% of total population are workers where as 42% of total population are non-workers. *Figure 8 Work Participation Ratio*
- 0-6 age group sex ratio 901:1000 with actual number 3696: 4104. *Figure 9 Age Make up(0-6 age)*

Regional linkage

The land parcel of 10 acres is situated at the junction of B. P. Patel Chowk and the connectivity of this to various other micro- markets is by bus, car, taxi and by local train from Vile- Parle and Santa Cruz being the nearest stations at 5.5 km and 4.9 km respectively, see

Figure 10 Link to surrounding micro- markets (en.m.wikipedia.org)

The map shows the nearest areas within 8 km which could be visited by the locals and tourists for reasons as mentioned below:

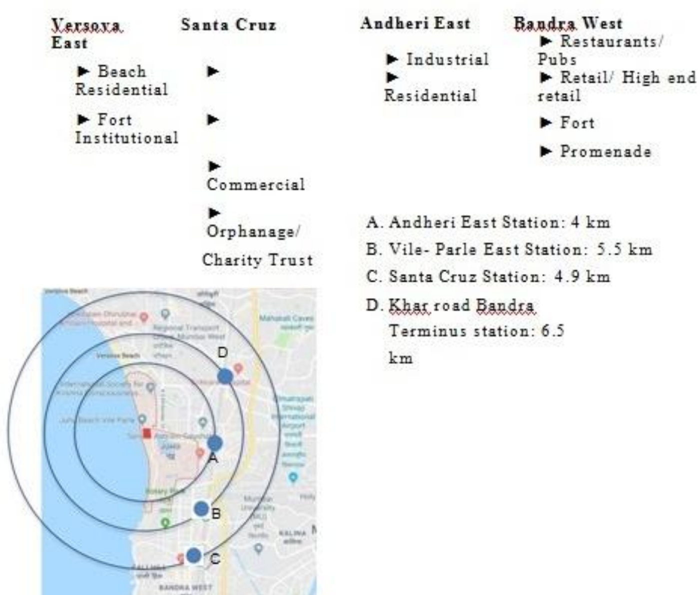


Figure 11 Closest railway stations (en.m.wikipedia.org)

Economy

- Large number of Hotels, Restaurants and cafes add to uplift hospitality in Juhu leading to the major economy of this area.
- High income group businessmen, Bollywood stars create center of attraction thus making an impact on the lease rent business. This also directly impacts on the increase in property prices. *Figure 12 Juhu Location Map* (Google Earth)

Development planning and municipal/ urban authorities

- Juhu comes under the urbanizable zone excluding the Juhu aerodrome, residential land prices between Rs.225000- 400000 per sq.m. and Net Bulk FSI ranging from 1.33- 2.7 (2012) as per the Draft DP 2034.
- As per *DCR;* with main road width of 20 meters, i.e., Juhu- Tara Road: Base FSI- 1, Additional FSI- 0.5, TDR- 0.9. Hence total FSI= 2.4
- Land parcel comes under Airport Authority of India.
- Coastal Regulation Zone - III A area
- Therefore, area up to 50 m from the high tide line on the landward side is applicable as the NDZ (No development zone). The selected land parcel is 120m (approx.) away from the high tide line thus making it applicable for development.
- Based on International Civil Aviation Organisation (ICAO) standards (2014), residential buildings within 2.5 km of the Juhu Airport should be 49.87 m or 15-floor high and commercial should be even lesser. (reference: timesofindia.com)

Income groups

- "Nearly 80% of Mumbai's Households belong to the economically weak, low-income and middle-income categories
- 50% of Mumbai's households earn less than Rs.20,000 per month" (MHADA Report). *Table 2 Income Groups*

Income Groups	Monthly Household Income	Yearly Income In Lakhs
Low-Income	16,001- 40,000	1.92
Middle-Income	40,001- 70,000	4.8
High-Income	≥ 70,001	8.4

Table 3 Income Groups

Infrastructure Development

Physical Infrastructure

Versova- Bandra Sea Link
One link of this sea link connects via Juhu- Koliwada area & connects to the Western Expressway via Milan Flyover

Metro Rail Buffer 0.5 km
This metro rail has it's stations at Khar, Santa Cruz, Vile- Parle, Andheri etc.

Figure 13 Versova- Bandra Sea Link Project

(www.msrdc.org)

SOCIAL INFRASTRUCTURE

Educational Institutes

Health Care

Temples

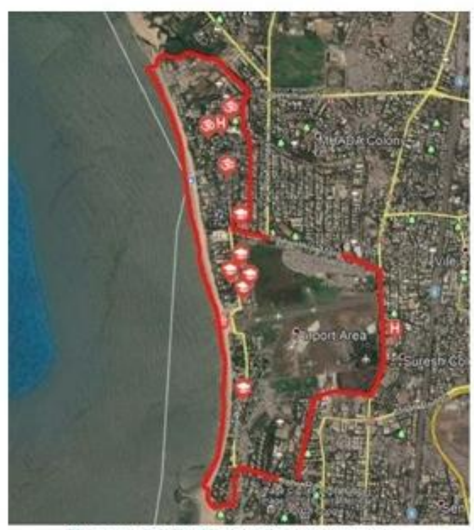


Figure 14 Social Infrastructure (Google Earth)

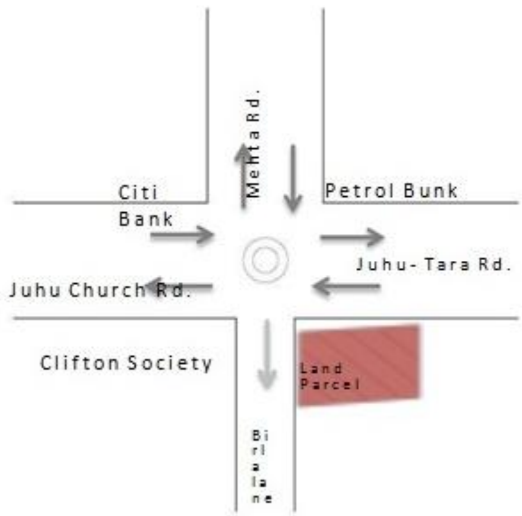
Feasibility report

Traffic and transportation

Number and type of vehicle

Primary Survey: 15 minutes observation (on 20th October, 2018; Sunday) of type and number of vehicles passing around our land parcel which is at a junction of 3 main roads and one secondary road.

Level of street congestion



On the basis of Primary survey, Secondary survey was done from which we can derive that the Juhu-Tara road was less congested when compared to Swami Vivekananda road assuming that the Juhu-

Tara road was mostly used by the residents, others, etc and Vivekananda road was used by everyone to travel towards Andheri, Khar and Kurla which are majorly Commercial Office Spaces.

STRENGTH | WEAKNESS | OPPORTUNITY | THREAT

Strength

- Prime location: Hospitality & Residential
- Presence of beach
- Close proximity to airport and 3 stations

Weakness

- Development not possible in the east due to Juhu Aerodrome
- CRZ stipulation
- Lack of organized retail
- Absence of Industries & IT

Opportunity

- Increase in investments
- More footfall of tourists and businessman
- Slum redevelopment

Threat

- Presence of land parcel at node/ junction which has high possibility of traffic agglomeration.
- Nala from slums flow into the Juhu beach hence, need for STP.

Objective

The primary objective of study is trade area analysis for residential and Hospitality development in Juhu micro market and to check future prospect of new residential and hospitality development in micro market.

Feasibility report

Property productivity analysis

Land Parcel is 10.61 acres. Beach is on the rear side of property. Property is 120m from High tide line. Terrain lies at 58 feet from sea level as per Terrain map *Figure 15topographic-map.com*

- Already existing Tulip Star Hotel can be used with alteration in infrastructure in case a hospitality project is taken up

Figure Physical Attributes of Site (Google Earth)

Residential demand – supply analysis

Demand estimation

Based on population demographics and secondary data collection and as per Stephen F. Fanning's scientific model of housing demand estimation. Demand is calculated by considering employment generation, income data and number of households in the market area.

Demand for new housing units = (cH+nR) –(Va-Vn) – (UCa- UCa)

cH = change in the number of households in the community or market area over a given period

nR = net removals of units (demolitions) from the housing inventory

Va = actual vacancies

Vn = frictional vacancy (normal vacancy in balanced market)

UCa = actual housing units under construction

UCn = the normal (average) number of units under construction

Population of micro market is 121000 and 4.3 is the number of persons per household in the micro market area.

cH = 121000/ 4.3 = 28140 new households

nR = 0

Va = 116 units vacant

Vn = units fractional vacancy (5% of total units) = 0

Uca = units actually under construction = 640

Ucn = units normally under construction = 0

(28140+0) -(116) – (640) = 27384

New housing units in demand over the next five years is 27384

ASSUMPTIONS (for Maximum development for Product mix Design)

Plot Area- 42937.14 sq.m

FSI- 2.40

Permissible Built up- 77286.85 sq.m

Product Mix Design	
2 BHK	
No. of Flats	184
Saleable Area	682.43 sq.ft/Flat
1 BHK	
No. of Flats	116
Saleable Area	424.62 sq.ft/Flat
3 BHK	
No. of Flats	36
Saleable Area	1213.21 sq.ft/Flat

Existing supply

As per primary survey Heena group of companies, Span group, Legend Siroya, Ahuja group,Bharat Infrastructureand engineering, M.L. Group of companies aresome of prominent groups in this area.Following table showing price range and area in sq.ft .

Typical	Price Range (Rs.)	Area (sq.ft.)
1BHK Flat	73.80L-1.72Cr	345-800 sqft
2BHK Flat	2.25Cr-5.25Cr	670-1500 sqft
3BHK Flat	3.83Cr-8.94Cr	1100-2560 sqft
4BHK Flat	8.22Cr-19.18Cr	1800-4290 sqft
5BHK Flat	8.58Cr-20.02Cr	2500-5000 sqft

Table: Residential Property Price (www.housing.com)

Property price trend

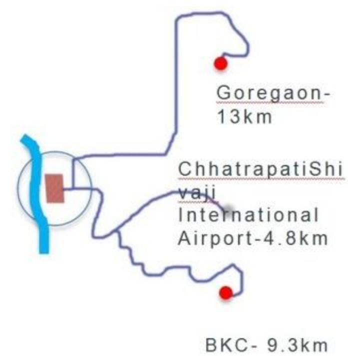
Figure Locality Price ;(www.magicbricks.com)

Hospitality demand supply analysis

To do trade area analysis for Juhu micro market and understanding sustainability of Hotel project through primary and secondary studies. Following are the probable reasons for occupancy in the hotels of Juhu.

Business point of view:

- Central point with respect to visiting IT and Office Spaces.
- Close to International Airport
- Close to restaurants in Juhu



Tourism point of view

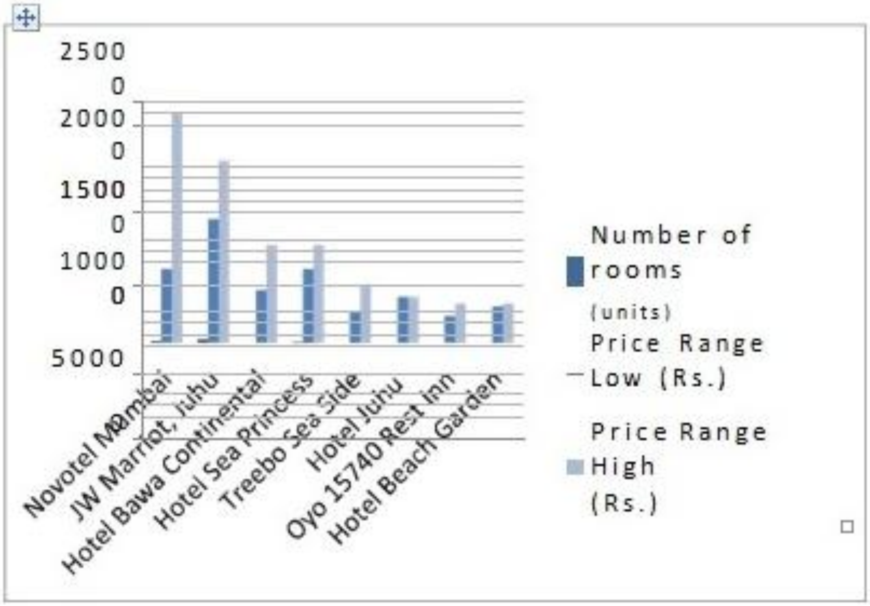
- Close to beaches- Juhu, Versova
- Close to International Airport
- Close to restaurants in Juhu

Hotels (within 1km radius)	**No. of rooms & Price range**	**Vacancy Rate %**
Hotel Beach Garden	25; Rs.3,200-3,500	80
JW Marriot, Juhu	326; Rs.10,800- 15,900	70
Hotel Bawa Continental	32; Rs.4,600- 8,500	70
Hotel Sea Princess	111; Rs.6,500- 8,500	80
Novotel Mumbai	203; Rs.6,500- 20,000	80
Treebo Sea Side	35; Rs. -2,700- 5,100	70
Oyo 15740 Rest Inn	8; Rs.2,400- 3,500	90
Hotel Juhu	15; Rs.4,000	80

Table Hotels in the micro- market

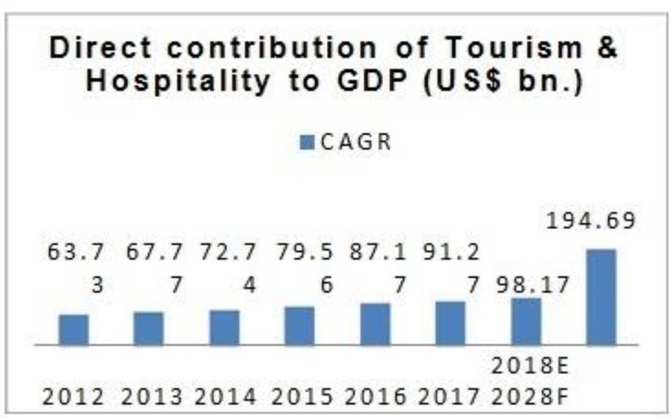
- Room demand in business destinations - Mumbai, demand is expected to grow at a moderate rate of 9% supply and 7% CAGR respectively.

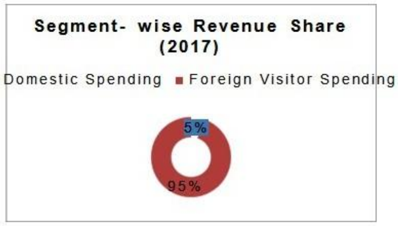
- While OR is expected to increase by 400 basis points to 68%, ARR (avg. room rate) is estimated to increase by CAGR of ~2%. As a result, RevPAR (revenue per available room) in business destinations is expected to rise by %CAGR to Rs 5,500 till fiscal 2022. Following table showing comparison of top 8 hotels out of 24 in the micro- market with highest and lowest accommodation price along with number of rooms.

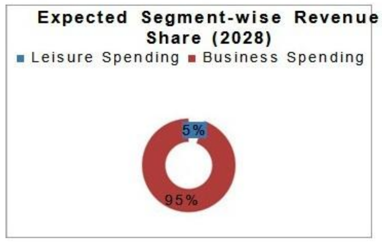


Hotel Price range in Juhu

- As per IBEF Report Growth of Tourism & Hospitality Industry (IBEF Report Growth of Tourism & Hospitality Industry)- Info graphic updated (March 2018) directcontribution of tourism and Hospitality, Segment wise revenue share, Expected Segment wise revenue share are shown below







Data showing foreigners visiting India

Sr.No	Type of Model	Worst Case	Most Likely Case	Best Case
RESIDENTIAL	**– PRODUCT**	**MIX**		
1	NPV	13,37,05,381.94	27,66,37,975.35	76,87,43,995.94
2	IRR	19%	22%	27%
3	BCR	1.17	1.25	1.37
4	Payback Period (in yrs)	3.19	3.27	3.27
5	Duration	5	5	5
HOSPITALITY-	**3 STAR**			
1	NPV	1,51,28,82,000.00	1,79,62,50,400.00	2,15,80,16,000.00
2	IRR	19%	20%	27%
3	BCR	2.38	2.53	3.40
4	Payback Period (in yrs)	10	10	10
5	Duration	5	5	5

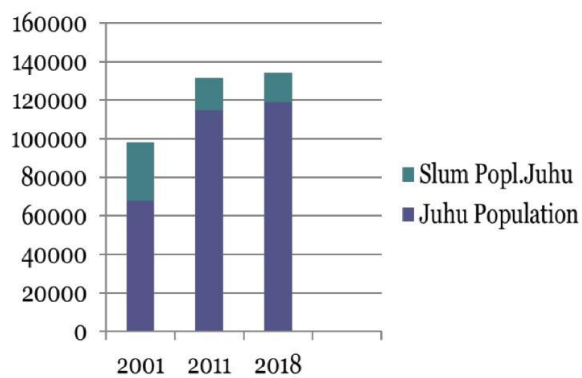
Conclusion

Above analysis clearly concludes that Residential Apartment or Hotel development with advanced facilities will be physically possible, financially feasible and maximally productive. Focusing on NPV, IRR, BCR and Payback period we can conclude that Residential Apartment with product mix design is the most feasible option on this hypothetical site taking into consideration the hospitality's payback period to be the changing side of coin.

ANNEXURE

POPULATION GROWTH POTENTIAL

POPULATION GROWTH



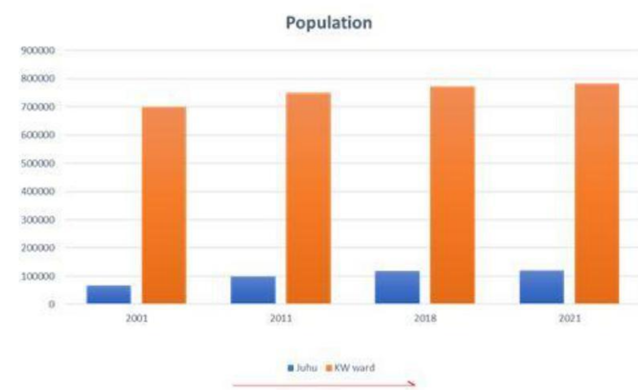


Figure 16 Population GrowthFigure 17 Population Growth Potential

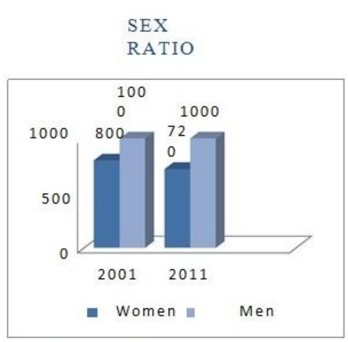
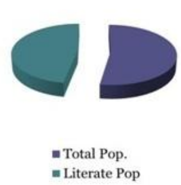


Figure 18 Sex Ratio

Figure 19 Age Make up (0-6 age)



LITERACY RATE

Literates %		
Persons	Male	Female
89.7	92.08	87.4

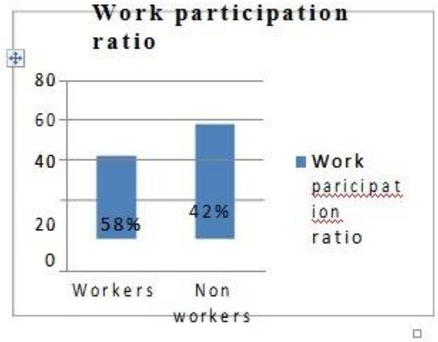


Table 4Literacy Rate *Figure 21 Work Participation Ratio*

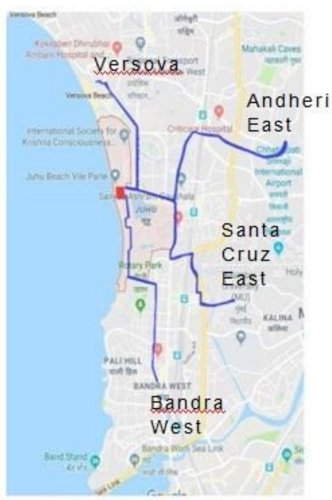


Figure 22 Link to surrounding micro-markets (en.m.wikipedia.org)

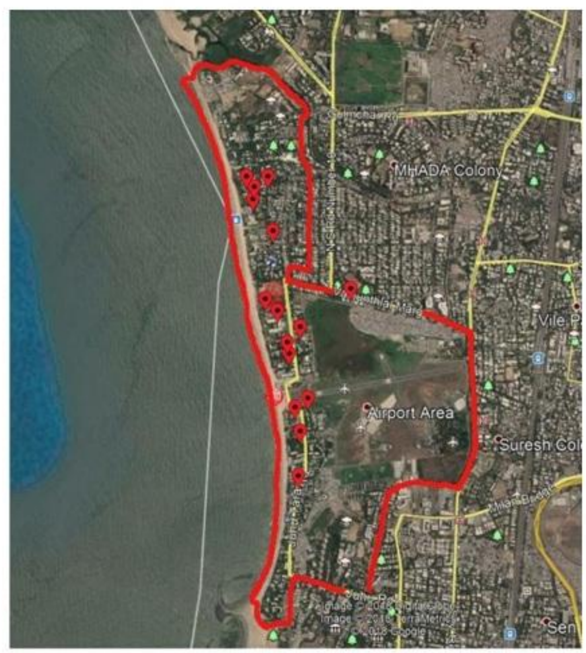


Figure 23 Juhu Location Map (Google Earth)

FINANCIAL FEASIBILITY CALCULATIONS

RESIDENTIAL FEASIBILITY- Most Likely Case (PRODUCT MIX)

S.NO.	Description of item	Unit	Quantity	Remarks
A	**AREA CALCULATIONS**			
1	Plot Area	Sq. mt.	42937.14	
2	FSI		2.40	
3	RG/ Open Space (15% of Plot Area)	Sq. mt.	6440.57	
4	Amenities (10% of Plot Area)	Sq. mt.	4293.71	
5	Permissible Built up Area	Sq. mt.	77286.85	
B	**AREA CALCULATIONS FOR 2 BHK**			
1	Built up Area for 2 BHK Building	Sq. mt.	34779.08	45% of Total Area
2	Built Up Area for 2 BHK flats	Sq. ft.	374358.90	Including Built up & Fungible
3	Saleable/ Carpet Area	Sq. ft.	131025.62	
4	No. of Buildings	Nos.	2.00	
5	No. of Floors	Nos.	12.00	Considering 36m height
6	Floor Plate of One Building	Sq. ft.	18717.95	Includes BUA Area
7	Floor Plate of One Building	Sq. ft.	5459.40	Includes Carpet Area
8	No. of Flats/ Floor in One Building	Nos.	8.00	
9	Proposed Carpet Area for per 2 BHK	Sq. ft.	682.43	
10	Nos. of 2 BHK Flats in One Building	Nos.	92.00	Excluding 8 Flats on Stilt & 4 Flats on Refuge
11	Nos. of 2 BHK Flats in Two Building	Nos.	184.00	
C	**AREA CALCULATIONS FOR 1 BHK**			
1	Built up Area for 1 BHK Building	Sq. mt.	27050.40	35% of Total Area
2	Built up Area for 1 BHK flats	Sq. ft.	291170.49	Including Built up & Fungible
3	Saleable/ Carpet Area	Sq. ft.	101909.67	
4	No. of Buildings	Nos.	2.00	
5	No. of Floors	Nos.	12.00	Considering 36m height
6	Floor Plate of One Building	Sq. ft.	12132.10	Includes BUA Area
7	Floor Plate of One Building	Sq. ft.	4246.24	
8	No. of Flats/ Floor in One Building	Nos.	10.00	
9	Proposed Carpet Area for per 1 BHK	Sq. ft.	424.62	
10	Nos. of 1 BHK Flats in One Building	Nos.	58.00	Excluding 8 Flats on Stilt & 4 Flats on Refuge
11	Nos. of 1 BHK Flats in Two Building	Nos.	116.00	
C	**AREA CALCULATIONS FOR 3 BHK**			
1	Built up Area for 3 BHK Building	Sq. mt.	15457.37	20% of Total Area
2	Built up Area for 3 BHK flats	Sq. ft.	166383.13	Including Built up & Fungible
3	Saleable/ Carpet Area	Sq. ft.	58234.10	
4	No. of Buildings	Nos.	1.00	
5	No. of Floors	Nos.	12.00	Considering 36m height
6	Floor Plate of One Building	Sq. ft.	6932.63	Includes BUA Area
7	Floor Plate of Building	Sq. ft.	4852.84	
8	No. of Flats/ Floor in One Building	Nos.	4.00	
9	Proposed Carpet Area for per 3 BHK	Sq. ft.	1213.21	
10	Nos. of 3 BHK Flats in One Building	Nos.	36.00	Excluding 8 Flats on Stilt & 4 Flats on Refuge
B	**CASH OUT FLOW**			
	HARD COST			
1	Construction cost per sq.ft	Rs.	₹ 2,500.00	If Height increase than 24m (2200 + 300)
2	Construction cost of 10 Floors of all Buildings	Rs.	₹ 2,05,89,81,834.29	
3	Construction cost of Refuge Floor of all Buildings	Rs.	₹ 12,86,86,364.64	75% cost of one floor
4	Construction cost of Stilt Floor of all Buildings	Rs.	₹ 8,57,90,909.76	50% cost of one floor
5	Construction cost of Terrace Floor of all Buildings	Rs.	₹ 8,57,90,909.76	50% cost of one floor
7	**Construction cost of all Building**	**Rs.**	**₹ 2,35,92,50,018.46**	
8	**Equity - 50%**	**Rs.**	**₹ 1,17,96,25,009.23**	
9	**Debt - 50%**	**Rs.**	**₹ 1,17,96,25,009.23**	**(Loan Amt.)**
10	**Interest Amt for 5 Year**	**Rs.**	**₹ 64,22,81,567.79**	**(Interest Amt.)**
	LAND COST			
9	Ready Recknar cost of Land	Rs./Sq.mt	₹ 77,900.00	
10	Actual Land Cost	Rs./Sq.mt	₹ 93,480.00	20% on Ready Recknar Land Cost
11	**Total Land Cost**	**Rs.**	**₹ 4,01,37,63,847.20**	
	SOFT COST			
12	TDR & Additional Premium FSI	Rs.	₹ 1,34,46,10,888.81	
13	5% Miscellenous Amount	Rs.	₹ 31,86,50,693.28	
14	6% Stamp duty	Rs.	₹ 38,23,80,831.94	
15	2% Brokerage	Rs.	₹ 17,47,98,502.32	
16	Approvals of Project	Rs./Sq.mt	₹ 7,27,92,345.61	Rs.250/- on Total Saleable Area
17	**Total Cost Construction**	**Rs.**	**₹ 9,30,85,28,695.41**	
18	**NPV of Total Cash Out Flow**	**Rs.**	**₹ 5,64,69,90,700.94**	
C	**CASH IN FLOW**			
1	Total No. of Flats in 1 BHK Building	No.	116	
2	Saleable Area For 1 BHK	Sq.ft	424.6236257	Excludes 30% Loading of BUA
3	Total No. of Flats in 2 BHK Building	No.	184	
4	Saleable Area For 2 BHK	Sq.ft	682.4250781	Excludes 30% Loading of BUA

5	Total No. of Flats in 3 BHK Building	No.	36	
6	Saleable Area For 3 BHK	Sq.ft	1213.210359	Excludes 30% Loading of BUA
7	Saleable Area Rate	Rate/Sq.ft	₹ 40,000.00	
8	**Total Revenue from project**	**Rs.**	**₹ 8,73,99,25,115.80**	
9	**NPV of Total Cash In Flow**	**Rs.**	**₹ 7,10,83,54,411.56**	
D	**FINANCIAL CALCULATIONS**			
1	Duration	Yrs.	5	
2	Tax	Rs.	₹ 3,23,70,39,393	33% of Net profit every year
3	PAT	Rs.	₹ 14,02,71,70,701.65	
4	NPV of profit	Rs.	₹ 27,66,37,975.35	
5	IRR		22%	
6	BCR (Benefit Cost Ratio)		1.258786279	
7	Payback Period	Yr.	3.27	

Year		Cash Inflow %	Cash inflow		Cash Outflow	NCF (PBT)	CUMULATIVE (PBT)
	Total		₹ 8,73,99,25,116		₹ 9,30,85,28,695		
2018	Initial Stage	0%	0	89%	₹ 5,74,07,55,568	₹ -5,74,07,55,567.95	-5740755568
2019		20%	₹ 1,74,79,85,023.16	2.2%	₹ 40,17,98,862.67	₹ 1,34,61,86,160.49	-4394569407
2020		20%	₹ 2,30,73,40,230.57	2.2%	₹ 37,19,94,304.89	₹ 1,93,53,45,925.68	-2459223482
2021		20%	₹ 2,53,80,74,253.63	2.2%	₹ 33,80,17,109.02	₹ 2,20,00,57,144.61	-259166337.2
2022		20%	₹ 2,79,18,81,678.99	2.2%	₹ 29,92,83,105.73	₹ 2,49,25,98,573.26	2233432236
2023		20%	₹ 3,07,10,69,846.89	2.2%	₹ 25,51,26,341.98	₹ 2,81,59,43,504.91	5049375741

Mortgage Loan Payments

Enter Values	
Loan Amount	₹ 1,40,72,23,081.21
Annual Interest Rate	14.00 %
Loan Period in Years	5
Number of Payments Per Year	1
Start Date of Loan	01-12-2018
Optional Extra Payments	₹ -

Loan Summary	
Scheduled Payment	₹ 40,99,00,929.80
Scheduled Number of Payments	5
Actual Number of Payments	5
Total Early Payments	₹ -
Total Interest	₹ 64,22,81,567.78

Annuity Formula

Lender Name:

Pmt No.	Payment Date	Beginning Balance	Scheduled Payment	Extra Payment	Total Payment	Principal	Interest	Ending Balance	Cumulative Interes
1	01-12-2019	₹ 1,40,72,23,081.21	₹ 40,99,00,929.80	₹ -	₹ 40,99,00,929.80	₹ 21,28,89,698.43	₹ 19,70,11,231.37	₹ 1,19,43,33,382.78	₹ 19,70,11,231.37
2	01-12-2020	1,19,43,33,382.78	40,99,00,929.80	-	40,99,00,929.80	24,26,94,256.21	16,72,06,673.59	95,16,39,126.57	36,42,17,904.9
3	01-12-2021	95,16,39,126.57	40,99,00,929.80	-	40,99,00,929.80	27,66,71,452.08	13,32,29,477.72	67,49,67,674.49	49,74,47,382.6
4	01-12-2022	67,49,67,674.49	40,99,00,929.80	-	40,99,00,929.80	31,54,05,455.37	9,44,95,474.43	35,95,62,219.12	59,19,42,857.1
5	01-12-2023	35,95,62,219.12	40,99,00,929.80	-	35,95,62,219.12	30,92,23,508.44	5,03,38,710.68	0.00	64,22,81,567.7

FINANCIAL FEASIBILITY CALCULATIONS

RESIDENTIAL FEASIBILITY- Worst Case (PRODUCT MIX)

S.NO.	Description of item	Unit	Quantity	Remarks
A	AREA CALCULATIONS			
1	Plot Area	Sq. mt.	42937.14	
2	FSI		2.40	
3	RG/ Open Space (15% of Plot Area)	Sq. mt.	6440.57	
4	Amenities (10% of Plot Area)	Sq. mt.	4293.71	
5	Permissible Built up Area	Sq. mt.	77286.85	
B	AREA CALCULATIONS FOR 2 BHK			
1	Built up Area for 2 BHK Building	Sq. mt.	34779.08	45% of Total Area
2	Built Up Area for 2 BHK flats	Sq. ft.	374362.05	Including Built up & Fungible
3	Saleable/ Carpet Area	Sq. ft.	131026.72	
4	No. of Buildings	Nos.	2.00	
5	No. of Floors	Nos.	12.00	Considering 36m height
6	Floor Plate of One Building	Sq. ft.	15598.42	Includes BUA Area
7	Floor Plate of One Building	Sq. ft.	5459.45	Includes Carpet Area
8	No. of Flats/ Floor in One Building	Nos.	8.00	
9	Proposed Carpet Area for per 2 BHK	Sq. ft.	682.43	
10	Nos. of 2 BHK Flats in One Building	Nos.	92.00	Excluding 8 Flats on Stilt & 4 Flats on Refuge
11	Nos. of 2 BHK Flats in Two Building	Nos.	184.00	
C	AREA CALCULATIONS FOR 1 BHK			
1	Built up Area for 1 BHK Building	Sq. mt.	27050.40	35% of Total Area
2	Built up Area for 1 BHK flats	Sq. ft.	291170.49	Including Built up & Fungible
3	Saleable/ Carpet Area	Sq. ft.	101909.67	
4	No. of Buildings	Nos.	2.00	
5	No. of Floors	Nos.	12.00	Considering 36m height
6	Floor Plate of One Building	Sq. ft.	12132.10	Includes BUA Area
7	Floor Plate of One Building	Sq. ft.	4246.24	
8	No. of Flats/ Floor in One Building	Nos.	10.00	
9	Proposed Carpet Area for per 1 BHK	Sq. ft.	424.62	
10	Nos. of 1 BHK Flats in One Building	Nos.	58.00	Excluding 8 Flats on Stilt & 4 Flats on Refuge
11	Nos. of 1 BHK Flats in Two Building	Nos.	116.00	
C	AREA CALCULATIONS FOR 3 BHK			
1	Built up Area for 3 BHK Building	Sq. mt.	15457.37	20% of Total Area
2	Built up Area for 3 BHK flats	Sq. ft.	166383.13	Including Built up & Fungible
3	Saleable/ Carpet Area	Sq. ft.	58234.10	
4	No. of Buildings	Nos.	1.00	
5	No. of Floors	Nos.	12.00	Considering 36m height
6	Floor Plate of One Building	Sq. ft.	8319.16	Includes BUA Area
7	Floor Plate of Building	Sq. ft.	4852.84	
8	No. of Flats/ Floor in One Building	Nos.	4.00	
9	Proposed Carpet Area for per 3 BHK	Sq. ft.	1326.68	
10	Nos. of 3 BHK Flats in One Building	Nos.	36.00	Excluding 8 Flats on Stilt & 4 Flats on Refuge
B	CASH OUT FLOW			
	HARD COST			
1	Construction cost per sq.ft	Rs.	₹ 2,500.00	If Height increase than 24m (2200 + 300)
2	Construction cost of 10 Floors of all Buildings	Rs.	₹ 1,91,34,06,052.33	
3	Construction cost of Refuge Floor of all Buildings	Rs.	₹ 11,95,87,878.27	75% cost of one floor
4	Construction cost of Stilt Floor of all Buildings	Rs.	₹ 7,97,25,252.18	50% cost of one floor
5	Construction cost of Terrace Floor of all Buildings	Rs.	₹ 7,97,25,252.18	50% cost of one floor
7	**Construction cost of all Building**	**Rs.**	**₹ 2,19,24,44,434.97**	
8	**Equity - 20%**	**Rs.**	**₹ 43,84,88,886.99**	
9	**Debt - 80%**	**Rs.**	**₹ 1,75,39,55,547.97**	**(Loan Amt.)**
10	**Interest Amt for 5 Year**	**Rs.**	**₹ 1,02,76,50,508.14**	**(Interest Amt.)**
	LAND COST			
9	Ready Recknar cost of Land	Rs./Sq.mt	₹ 77,900.00	
10	Actual Land Cost	Rs./Sq.mt	₹ 93,480.00	20% on Ready Recknar Land Cost
11	**Total Land Cost**	**Rs.**	**₹ 4,01,37,63,847.20**	
	SOFT COST			
12	TDR & Additional Premium FSI	Rs.	₹ 1,34,46,10,888.81	
13	5% Miscellenous Amount	Rs.	₹ 31,03,10,414.11	
14	6% Stamp duty	Rs.	₹ 37,23,72,496.93	
15	2% Brokerage	Rs.	₹ 13,35,50,455.66	
16	Approvals of Project	Rs./Sq.mt	₹ 7,27,92,621.56	Rs.250/- on Total Saleable Area
17	**Total Cost Construction**	**Rs.**	**₹ 9,46,74,95,667.38**	

18	**NPV of Total Cash Out Flow**	**Rs.**	**₹ 5,85,89,62,693.58**	
C	**CASH IN FLOW**			
1	Total No. of Flats in 1 BHK Building	No.	116	
2	Saleable Area For 1 BHK	Sq.ft	424.6236257	Excludes 30% Loading of BUA
3	Total No. of Flats in 2 BHK Building	No.	184	
4	Saleable Area For 2 BHK	Sq.ft	682.4308271	Excludes 30% Loading of BUA
5	Total No. of Flats in 3 BHK Building	No.	36	
6	Saleable Area For 3 BHK	Sq.ft	1326.68	Excludes 30% Loading of BUA
7	Saleable Area Rate	Rate/Sq.ft	₹ 30,000.00	
8	**Total Revenue from project**	**Rs.**	**₹ 6,67,75,22,783.12**	
9	**NPV of Total Cash In Flow**	**Rs.**	**₹ 6,87,03,08,773.97**	
D	**FINANCIAL CALCULATIONS**			
1	Duration	Yrs.	5	
2	Tax	Rs.	₹ 3,05,25,13,327	33% of Net profit every year
3	PAT	Rs.	₹ 13,22,75,57,751.61	
4	NPV of profit	Rs.	₹ -13,37,05,381.94	
5	IRR		19%	
6	BCR (Benefit Cost Ratio)		1.172615211	
7	Payback Period	Yr.	3.19	

Year		Cash Inflow %	Cash inflow		Cash Outflow	NCF (PBT)	CUMULATIVE (PBT)
	Total		₹ 6,67,75,22,783		₹ 9,46,74,95,667		
2018	Initial Stage	0%	0	89%	₹ 5,73,07,47,233	₹ -5,73,07,47,232.94	-5730747233
2019		20%	₹ 1,33,55,04,556.62	2.2%	₹ 52,35,02,874.77	₹ 81,20,01,681.85	-4918745551
2020		20%	₹ 2,35,04,88,019.66	2.2%	₹ 47,58,15,582.34	₹ 1,87,46,72,437.32	-3044073114
2021		20%	₹ 2,58,55,36,821.63	2.2%	₹ 42,14,52,068.97	₹ 2,16,40,84,752.65	-879988361.1
2022		20%	₹ 2,84,40,90,503.79	2.2%	₹ 35,94,77,663.72	₹ 2,48,46,12,840.07	1604624479
2023		20%	₹ 3,12,84,99,554.17	2.2%	₹ 28,88,26,841.74	₹ 2,83,96,72,712.42	4444297191

Mortgage Loan Payments

Enter Values	
Loan Amount	₹ 2,25,15,56,929.23
Annual Interest Rate	14.00 %
Loan Period in Years	5
Number of Payments Per Year	1
Start Date of Loan	01-12-2018
Optional Extra Payments	₹ -

Loan Summary	
Scheduled Payment	₹ 65,58,41,487.47
Scheduled Number of Payments	5
Actual Number of Payments	5
Total Early Payments	₹ -
Total Interest	₹ 1,02,76,50,508.13

Annuity Formula

Lender Name:

Pmt No.	Payment Date	Beginning Balance	Scheduled Payment	Extra Payment	Total Payment	Principal	Interest	Ending Balance	Cumulative Interest
1	01-12-2019	₹ 2,25,15,56,929.23	₹ 65,58,41,487.47	₹ -	₹ 65,58,41,487.47	₹ 34,06,23,517.38	₹ 31,52,17,970.09	₹ 1,91,09,33,411.85	₹ 31,52,17,970.09
2	01-12-2020	1,91,09,33,411.85	65,58,41,487.47	-	65,58,41,487.47	38,83,10,809.81	26,75,30,677.66	1,52,26,22,602.04	58,27,48,647.75
3	01-12-2021	1,52,26,22,602.04	65,58,41,487.47	-	65,58,41,487.47	44,26,74,323.19	21,31,67,164.29	1,07,99,48,278.85	79,59,15,812.04
4	01-12-2022	1,07,99,48,278.85	65,58,41,487.47	-	65,58,41,487.47	50,46,48,728.43	15,11,92,759.04	57,52,99,550.41	94,71,08,571.07
5	01-12-2023	57,52,99,550.41	65,58,41,487.47	-	57,52,99,550.41	49,47,57,613.36	8,05,41,937.06	0.00	1,02,76,50,508.13

8	NPV of Total Cash In Flow	Rs.	₹ 17,23,38,08,523.77	
D	**FINANCIAL CALCULATIONS**			
1	Duration	Yrs.	5	Construction Period
2	Tax	Rs.	₹ 28,40,55,88,965	33% of Net profit every year
3	PAT	Rs.	₹ 23,48,62,97,573.02	
4	NPV of profit	Rs.	₹ 1,79,62,50,400.00	
5	IRR		20%	
6	BCR (Benefit Cost Ratio)		2.534726459	
7	Payback Period	Yr.	10.00	

Year		Cash Inflow %	Cash inflow		Cash Outflow	NCF (PBT)	CUMULATIVE (PBT)
	Total		₹ -		₹ 4,91,92,91,392		
2018	Initial Stage	0%	0	0%		₹ -	0
2019		0%		20%	₹ 98,38,58,278.48	₹ -98,38,58,278.48	-983858278.5
2020		0%		20%	₹ 98,38,58,278.48	₹ -98,38,58,278.48	-1967716557
2021		0%		20%	₹ 98,38,58,278.48	₹ -98,38,58,278.48	-2951574835
2022		0%		20%	₹ 98,38,58,278.48	₹ -98,38,58,278.48	-3935433114
2023		0%		20%	₹ 98,38,58,278.48	₹ -98,38,58,278.48	-4919291392
2024		70%	₹ 1,79,62,50,400.00		₹ 1,08,26,42,826.33	₹ 71,36,07,573.67	-4205683819
2025	Excalation 10%	80%	₹ 2,15,55,00,480.00		₹ 1,19,09,07,108.96	₹ 96,45,93,371.04	-3241090448
2026	Excalation 10%	80%	₹ 2,37,10,50,528.00		₹ 1,30,99,97,819.85	₹ 1,06,10,52,708.15	-2180037740
2027	Excalation 10%	80%	₹ 2,60,81,55,580.80		₹ 1,44,09,97,601.84	₹ 1,16,71,57,978.96	-1012879761
2028	Excalation 10%	80%	₹ 2,86,89,71,138.88		₹ 1,58,50,97,362.02	₹ 1,28,38,73,776.86	270994016.3
2029	Excalation 10%	80%	₹ 3,15,58,68,252.77		₹ 1,74,36,07,098.23	₹ 1,41,22,61,154.54	1683255171
2030	Excalation 10%	80%	₹ 3,47,14,55,078.04		₹ 1,91,79,67,808.05	₹ 1,55,34,87,270.00	3236742441
2031	Excalation 10%	80%	₹ 3,81,86,00,585.85		₹ 2,10,97,64,588.85	₹ 1,70,88,35,997.00	4945578438
2032	Excalation 10%	80%	₹ 4,20,04,60,644.43		₹ 2,32,07,41,047.74	₹ 1,87,97,19,596.70	6825298035
2033	Excalation 10%	80%	₹ 4,62,05,06,708.88		₹ 2,55,28,15,152.51	₹ 2,06,76,91,556.37	8892989591
2034	Excalation 10%	80%	₹ 5,08,25,57,379.77		₹ 2,80,80,96,667.76	₹ 2,27,44,60,712.00	11167450303
2035	Excalation 10%	80%	₹ 5,59,08,13,117.74		₹ 3,08,89,06,334.54	₹ 2,50,19,06,783.20	13669357086
2036	Excalation 10%	80%	₹ 6,14,98,94,429.52		₹ 3,39,77,96,967.99	₹ 2,75,20,97,461.52	16421454548
2037	Excalation 10%	80%	₹ 6,76,48,83,872.47		₹ 3,73,75,76,664.79	₹ 3,02,73,07,207.67	19448761755
2038	Excalation 10%	80%	₹ 7,44,13,72,259.71		₹ 4,11,13,34,331.27	₹ 3,33,00,37,928.44	22778799684
2039	Excalation 10%	80%	₹ 8,18,55,09,485.69		₹ 4,52,24,67,764.40	₹ 3,66,30,41,721.29	26441841405
2040	Excalation 10%	80%	₹ 9,00,40,60,434.25		₹ 4,97,47,14,540.84	₹ 4,02,93,45,893.41	30471187298
2041	Excalation 10%	80%	₹ 9,90,44,66,477.68		₹ 5,47,21,85,994.92	₹ 4,43,22,80,482.76	34903467781
2042	Excalation 10%	80%	₹ 10,89,49,13,125.45		₹ 6,01,94,04,594.42	₹ 4,87,55,08,531.03	39778976312
2043	Excalation 10%	80%	₹ 11,98,44,04,437.99		₹ 6,62,13,45,053.86	₹ 5,36,30,59,384.13	45142035696
2044	Excalation 10%	80%	₹ 13,18,28,44,881.79		₹ 7,28,34,79,559.24	₹ 5,89,93,65,322.55	51041401019
2045	Excalation 10%	80%	₹ 14,50,11,29,369.97		₹ 8,01,18,27,515.17	₹ 6,48,93,01,854.80	57530702874
2046	Excalation 10%	80%	₹ 15,95,12,42,306.97		₹ 8,81,30,10,266.69	₹ 7,13,82,32,040.28	64668934914
2047	Excalation 10%	80%	₹ 17,54,63,66,537.67		₹ 9,69,43,11,293.35	₹ 7,85,20,55,244.31	72520990158
2048	Excalation 10%	80%	₹ 19,30,10,03,191.43		₹ 10,66,37,42,422.69	₹ 8,63,72,60,768.74	81158250927

Enter Values	
Loan Amount	₹ 28,98,25,695.00
Annual Interest Rate	14.00 %
Loan Period in Years	30
Number of Payments Per Year	1
Start Date of Loan	01-12-2018
Optional Extra Payments	₹ -

Loan Summary	
Scheduled Payment	₹ 4,13,87,918.99
Scheduled Number of Payments	30
Actual Number of Payments	30
Total Early Payments	₹ -
Total Interest	₹ 95,18,11,874.74

Annuity Formula

Lender Name:

Pmt No.	Payment Date	Beginning Balance	Scheduled Payment	Extra Payment	Total Payment	Principal	Interest	Ending Balance	Cumulative Interest
1	01-12-2019	₹ 28,98,25,695.00	₹ 4,13,87,918.99	₹ -	₹ 4,13,87,918.99	₹ 8,12,321.69	₹ 4,05,75,597.30	₹ 28,90,13,373.31	₹ 4,05,75,597.30
2	01-12-2020	28,90,13,373.31	4,13,87,918.99	-	4,13,87,918.99	9,26,046.73	4,04,61,872.26	28,80,87,326.58	8,10,37,469.56
3	01-12-2021	28,80,87,326.58	4,13,87,918.99	-	4,13,87,918.99	10,55,693.27	4,03,32,225.72	28,70,31,633.31	12,13,69,695.28
4	01-12-2022	28,70,31,633.31	4,13,87,918.99	-	4,13,87,918.99	12,03,490.33	4,01,84,428.66	28,58,28,142.98	16,15,54,123.95
5	01-12-2023	28,58,28,142.98	4,13,87,918.99	-	4,13,87,918.99	13,71,978.97	4,00,15,940.02	28,44,56,164.01	20,15,70,063.97
6	01-12-2024	28,44,56,164.01	4,13,87,918.99	-	4,13,87,918.99	15,64,056.03	3,98,23,862.96	28,28,92,107.98	24,13,93,926.93
7	01-12-2025	28,28,92,107.98	4,13,87,918.99	-	4,13,87,918.99	17,83,023.87	3,96,04,895.12	28,11,09,084.11	28,09,98,822.04
8	01-12-2026	28,11,09,084.11	4,13,87,918.99	-	4,13,87,918.99	20,32,647.22	3,93,55,271.77	27,90,76,436.89	32,03,54,093.82
9	01-12-2027	27,90,76,436.89	4,13,87,918.99	-	4,13,87,918.99	23,17,217.83	3,90,70,701.16	27,67,59,219.06	35,94,24,794.98
10	01-12-2028	27,67,59,219.06	4,13,87,918.99	-	4,13,87,918.99	26,41,628.32	3,87,46,290.67	27,41,17,590.74	39,81,71,085.65
11	01-12-2029	27,41,17,590.74	4,13,87,918.99	-	4,13,87,918.99	30,11,456.29	3,83,76,462.70	27,11,06,134.45	43,65,47,548.36
12	01-12-2030	27,11,06,134.45	4,13,87,918.99	-	4,13,87,918.99	34,33,060.17	3,79,54,858.82	26,76,73,074.28	47,45,02,407.18
13	01-12-2031	26,76,73,074.28	4,13,87,918.99	-	4,13,87,918.99	39,13,688.59	3,74,74,230.40	26,37,59,385.69	51,19,76,637.58
14	01-12-2032	26,37,59,385.69	4,13,87,918.99	-	4,13,87,918.99	44,61,604.99	3,69,26,314.00	25,92,97,780.70	54,89,02,951.57
15	01-12-2033	25,92,97,780.70	4,13,87,918.99	-	4,13,87,918.99	50,86,229.69	3,63,01,689.30	25,42,11,551.00	58,52,04,640.87
16	01-12-2034	25,42,11,551.00	4,13,87,918.99	-	4,13,87,918.99	57,98,301.85	3,55,89,617.14	24,84,13,249.15	62,07,94,258.01
17	01-12-2035	24,84,13,249.15	4,13,87,918.99	-	4,13,87,918.99	66,10,064.11	3,47,77,854.88	24,18,03,185.04	65,55,72,112.89
18	01-12-2036	24,18,03,185.04	4,13,87,918.99	-	4,13,87,918.99	75,35,473.09	3,38,52,445.91	23,42,67,711.96	68,94,24,558.80
19	01-12-2037	23,42,67,711.96	4,13,87,918.99	-	4,13,87,918.99	85,90,439.32	3,27,97,479.67	22,56,77,272.64	72,22,22,038.47
20	01-12-2038	22,56,77,272.64	4,13,87,918.99	-	4,13,87,918.99	97,93,100.82	3,15,94,818.17	21,58,84,171.82	75,38,16,856.64
21	01-12-2039	21,58,84,171.82	4,13,87,918.99	-	4,13,87,918.99	1,11,64,134.94	3,02,23,784.05	20,47,20,036.88	78,40,40,640.70
22	01-12-2040	20,47,20,036.88	4,13,87,918.99	-	4,13,87,918.99	1,27,27,113.83	2,86,60,805.16	19,19,92,923.05	81,27,01,445.86
23	01-12-2041	19,19,92,923.05	4,13,87,918.99	-	4,13,87,918.99	1,45,08,909.76	2,68,79,009.23	17,74,84,013.29	83,95,80,455.09
24	01-12-2042	17,74,84,013.29	4,13,87,918.99	-	4,13,87,918.99	1,65,40,157.13	2,48,47,761.86	16,09,43,856.16	86,44,28,216.95
25	01-12-2043	16,09,43,856.16	4,13,87,918.99	-	4,13,87,918.99	1,88,55,779.13	2,25,32,139.86	14,20,88,077.03	88,69,60,356.81
26	01-12-2044	14,20,88,077.03	4,13,87,918.99	-	4,13,87,918.99	2,14,95,588.21	1,98,92,330.78	12,05,92,488.82	90,68,52,687.60
27	01-12-2045	12,05,92,488.82	4,13,87,918.99	-	4,13,87,918.99	2,45,04,970.56	1,68,82,948.44	9,60,87,518.27	92,37,35,636.03
28	01-12-2046	9,60,87,518.27	4,13,87,918.99	-	4,13,87,918.99	2,79,35,666.43	1,34,52,252.56	6,81,51,851.83	93,71,87,888.59
29	01-12-2047	6,81,51,851.83	4,13,87,918.99	-	4,13,87,918.99	3,18,46,659.73	95,41,259.26	3,63,05,192.10	94,67,29,147.84
30	01-12-2048	3,63,05,192.10	4,13,87,918.99	-	3,63,05,192.10	3,12,22,465.20	50,82,726.89	0.00	95,18,11,874.74

FINANCIAL FEASIBILITY CALCULATIONS

HOSPITALITY FEASIBILITY- WORST Case

S.NO.	Description of item	Unit	Quantity	Remarks
A	**AREA CALCULATIONS**			
1	Plot Area	Sq. mt.	42937.14	
2	FSI		2.40	
3	RG/ Open Space (15% of Plot Area)	Sq. mt.	6440.57	
4	Amenities (10% of Plot Area)	Sq. mt.	4293.71	
5	Permissible Built up Area	Sq. mt.	77286.85	
C	**AREA CALCULATIONS FOR HOSPITALITY**			
1	Built up Area for Hotel	Sq. mt.	21640.32	28% of Total Project (60% seating & 30% kitchen)
2	Built up Area for Rooms	Sq. mt.	19321.71	25% of Total Project
3	Built up Area for Banquet	Sq. mt.	5410.08	7% of Total Project
4	Built up Area for Conference	Sq. mt.	3864.34	5% of Total Project
5	Built up Area for Dormitary	Sq. mt.	7728.69	10% of Total Project
6	Built up Area for Admin	Sq. mt.	7728.69	10% of Total Project
7	Built up Area for Café	Sq. mt.	11593.03	15% of Total Project
B	**CASH OUT FLOW**			
	HARD COST			
1	Construction cost per sq.ft	Rs.	₹ 7,500.00	According to CBRE Report 7500/-
2	Construction cost of Hotel	Rs.	₹ 16,23,02,389.20	
3	Construction cost of Rooms	Rs.	₹ 14,49,12,847.50	
4	Construction cost of Banquet	Rs.	₹ 4,05,75,597.30	
5	Construction cost of Conference	Rs.	₹ 2,89,82,569.50	
6	Construction cost of Dormitary	Rs.	₹ 5,79,65,139.00	
7	Construction cost of Admin	Rs.	₹ 5,79,65,139.00	
8	Construction cost of Café	Rs.	₹ 8,69,47,708.50	
9	**Construction cost of all Building**	**Rs.**	**₹ 57,96,51,390.00**	
8	**Equity - 80%**	**Rs.**	**₹ 46,37,21,112.00**	
9	**Debt - 20%**	**Rs.**	**₹ 11,59,30,278.00**	**(Loan Amt.)**
10	**Interest Amt for 30 Year**	**Rs.**	**₹ 34,96,13,261.18**	**(Interest Amt.)**
	LAND COST			
9	Ready Recknar cost of Land	Rs./Sq.mt	₹ 77,900.00	
10	Actual Land Cost	Rs./Sq.mt	₹ 93,480.00	20% on Ready Recknar Land Cost
11	**Total Land Cost**	**Rs.**	**₹ -**	
	SOFT COST			
12	TDR & Additional Premium FSI	Rs.	₹ 2,80,96,34,693.04	
13	5% Miscellenous Amount	Rs.	₹ 2,89,82,569.50	
14	6% Stamp duty	Rs.	₹ 3,47,79,083.40	
15	2% Brokerage	Rs.	₹ -	
16	Approvals of Project	Rs./Sq.mt	₹ 1,25,59,113.45	Rs.250/- on Total Saleable Area
17	**Total Cost Construction**	**Rs.**	**₹ 4,39,48,71,500.57**	
	EXPENSES			
1	Room Maintenance	Nos.	5%	
2	Administrative & General	Nos.	3%	
3	Marketing	Nos.	1%	
4	Property operations & Maintenance	Nos.	5%	
5	License Fees	Nos.	2%	
6	Energy	Nos.	8%	
7	Management Fee	Nos.	7%	
	FIXED EXPENSES			
1	Property Tax	Nos.	2%	
2	Insurance	Nos.	1%	
3	Incentive Fees	Nos.	1%	
4	Reserve for Replacement	Nos.	2%	
5	Tax	Nos.	12%	
6	**NPV of Total Cash Out Flow**	**Rs.**	**₹ 6,07,40,97,689.69**	
C	**CASH IN FLOW**			
1	Revenue generated by Hotel	Rs.	₹ 2,200.00	Capacity of 2000 ppl
2	Revenue generated by Rooms	Rs.	₹ 8,000.00	Considering 350 rooms
3	Revenue generated by Banquet	Rs.	₹ 3,00,000.00	Considering 2 Banquet
4	Revenue generated by Conference & Seminar Halls	Rs.	₹ 1,500.00	1800/- per hour (4hrs for 40 days in yr)
5	Revenue generated by Dormitary	Rs.	₹ -	
6	Revenue generated by Admin	Rs.	₹ -	
7	Revenue generated by Café	Rs.	₹ 800.00	Capacity of 600 ppl (Rs.1000/person for 280 days)

8	NPV of Total Cash In Flow	Rs.	₹ 14,51,50,80,251.09	
D	FINANCIAL CALCULATIONS			
1	Duration	Yrs.	5	Construction Period
2	Tax	Rs.	₹ 22,12,87,16,442	33% of Net profit every year
3	PAT	Rs.	₹ 17,73,38,44,941.63	
4	NPV of profit	Rs.	₹ 1,51,28,82,000.00	
5	IRR		19%	
6	BCR (Benefit Cost Ratio)		2.389668555	
7	Payback Period	Yr.	10.00	

Year		Cash Inflow %	Cash inflow		Cash Outflow	NCF (PBT)	CUMULATIVE (PBT)
	Total		₹ -		₹ 4,39,48,71,501		
2018	Initial Stage	0%	0	0%		₹ -	0
2019		0%		20%	₹ 87,89,74,300.11	₹ -87,89,74,300.11	-878974300.1
2020		0%		20%	₹ 87,89,74,300.11	₹ -87,89,74,300.11	-1757948600
2021		0%		20%	₹ 87,89,74,300.11	₹ -87,89,74,300.11	-2636922900
2022		0%		20%	₹ 87,89,74,300.11	₹ -87,89,74,300.11	-3515897200
2023		0%		20%	₹ 87,89,74,300.11	₹ -87,89,74,300.11	-4394871501
2024		70%	₹ 1,51,28,82,000.00		₹ 96,71,80,730.13	₹ 54,57,01,269.87	-3849170231
2025	Excalation 10%	80%	₹ 1,81,54,58,400.00		₹ 1,06,38,98,803.14	₹ 75,15,59,596.86	-3097610634
2026	Excalation 10%	80%	₹ 1,99,70,04,240.00		₹ 1,17,02,88,683.45	₹ 82,67,15,556.55	-2270895077
2027	Excalation 10%	80%	₹ 2,19,67,04,664.00		₹ 1,28,73,17,551.80	₹ 90,93,87,112.20	-1361507965
2028	Excalation 10%	80%	₹ 2,41,63,75,130.40		₹ 1,41,60,49,306.98	₹ 1,00,03,25,823.42	-361182141.7
2029	Excalation 10%	80%	₹ 2,65,80,12,643.44		₹ 1,55,76,54,237.67	₹ 1,10,03,58,405.77	739176264.1
2030	Excalation 10%	80%	₹ 2,92,38,13,907.78		₹ 1,71,34,19,661.44	₹ 1,21,03,94,246.34	1949570510
2031	Excalation 10%	80%	₹ 3,21,61,95,298.56		₹ 1,88,47,61,627.59	₹ 1,33,14,33,670.98	3281004181
2032	Excalation 10%	80%	₹ 3,53,78,14,828.42		₹ 2,07,32,37,790.35	₹ 1,46,45,77,038.07	4745581219
2033	Excalation 10%	80%	₹ 3,89,15,96,311.26		₹ 2,28,05,61,569.38	₹ 1,61,10,34,741.88	6356615961
2034	Excalation 10%	80%	₹ 4,28,07,55,942.39		₹ 2,50,86,17,726.32	₹ 1,77,21,38,216.07	8128754177
2035	Excalation 10%	80%	₹ 4,70,88,31,536.63		₹ 2,75,94,79,498.95	₹ 1,94,93,52,037.68	10078106215
2036	Excalation 10%	80%	₹ 5,17,97,14,690.29		₹ 3,03,54,27,448.84	₹ 2,14,42,87,241.44	12222393457
2037	Excalation 10%	80%	₹ 5,69,76,86,159.32		₹ 3,33,89,70,193.73	₹ 2,35,87,15,965.59	14581109422
2038	Excalation 10%	80%	₹ 6,26,74,54,775.25		₹ 3,67,28,67,213.10	₹ 2,59,45,87,562.15	17175696984
2039	Excalation 10%	80%	₹ 6,89,42,00,252.77		₹ 4,04,01,53,934.41	₹ 2,85,40,46,318.36	20029743303
2040	Excalation 10%	80%	₹ 7,58,36,20,278.05		₹ 4,44,41,69,327.85	₹ 3,13,94,50,950.20	23169194253
2041	Excalation 10%	80%	₹ 8,34,19,82,305.86		₹ 4,88,85,86,260.64	₹ 3,45,33,96,045.22	26622590298
2042	Excalation 10%	80%	₹ 9,17,61,80,536.44		₹ 5,37,74,44,886.70	₹ 3,79,87,35,649.74	30421325948
2043	Excalation 10%	80%	₹ 10,09,37,98,590.08		₹ 5,91,51,89,375.37	₹ 4,17,86,09,214.71	34599935163
2044	Excalation 10%	80%	₹ 11,10,31,78,449.09		₹ 6,50,67,08,312.91	₹ 4,59,64,70,136.18	39196405299
2045	Excalation 10%	80%	₹ 12,21,34,96,294.00		₹ 7,15,73,79,144.20	₹ 5,05,61,17,149.80	44252522449
2046	Excalation 10%	80%	₹ 13,43,48,45,923.40		₹ 7,87,31,17,058.62	₹ 5,56,17,28,864.78	49814251313
2047	Excalation 10%	80%	₹ 14,77,83,30,515.74		₹ 8,66,04,28,764.48	₹ 6,11,79,01,751.26	55932153065
2048	Excalation 10%	80%	₹ 16,25,61,63,567.32		₹ 9,52,64,71,640.93	₹ 6,72,96,91,926.39	62661844991

Mortgage Loan Payments

Enter Values	
Loan Amount	₹ 46,37,21,112.00
Annual Interest Rate	14.00 %
Loan Period in Years	30
Number of Payments Per Year	1
Start Date of Loan	01-12-2018
Optional Extra Payments	₹ -

Loan Summary	
Scheduled Payment	₹ 6,62,20,670.39
Scheduled Number of Payments	30
Actual Number of Payments	30
Total Early Payments	₹ -
Total Interest	₹ 1,52,28,98,999.58

Annuity Formula

Lender Name:

Pmt No.	Payment Date	Beginning Balance	Scheduled Payment	Extra Payment	Total Payment	Principal	Interest	Ending Balance	Cumulative Interest
1	01-12-2019	₹ 46,37,21,112.00	₹ 6,62,20,670.39	₹ -	₹ 6,62,20,670.39	₹ 12,99,714.71	₹ 6,49,20,955.68	₹ 46,24,21,397.29	₹ 6,49,20,955.68
2	01-12-2020	46,24,21,397.29	6,62,20,670.39	-	6,62,20,670.39	14,81,674.76	6,47,38,995.62	46,09,39,722.53	12,96,59,951.30
3	01-12-2021	46,09,39,722.53	6,62,20,670.39	-	6,62,20,670.39	16,89,109.23	6,45,31,561.15	45,92,50,613.30	19,41,91,512.46
4	01-12-2022	45,92,50,613.30	6,62,20,670.39	-	6,62,20,670.39	19,25,584.52	6,42,95,085.86	45,73,25,028.77	25,84,86,598.32
5	01-12-2023	45,73,25,028.77	6,62,20,670.39	-	6,62,20,670.39	21,95,166.36	6,40,25,504.03	45,51,29,862.41	32,25,12,102.34
6	01-12-2024	45,51,29,862.41	6,62,20,670.39	-	6,62,20,670.39	25,02,489.65	6,37,18,180.74	45,26,27,372.77	38,62,30,283.08
7	01-12-2025	45,26,27,372.77	6,62,20,670.39	-	6,62,20,670.39	28,52,838.20	6,33,67,832.19	44,97,74,534.57	44,95,98,115.27
8	01-12-2026	44,97,74,534.57	6,62,20,670.39	-	6,62,20,670.39	32,52,235.55	6,29,68,434.84	44,65,22,299.02	51,25,66,550.11
9	01-12-2027	44,65,22,299.02	6,62,20,670.39	-	6,62,20,670.39	37,07,548.52	6,25,13,121.86	44,28,14,750.50	57,50,79,671.97
10	01-12-2028	44,28,14,750.50	6,62,20,670.39	-	6,62,20,670.39	42,26,605.32	6,19,94,065.07	43,85,88,145.18	63,70,73,737.04
11	01-12-2029	43,85,88,145.18	6,62,20,670.39	-	6,62,20,670.39	48,18,330.06	6,14,02,340.33	43,37,69,815.12	69,84,76,077.37
12	01-12-2030	43,37,69,815.12	6,62,20,670.39	-	6,62,20,670.39	54,92,896.27	6,07,27,774.12	42,82,76,918.85	75,92,03,851.49
13	01-12-2031	42,82,76,918.85	6,62,20,670.39	-	6,62,20,670.39	62,61,901.75	5,99,58,768.64	42,20,15,017.11	81,91,62,620.12
14	01-12-2032	42,20,15,017.11	6,62,20,670.39	-	6,62,20,670.39	71,38,567.99	5,90,82,102.39	41,48,76,449.11	87,82,44,722.52
15	01-12-2033	41,48,76,449.11	6,62,20,670.39	-	6,62,20,670.39	81,37,967.51	5,80,82,702.88	40,67,38,481.60	93,63,27,425.40
16	01-12-2034	40,67,38,481.60	6,62,20,670.39	-	6,62,20,670.39	92,77,282.96	5,69,43,387.42	39,74,61,198.64	99,32,70,812.82
17	01-12-2035	39,74,61,198.64	6,62,20,670.39	-	6,62,20,670.39	1,05,76,102.58	5,56,44,567.81	38,68,85,096.07	1,04,89,15,380.63
18	01-12-2036	38,68,85,096.07	6,62,20,670.39	-	6,62,20,670.39	1,20,56,756.94	5,41,63,913.45	37,48,28,339.13	1,10,30,79,294.08
19	01-12-2037	37,48,28,339.13	6,62,20,670.39	-	6,62,20,670.39	1,37,44,702.91	5,24,75,967.48	36,10,83,636.22	1,15,55,55,261.56
20	01-12-2038	36,10,83,636.22	6,62,20,670.39	-	6,62,20,670.39	1,56,68,961.31	5,05,51,709.07	34,54,14,674.91	1,20,61,06,970.63
21	01-12-2039	34,54,14,674.91	6,62,20,670.39	-	6,62,20,670.39	1,78,62,615.90	4,83,58,054.49	32,75,52,059.01	1,25,44,65,025.12
22	01-12-2040	32,75,52,059.01	6,62,20,670.39	-	6,62,20,670.39	2,03,63,382.12	4,58,57,288.26	30,71,88,676.89	1,30,03,22,313.38
23	01-12-2041	30,71,88,676.89	6,62,20,670.39	-	6,62,20,670.39	2,32,14,255.62	4,30,06,414.76	28,39,74,421.26	1,34,33,28,728.14
24	01-12-2042	28,39,74,421.26	6,62,20,670.39	-	6,62,20,670.39	2,64,64,251.41	3,97,56,418.98	25,75,10,169.85	1,38,30,85,147.12
25	01-12-2043	25,75,10,169.85	6,62,20,670.39	-	6,62,20,670.39	3,01,69,246.61	3,60,51,423.78	22,73,40,923.25	1,41,91,36,570.90
26	01-12-2044	22,73,40,923.25	6,62,20,670.39	-	6,62,20,670.39	3,43,92,941.13	3,18,27,729.25	19,29,47,982.12	1,45,09,64,300.15
27	01-12-2045	19,29,47,982.12	6,62,20,670.39	-	6,62,20,670.39	3,92,07,952.89	2,70,12,717.50	15,37,40,029.23	1,47,79,77,017.65
28	01-12-2046	15,37,40,029.23	6,62,20,670.39	-	6,62,20,670.39	4,46,97,066.29	2,15,23,604.09	10,90,42,962.93	1,49,95,00,621.74
29	01-12-2047	10,90,42,962.93	6,62,20,670.39	-	6,62,20,670.39	5,09,54,655.58	1,52,66,014.81	5,80,88,307.36	1,51,47,66,636.55
30	01-12-2048	5,80,88,307.36	6,62,20,670.39	-	5,80,88,307.36	4,99,55,944.33	81,32,363.03	0.00	1,52,28,98,999.58

FINANCIAL FEASIBILITY CALCULATIONS

HOSPITALITY FEASIBILITY- Best Case

S.NO.	Description of item	Unit	Quantity	Remarks
A	**AREA CALCULATIONS**			
1	Plot Area	Sq. mt.	42937.14	
2	FSI		2.40	
3	RG/ Open Space (15% of Plot Area)	Sq. mt.	6440.57	
4	Amenities (10% of Plot Area)	Sq. mt.	4293.71	
5	Permissible Built up Area	Sq. mt.	77286.85	
C	**AREA CALCULATIONS FOR HOSPITALITY**			
1	Built up Area for Hotel	Sq. mt.	21640.32	28% of Total Project (60% seating & 30% kitchen)
2	Built up Area for Rooms	Sq. mt.	19321.71	25% of Total Project
3	Built up Area for Banquet	Sq. mt.	5410.08	7% of Total Project
4	Built up Area for Conference	Sq. mt.	3864.34	5% of Total Project
5	Built up Area for Dormitary	Sq. mt.	7728.69	10% of Total Project
6	Built up Area for Admin	Sq. mt.	7728.69	10% of Total Project
7	Built up Area for Café	Sq. mt.	11593.03	15% of Total Project
B	**CASH OUT FLOW**			
	HARD COST			
1	Construction cost per sq.ft	Rs.	₹ 7,500.00	According to CBRE Report 7500/-
2	Construction cost of Hotel	Rs.	₹ 16,23,02,389.20	
3	Construction cost of Rooms	Rs.	₹ 14,49,12,847.50	
4	Construction cost of Banquet	Rs.	₹ 4,05,75,597.30	
5	Construction cost of Conference	Rs.	₹ 2,89,82,569.50	
6	Construction cost of Dormitary	Rs.	₹ 5,79,65,139.00	
7	Construction cost of Admin	Rs.	₹ 5,79,65,139.00	
8	Construction cost of Café	Rs.	₹ 8,69,47,708.50	
9	**Construction cost of all Building**	**Rs.**	**₹ 57,96,51,390.00**	
8	**Equity - 80%**	**Rs.**	**₹ 46,37,21,112.00**	
9	**Debt - 20%**	**Rs.**	**₹ 11,59,30,278.00**	**(Loan Amt.)**
10	**Interest Amt for 30 Year**	**Rs.**	**₹ 34,96,13,261.18**	**(Interest Amt.)**
	LAND COST			
9	Ready Recknar cost of Land	Rs./Sq.mt	₹ 77,900.00	
10	Actual Land Cost	Rs./Sq.mt	₹ 93,480.00	20% on Ready Recknar Land Cost
11	**Total Land Cost**	**Rs.**	**₹ -**	
	SOFT COST			
12	TDR & Additional Premium FSI	Rs.	₹ 2,80,96,34,693.04	
13	5% Miscellenous Amount	Rs.	₹ 2,89,82,569.50	
14	6% Stamp duty	Rs.	₹ 3,47,79,083.40	
15	2% Brokerage	Rs.	₹ -	
16	Approvals of Project	Rs./Sq.mt	₹ 1,25,59,113.45	Rs.250/- on Total Saleable Area
17	**Total Cost Construction**	**Rs.**	**₹ 4,39,48,71,500.57**	
	EXPENSES			
1	Room Maintenance	Nos.	5%	
2	Administrative & General	Nos.	3%	
3	Marketing	Nos.	1%	
4	Property operations & Maintenance	Nos.	5%	
5	License Fees	Nos.	2%	
6	Energy	Nos.	8%	
7	Management Fee	Nos.	7%	
	FIXED EXPENSES			
1	Property Tax	Nos.	2%	
2	Insurance	Nos.	1%	
3	Incentive Fees	Nos.	1%	
4	Reserve for Replacement	Nos.	2%	
5	Tax	Nos.	12%	
6	**NPV of Total Cash Out Flow**	**Rs.**	**₹ 6,07,47,65,272.18**	
C	**CASH IN FLOW**			
1	Revenue generated by Hotel	Rs.	₹ 3,000.00	Capacity of 2000 ppl
2	Revenue generated by Rooms	Rs.	₹ 12,000.00	Considering 350 rooms
3	Revenue generated by Banquet	Rs.	₹ 7,00,000.00	Considering 2 Banquet
4	Revenue generated by Conference & Seminar Halls	Rs.	₹ 2,000.00	1800/- per hour (4hrs for 40 days in yr)
5	Revenue generated by Dormitary	Rs.	₹ -	
6	Revenue generated by Admin	Rs.	₹ -	
7	Revenue generated by Café	Rs.	₹ 1,200.00	Capacity of 600 ppl (Rs.1000/person for 280 days)

8	**NPV of Total Cash In Flow**	**Rs.**	**₹ 20,70,47,04,942.71**	
D	**FINANCIAL CALCULATIONS**			
1	Duration	Yrs.	5	Construction Period
2	Tax	Rs.	₹ 44,94,42,11,906	33% of Net profit every year
3	PAT	Rs.	₹ 40,54,93,40,405.47	
4	NPV of profit	Rs.	₹ 2,15,80,16,000.00	
5	IRR		27%	
6	BCR (Benefit Cost Ratio)		3.408313575	
7	Payback Period	Yr.	10.00	

Year		Cash Inflow %	Cash inflow		Cash Outflow	NCF (PBT)	CUMULATIVE (PBT)
	Total		₹ -		₹ 4,39,48,71,501		
2018	Initial Stage	0%	0	0%		₹ -	0
2019		0%		20%	₹ 87,89,74,300.11	₹ -87,89,74,300.11	-878974300.1
2020		0%		20%	₹ 87,89,74,300.11	₹ -87,89,74,300.11	-1757948600
2021		0%		20%	₹ 87,89,74,300.11	₹ -87,89,74,300.11	-2636922900
2022		0%		20%	₹ 87,89,74,300.11	₹ -87,89,74,300.11	-3515897200
2023		0%		20%	₹ 87,89,74,300.11	₹ -87,89,74,300.11	-4394871501
2024		70%	₹ 2,15,80,16,000.00		₹ 96,73,68,130.13	₹ 1,19,06,47,869.87	-3204223631
2025	Excalation 10%	80%	₹ 2,58,96,19,200.00		₹ 1,06,41,04,943.14	₹ 1,52,55,14,256.86	-1678709374
2026	Excalation 10%	80%	₹ 2,84,85,81,120.00		₹ 1,17,05,15,437.45	₹ 1,67,80,65,682.55	-643691.2878
2027	Excalation 10%	80%	₹ 3,13,34,39,232.00		₹ 1,28,75,66,981.20	₹ 1,84,58,72,250.80	1845228560
2028	Excalation 10%	80%	₹ 3,44,67,83,155.20		₹ 1,41,63,23,679.32	₹ 2,03,04,59,475.88	3875688035
2029	Excalation 10%	80%	₹ 3,79,14,61,470.72		₹ 1,55,79,56,047.25	₹ 2,23,35,05,423.47	6109193459
2030	Excalation 10%	80%	₹ 4,17,06,07,617.79		₹ 1,71,37,51,651.97	₹ 2,45,68,55,965.82	8566049425
2031	Excalation 10%	80%	₹ 4,58,76,68,379.57		₹ 1,88,51,26,817.17	₹ 2,70,25,41,562.40	11268590987
2032	Excalation 10%	80%	₹ 5,04,64,35,217.53		₹ 2,07,36,39,498.89	₹ 2,97,27,95,718.64	14241386706
2033	Excalation 10%	80%	₹ 5,55,10,78,739.28		₹ 2,28,10,03,448.78	₹ 3,27,00,75,290.50	17511461996
2034	Excalation 10%	80%	₹ 6,10,61,86,613.21		₹ 2,50,91,03,793.65	₹ 3,59,70,82,819.55	21108544816
2035	Excalation 10%	80%	₹ 6,71,68,05,274.53		₹ 2,76,00,14,173.02	₹ 3,95,67,91,101.51	25065335917
2036	Excalation 10%	80%	₹ 7,38,84,85,801.98		₹ 3,03,60,15,590.32	₹ 4,35,24,70,211.66	29417806129
2037	Excalation 10%	80%	₹ 8,12,73,34,382.18		₹ 3,33,96,17,149.35	₹ 4,78,77,17,232.83	34205523362
2038	Excalation 10%	80%	₹ 8,94,00,67,820.40		₹ 3,67,35,78,864.29	₹ 5,26,64,88,956.11	39472012318
2039	Excalation 10%	80%	₹ 9,83,40,74,602.44		₹ 4,04,09,36,750.72	₹ 5,79,31,37,851.72	45265150170
2040	Excalation 10%	80%	₹ 10,81,74,82,062.68		₹ 4,44,50,30,425.79	₹ 6,37,24,51,636.89	51637601807
2041	Excalation 10%	80%	₹ 11,89,92,30,268.95		₹ 4,88,95,33,468.37	₹ 7,00,96,96,800.58	58647298607
2042	Excalation 10%	80%	₹ 13,08,91,53,295.85		₹ 5,37,84,86,815.21	₹ 7,71,06,66,480.64	66357965088
2043	Excalation 10%	80%	₹ 14,39,80,68,625.43		₹ 5,91,63,35,496.73	₹ 8,48,17,33,128.70	74839698216
2044	Excalation 10%	80%	₹ 15,83,78,75,487.98		₹ 6,50,79,69,046.40	₹ 9,32,99,06,441.57	84169604658
2045	Excalation 10%	80%	₹ 17,42,16,63,036.77		₹ 7,15,87,65,951.04	₹ 10,26,28,97,085.73	94432501744
2046	Excalation 10%	80%	₹ 19,16,38,29,340.45		₹ 7,87,46,42,546.14	₹ 11,28,91,86,794.31	1.05722E+11
2047	Excalation 10%	80%	₹ 21,08,02,12,274.49		₹ 8,66,21,06,800.76	₹ 12,41,81,05,473.74	1.1814E+11
2048	Excalation 10%	80%	₹ 23,18,82,33,501.94		₹ 9,52,83,17,480.83	₹ 13,65,99,16,021.11	1.318E+11

Mortgage Loan Payments

Enter Values	
Loan Amount	₹ 11,59,30,278.00
Annual Interest Rate	14.00 %
Loan Period in Years	30
Number of Payments Per Year	1
Start Date of Loan	01-12-2018
Optional Extra Payments	₹ -

Loan Summary	
Scheduled Payment	₹ 1,65,55,167.60
Scheduled Number of Payments	30
Actual Number of Payments	30
Total Early Payments	₹ -
Total Interest	₹ 38,07,24,749.90

Annuity Formula

Lender Name:

Pmt No.	Payment Date	Beginning Balance	Scheduled Payment	Extra Payment	Total Payment	Principal	Interest	Ending Balance	Cumulative Interest
1	01-12-2019	₹ 11,59,30,278.00	₹ 1,65,55,167.60	₹ -	₹ 1,65,55,167.60	₹ 3,24,928.68	₹ 1,62,30,238.92	₹ 11,56,05,349.32	₹ 1,62,30,238.92
2	01-12-2020	11,56,05,349.32	1,65,55,167.60	-	1,65,55,167.60	3,70,418.69	1,61,84,748.91	11,52,34,930.63	3,24,14,987.83
3	01-12-2021	11,52,34,930.63	1,65,55,167.60	-	1,65,55,167.60	4,22,277.31	1,61,32,890.29	11,48,12,653.32	4,85,47,878.11
4	01-12-2022	11,48,12,653.32	1,65,55,167.60	-	1,65,55,167.60	4,81,396.13	1,60,73,771.47	11,43,31,257.19	6,46,21,649.58
5	01-12-2023	11,43,31,257.19	1,65,55,167.60	-	1,65,55,167.60	5,48,791.59	1,60,06,376.01	11,37,82,465.60	8,06,28,025.59
6	01-12-2024	11,37,82,465.60	1,65,55,167.60	-	1,65,55,167.60	6,25,622.41	1,59,29,545.18	11,31,56,843.19	9,65,57,570.77
7	01-12-2025	11,31,56,843.19	1,65,55,167.60	-	1,65,55,167.60	7,13,209.55	1,58,41,958.05	11,24,43,633.64	11,23,99,528.82
8	01-12-2026	11,24,43,633.64	1,65,55,167.60	-	1,65,55,167.60	8,13,058.89	1,57,42,108.71	11,16,30,574.76	12,81,41,637.53
9	01-12-2027	11,16,30,574.76	1,65,55,167.60	-	1,65,55,167.60	9,26,887.13	1,56,28,280.47	11,07,03,687.62	14,37,69,917.99
10	01-12-2028	11,07,03,687.62	1,65,55,167.60	-	1,65,55,167.60	10,56,651.33	1,54,98,516.27	10,96,47,036.30	15,92,68,434.26
11	01-12-2029	10,96,47,036.30	1,65,55,167.60	-	1,65,55,167.60	12,04,582.52	1,53,50,585.08	10,84,42,453.78	17,46,19,019.34
12	01-12-2030	10,84,42,453.78	1,65,55,167.60	-	1,65,55,167.60	13,73,224.07	1,51,81,943.53	10,70,69,229.71	18,98,00,962.87
13	01-12-2031	10,70,69,229.71	1,65,55,167.60	-	1,65,55,167.60	15,65,475.44	1,49,89,692.16	10,55,03,754.28	20,47,90,655.03
14	01-12-2032	10,55,03,754.28	1,65,55,167.60	-	1,65,55,167.60	17,84,642.00	1,47,70,525.60	10,37,19,112.28	21,95,61,180.63
15	01-12-2033	10,37,19,112.28	1,65,55,167.60	-	1,65,55,167.60	20,34,491.88	1,45,20,675.72	10,16,84,620.40	23,40,81,856.35
16	01-12-2034	10,16,84,620.40	1,65,55,167.60	-	1,65,55,167.60	23,19,320.74	1,42,35,846.86	9,93,65,299.66	24,83,17,703.21
17	01-12-2035	9,93,65,299.66	1,65,55,167.60	-	1,65,55,167.60	26,44,025.64	1,39,11,141.95	9,67,21,274.02	26,22,28,845.16
18	01-12-2036	9,67,21,274.02	1,65,55,167.60	-	1,65,55,167.60	30,14,189.23	1,35,40,978.36	9,37,07,084.78	27,57,69,823.52
19	01-12-2037	9,37,07,084.78	1,65,55,167.60	-	1,65,55,167.60	34,36,175.73	1,31,18,991.87	9,02,70,909.06	28,88,88,815.39
20	01-12-2038	9,02,70,909.06	1,65,55,167.60	-	1,65,55,167.60	39,17,240.33	1,26,37,927.27	8,63,53,668.73	30,15,26,742.66
21	01-12-2039	8,63,53,668.73	1,65,55,167.60	-	1,65,55,167.60	44,65,653.97	1,20,89,513.62	8,18,88,014.75	31,36,16,256.28
22	01-12-2040	8,18,88,014.75	1,65,55,167.60	-	1,65,55,167.60	50,90,845.53	1,14,64,322.07	7,67,97,169.22	32,50,80,578.34
23	01-12-2041	7,67,97,169.22	1,65,55,167.60	-	1,65,55,167.60	58,03,563.91	1,07,51,603.69	7,09,93,605.32	33,58,32,182.04
24	01-12-2042	7,09,93,605.32	1,65,55,167.60	-	1,65,55,167.60	66,16,062.85	99,39,104.74	6,43,77,542.46	34,57,71,286.78
25	01-12-2043	6,43,77,542.46	1,65,55,167.60	-	1,65,55,167.60	75,42,311.65	90,12,855.94	5,68,35,230.81	35,47,84,142.72
26	01-12-2044	5,68,35,230.81	1,65,55,167.60	-	1,65,55,167.60	85,98,235.28	79,56,932.31	4,82,36,995.53	36,27,41,075.04
27	01-12-2045	4,82,36,995.53	1,65,55,167.60	-	1,65,55,167.60	98,01,988.22	67,53,179.37	3,84,35,007.31	36,94,94,254.41
28	01-12-2046	3,84,35,007.31	1,65,55,167.60	-	1,65,55,167.60	1,11,74,266.57	53,80,901.02	2,72,60,740.73	37,48,75,155.44
29	01-12-2047	2,72,60,740.73	1,65,55,167.60	-	1,65,55,167.60	1,27,38,663.89	38,16,503.70	1,45,22,076.84	37,86,91,659.14
30	01-12-2048	1,45,22,076.84	1,65,55,167.60	-	1,45,22,076.84	1,24,88,986.08	20,33,090.76	0.00	38,07,24,749.90

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Trade Area Analysis and Feasibility study of Hospitality Development in the city of Satara, India

An overview of India's Urbanization,Urban Economic Growth and UrbanEquity, HVS Feasibility Study

Proposed Alton Hotel, Alton, Illinois

HIGHEST AND BEST USE ANALYSIS IN MICRO-MARKET OF DOMBIVLI

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Abstract

Kalyan-Dombivli is a twin city within the Thane district and forms the "Peripheral Central Suburbs" of Mumbai. Dombivli is a town in Kalyan tehsil and falls under the jurisdiction of Kalyan-Dombivli Municipal Corporation (KDMC). Highest and Best Use Analysis was conducted for the micro-market Dombivli using six step market analysis process. This study focuses on being able to understand the real estate market dynamics in the given context of the chosen micro-market. This allows one to make an informed decision about the most profitable use the site can be put to and its competitive position among the various market participants. The site chosen is hypothetical in nature. The study makes use of primary and secondary data for the various rationales presented in it. It was observed that there is a dearth of affordable properties, Grade A commercial spaces, organized retail spaces (malls) in the city despite an oversupply of residential housing. The inferences and recommendations are based on several scientific methodologies of urban economics and market study. The major conclusion drawn among them all was that, mixed use of the property (Commercial/ Residential mix and Commercial/ Retail mix) would bring in the highest returns.

Keywords: *Micro-market, Feasibility, Scenario analysis, Catchment, Product Mix*

Background

Among the top eight cities in India, Mumbai, spread over an area of 4354.50 sq. km, has always been a major contender for mainstay of economic development in the country and would continue holding its position. MMR (Mumbai-Metropolitan Region), represents one of the most diversified and vibrant local economies due to presence of ports, manufacturing industries (traditional and modern), government and financial institutions, trade and services industry (VBHC-Hillview- JLL Report). Coupled with sheer shortage of developable land Mumbai becomes one of the most valued real estate markets. It has one of the largest urban population and a recorded density of 37,000 persons per sq. km. It has witnessed a 197% population growth during the past 4 decades which would increase on considering the unregistered slum population (HDFC Realty, Affordable Housing Climate in Mumbai, Report 2018).

As per the Census of 2011, MMR accounts for 25% of the total population of Maharashtra which is 2% of country's population. The spatial dynamics of MMR have been changing rapidly over the past few decades, with Greater Mumbai including suburbs observing population decrease from 60% in 2001 to 45% in 2011. On the other hand, population share of extended suburbs and regions in fringe areas have significantly increased, which clearly ascertains the direction of city growth (VBHC-Hillview- JLL Report).

As defined by Stephen F. Fanning, highest and best analysis is conducted to identify the most profitable, sustainable and competitive use to which a subject property can be put under the various market influences. Marketability analysis is the basis for determining the highest and best use of a property. The analysis focuses on investigation of local economic activity and on factors individually influencing supply and demand of a property or in a specific market area. It also shows the interaction of supply and demand (Fanning, 2005). In this research, we have tried to extend these concept/s to the micro-market of Dombivli, which forms part of Kalyan-Dombivli twin city in Thane district and is located at the fringe of "Extended or Peripheral Central Suburbs" of Mumbai *(Figure 1 MMR Division)*

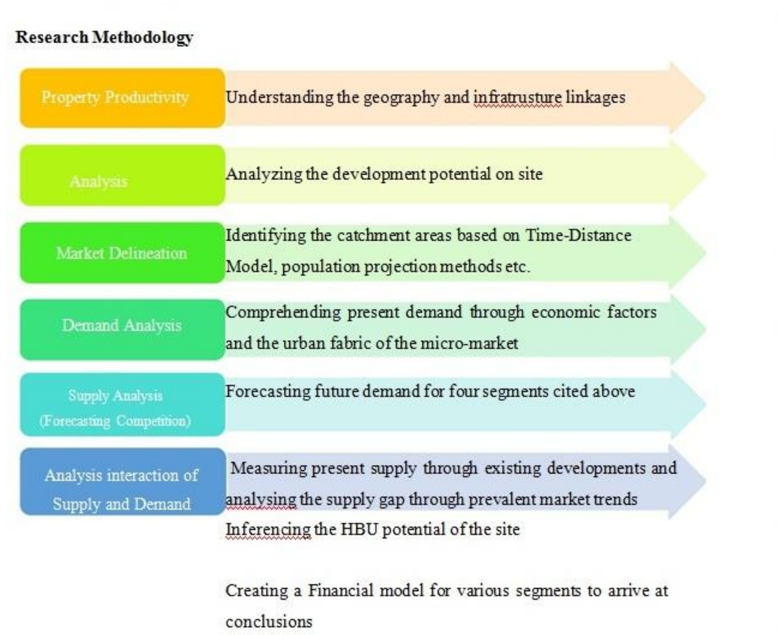
Introduction

Dombivli is spread across an area of 49 sq. km and is composed of Ulhas river floodplains in the north with relatively flat land in the rest of the Dombivli. It is divided in to East and West with the central railway forming this division (KDMC, 2010). It is governed under the jurisdiction of Kalyan-Dombivli Municipal Corporation (KDMC) and the city level developments are additionally regulated by MMRDA (Mumbai Metropolitan Regional Development Authority), MHADA (Maharashtra Housing and Area Development Authority) and MIDC (Maharashtra Industrial Development Corporation) (Dijk, Tara Van, 2013) *(Figure4 MMR Neighbouring Tehsils of Dombivli).*

The later years of 2000's (*Figure 5 Historic Timeline from 1984 to 2018*) have seen the growth of new residential and commercial developments along the highway and near suburban railway stations. Infrastructural growth in the form of rail and road network in the region has eased connectivity with business centres such as BKC, Thane, Taloja Industrial area, Reliance Corporate Park and Navi Mumbai. Moreover, land use in the city has changed over time, with a strong tendency towards mixed land use and high levels of population density in the city centres. This aided in choosing a 10-acre land parcel for study in the "Dawdi" region of Dombivli along the Kalyan Shilphata highway and led us to the following research objectives:

Research Objectives

- Understanding the developments and trends in the micro-market in the following segments: Residential, Commercial, Retail & Hospitality
- Analyzing demand-supply gap through scientific methods
- Analyzing the subsequent financial feasibility of the potential uses and creating a financial model for the same



Analysis

Market delineation done using the Business Analyst tool of Arc GIS and Time – Distance model was used to identify the primary and secondary catchment for study of HBU. Demand - Supply analysis was done based on catchment data. Analysis of each asset class is summarized below:

Residential

Extensive market survey was used to assess the fundamental demand drivers as:

a. Population growth (Figure 6 Population Projection)
b. Affordability, at average price of Rs. 9,000/ sq. ft. and falling in the price range of 40 – 70 lacs (Figure 7 Percentage Segmentation in Dombivli, Figure 8 Competition Analysis of Dombivli) as per socio-economic classification done using primary and secondary survey (Figure 9 Socio Economic Group Classification).
c. The provision of high-end amenities at affordable rates has also been a crowd-puller to this peripheral suburb.
d. Upcoming infrastructure development such as metro link and flyover further accentuate the demand for residential housing in the area *(Figure 10 Area wise Rate Contour Figure11 Area wise Rental Contour).*

Demand estimation for residential sector is primarily driven by population growth. According to the Census 2011 data, the average household size for Dombivli has been 4 (Figure 12Dwelling Preference according to Census 2011), (99ACRES, 2018) which is validated through primary survey. Analysis of this data leads to the most preferred dwelling type as 1 & 2 BHK apartments, for both selling and renting purposes (common floor, 2014) (CENSUS, 2011), thereby making it the most preferred product mix for maximum returns.

Supply assessment was done through the prevalent market trends (Figure 13 Residential Price Trends), where the key existing and upcoming projects in the micro-market have been noted (Figure 8 Competition Analysis of Dombivli). The demand supply gap proves that there is demand for affordable residential segment with high end.

Hospitality

According to report published by IBEF (India Brand Equity Foundation), the key drivers for the hospitality industry to flourish in any place are as follows:

a. A robust domestic tourism industry.
b. Global nature of businesses boosting business travel.
c. Tax incentives for hotels and higher FSI.

Demand for luxury and premium hotels which come in the 5-star and 3-star category is next to non-existent in the micro-market, due to lack of required consumer profile with the required spending capacity. As per the socio-economic study done through primary survey (which points to MIG and LIG being the dominant user groups in the area) and the simulation run on ArcGIS Business Analyst which generated the ESRI financial report, it is logical to conclude that the spending capacity per capita per annum does not exceed 3 lacs. Therefore, there isn't the required user inflow for such grand hotels. Absence of any tourist attractions, sustained business economy, to attract potential business or work-class to frequently visit or stay in a hotel and of Grade A office spaces in the area cancels out any customer flow from business-trips/ meetings/ conferences. As per primary survey of hotels and lodging enterprises, it is seen that they have an occupancy of less than 50% year-round while being fully booked during wedding/ festive seasons or occasionally by people visiting MIDC. This shows that there is lack of demand for hotel development of premium segment in the micro-market.

But demand of hotels/ lodging places coupled with banquet facilities, indoor halls, outside seating arrangements, children play area, ample parking spaces, good variety of food at affordable rates is high. Despite there being individual banquet halls and family restaurants, only few such as Nandi hotel and Hotel Suhyog are flourishing in the trade as they provide all the services under one roof.

Present supply assessment shows existence of hotels, boarding and lodging homes, restaurants and bars in Dombivli. The occupancy and capacity of these properties (Figure 15 Sitting capacity of Restaurants, Figure 14 Occupancy and Rooms in Hotels) shows the usage characteristics.

This shows that there is a demand-supply gap for good mixed-use hotels.

Retail

Indian retail industry is among the fastest growing markets in the world and fifth largest global destination in retail space. It is projected to grow from US$ 672 billion from 2017 to US$ 1.1 trillion in 2020 (IBEF, 2018). The per capita expenditure per year is maximum on Food and Beverages followed by clothing (ESRI, Arc GIS Business Analyst, 2018) (IBEF, 2018). It is forecasted that the penetration of modern retail in the top six retail markets of the country will also see a rise, from the current 19% to 24% in the next three years. This is due to the fact that omni-channel way of retailing is fast catching speed (knight frank, 2017). MMR and Hyderabad have the lowest penetration of modern retail at 14% and 10%, respectively, despite having a sizeable consumer base (knight frank, 2017). Residents consume maximum number of national brands while shopping in a Mall whereas maximum percentage of retail street shops range from 0 to 1000 sq. ft. in terms of area occupied (knight frank, 2018). The average rent of retail space prevailing in the market is Rs. 180 per sq. ft. per month (based on primary survey).

Demand estimation was assessed through the average spending capacity per person, which is growing owning to the rising income. Using Time-Distance method of market delineation (Berman & Evans, 1995) and generating ESRI report through ArcGIS, for the distances of 1, 3 and 5 kms and for time of 5, 10 and 15 min, the catchment areas were respectively segmented into primary, secondary and tertiary (Figure 16 Distance Model Figure 6 Population Projection). The consumer spending behavior and preference was analyzed through age breakup, per capita income per month, average expenditure per visit and minimum distance they travel to visit a mall. Most of these retail outlets are clustered around the Dombivli local station as observed during market study. Population projection method for demographic analysis gave a population of 10,35,884 by 2021 (CENSUS, 2011). Considering per capita retail space as 1.5 sq. ft., by revising per capita space of 1.33 sq. ft. (Nagargoje, n.d.)., considering future growth, the total demand was arrived at 15,53,826 sq. Ft.

The total supply of high-end retail space in the micro-market totals to around 4,64,990 sq. ft. (including Street Retail Shops).

A demand supply gap of 10,88,836 sq. ft. was realized, which is enough for sole development of a retail mall on a 10-acre plot.

Commercial

Market supply analysis reveals that very few commercial buildings having a mix occupancy of retail outlets and small offices exist in the area. Majority of commercial spaces are shops that have been converted into offices, clinics or hospitals, etc. Although new commercial developments are under progress, there is complete absence of Grade A office buildings in the micro-market. The commercial buildings in Dombivli are generally a mix of:

- Retail (generally on the Ground Floor or first 2 Floors)
- Commercial Offices
- Health-Care Centres
- Community Spaces & Banquet Halls
- Residential apartments (in some buildings)

There is moderate demand for pure commercial Grade A office spaces as most of the residents belong to service sector (CENSUS, 2011). Also according to the primary study, most of the service class people travel outside Dombivli for work to Thane, Navi Mumbai or Greater Mumbai (Dombivli, 2018) (Dijk, Tara Van, 2013) due to the absence of service economy in Dombivli.

Observations

From market study and analysis, it can be determined that there is high demand for Residential, Commercial and Retail as well as mixed use developments in the micro-market. However, due to absence of economic drivers for hospitality, a premium category Hotel solely would not be feasible.

Financial Feasibility

Financial feasibility was drawn from the above market analysis and the Net Present Value (NPV) and Internal Rate or Return (IRR) were calculated for various product constructs and compared (Refer Annexure I) for various permutations of Debt-Equity (Annexure II) to identify the most feasible development at the proposed site. Following assumptions were made for financial calculations:

FSI Calculation	
se FSI	1.33 (DCR, KDMC)
TDR and Additional FSI	1.65
Total FSI	2.98

Cost Assumptions	
Particulars	**Cost/ Sq. ft.**
Land Cost	2300
Construction Cost – Commercial (C)/ Retail (RE)	3000/ 3500
Construction Cost – Residential (R-1,2 BHK)/ R+C	1800/ 2500/ 2800

The above values are used to create scenarios for best and worst case (Annexure II) by changing the following variables:

- In case of residential developments, variables are expected rent per month (assumed as Rs. 9000/ sq. ft.) and 20% of booking in the first year. Difference of Rs. 1000 has been considered while analysing worst and best-case scenario.
- In case of retail developments, monthly rent of Rs. 186 and occupancy of 70% was anticipated at the time of possession. Variation of around 10 – 15 Rs. in form of rent per month with occupancy of 60% and 75% was used to create worst and best-case scenarios respectively.
- In case of commercial developments coupled with residential ones, selling rate of Rs. 12,000 per sq. ft. was assumed at 35% occupancy in the first year of possession. Variation of

2000 – 2500 Rs. was observed as deviations from the assumed value to arrive at worst and best-case scenario.

- In case of commercial developments coupled with retail, rental price of Rs. 70 per sq. ft. was assumed at 70% occupancy in the first year of possession. Variation of 10 – 20 Rs. was observed as deviations from the assumed value to analyse worst and best-case scenario.

Conclusions

It can be concluded from the market and financial feasibility analysis that pure Retail development would be the most feasible option at D:E ratio of 80:20 with an NPV of 189 Cr. and IRR of 43%. Annexure III may be referred for all other feasible cases.

Annexure A

Figure 1 MMR Division (Isa Baud, n.d.)

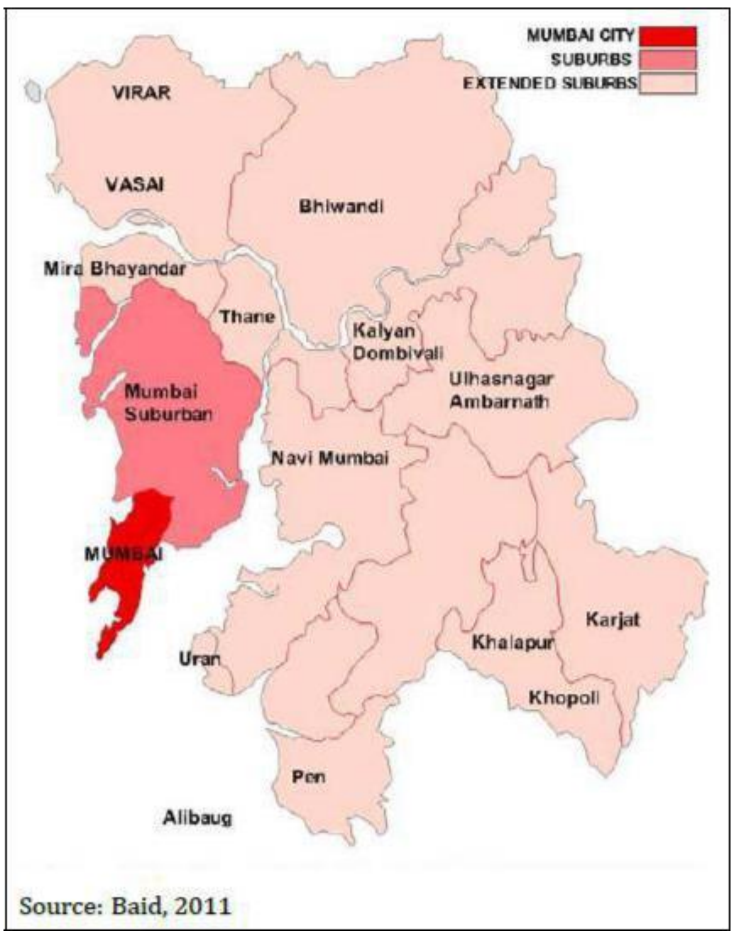


Figure 2 Land Use (Draft MMR Plan Report, n.d.)

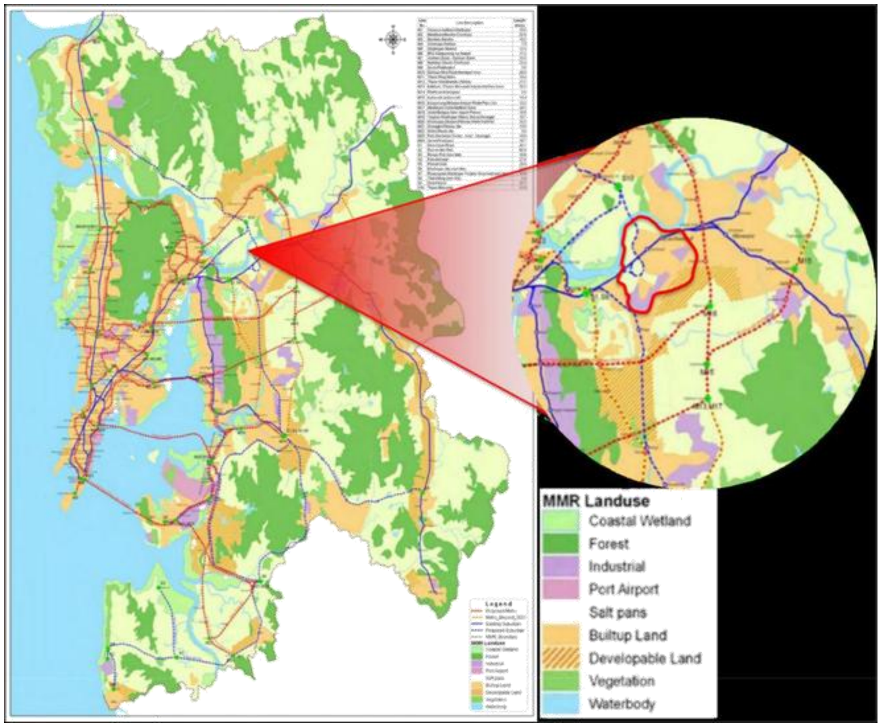


Figure 3 Land use division (Draft MMR Plan Report, n.d.)

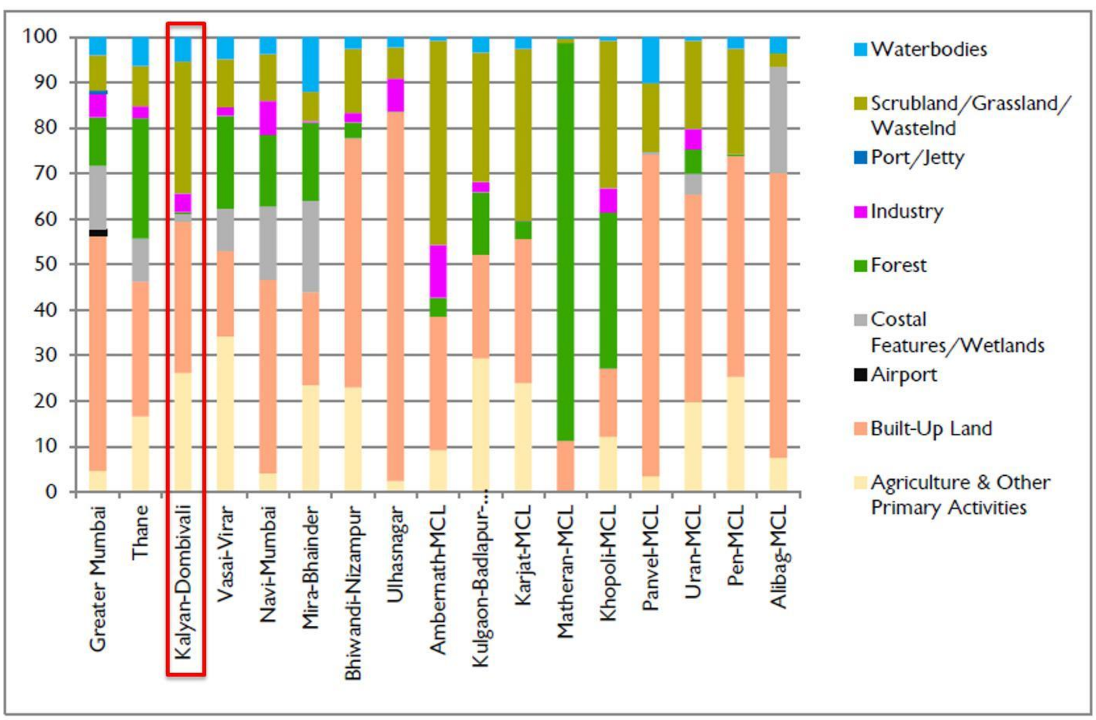


Figure 4 MMR Neighbouring Tehsils of Dombivli (Draft MMR Plan Report, n.d.)

Figure 5 Historic Timeline from 1984 to 2018

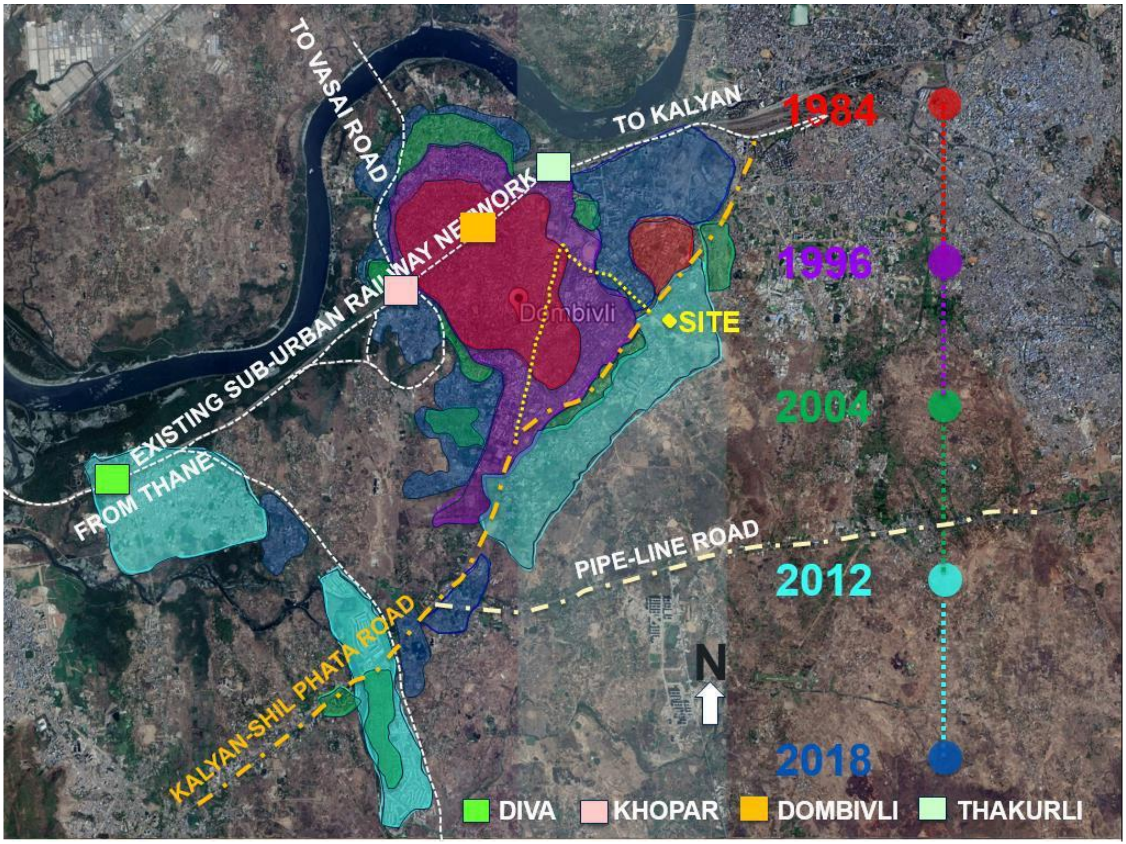


Figure 6 Population Projection

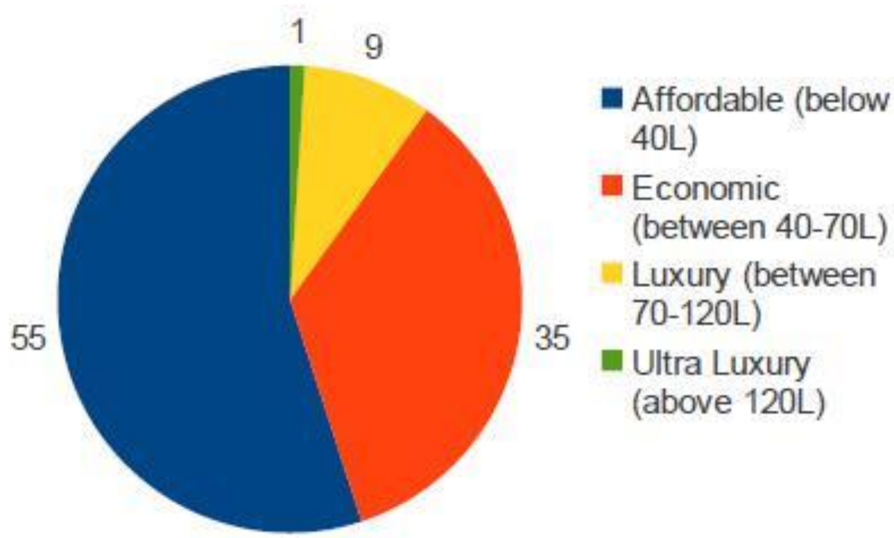


Figure 7 Percentage Segmentation in Dombivli

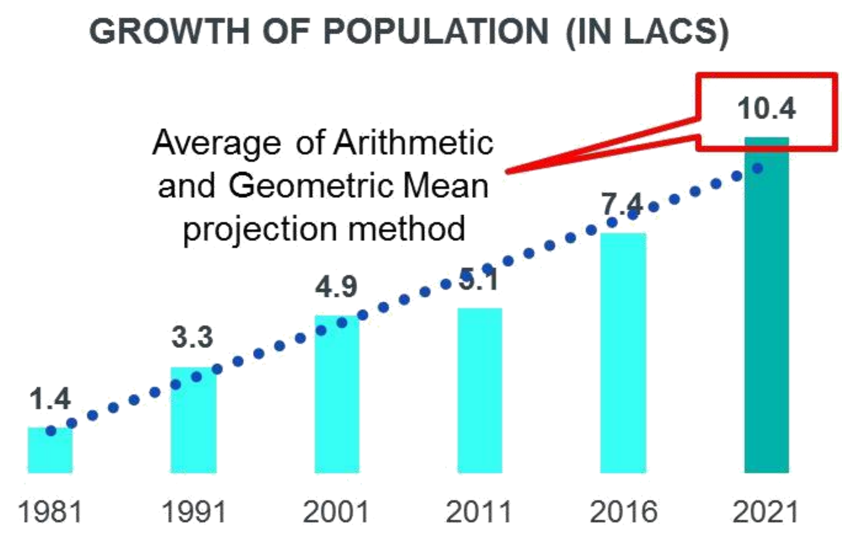


Figure 8 Competition Analysis of Dombivli

Apartments/ Complexes	Price (lacs)	Area (sq ft)	Price/ sq. Ft.
SANGHVI GARDEN	22	370	5946
SANGHVI SHANKHESHWAR NAGAR PHASEII-III	20	500	4000
LODHA VASTU VIHAR	30	500	6000
LODHA HERITAGE	33	600	5500
VEDANT SHREE	27	425	6235
YASHRAJ COMPLEX	38	640	5859
GAJANAN APARTMENTS	35	640	5478
REGENCY ESTATE	80	1135	7048
RUNWAL MY CITY - PHASE 2	49	406	12123
REGENCY ANATAM PHASE 1	44	431	10121
MARATHON NEXWORLD	63	650	9692

Figure 9 Socio Economic Group Classification

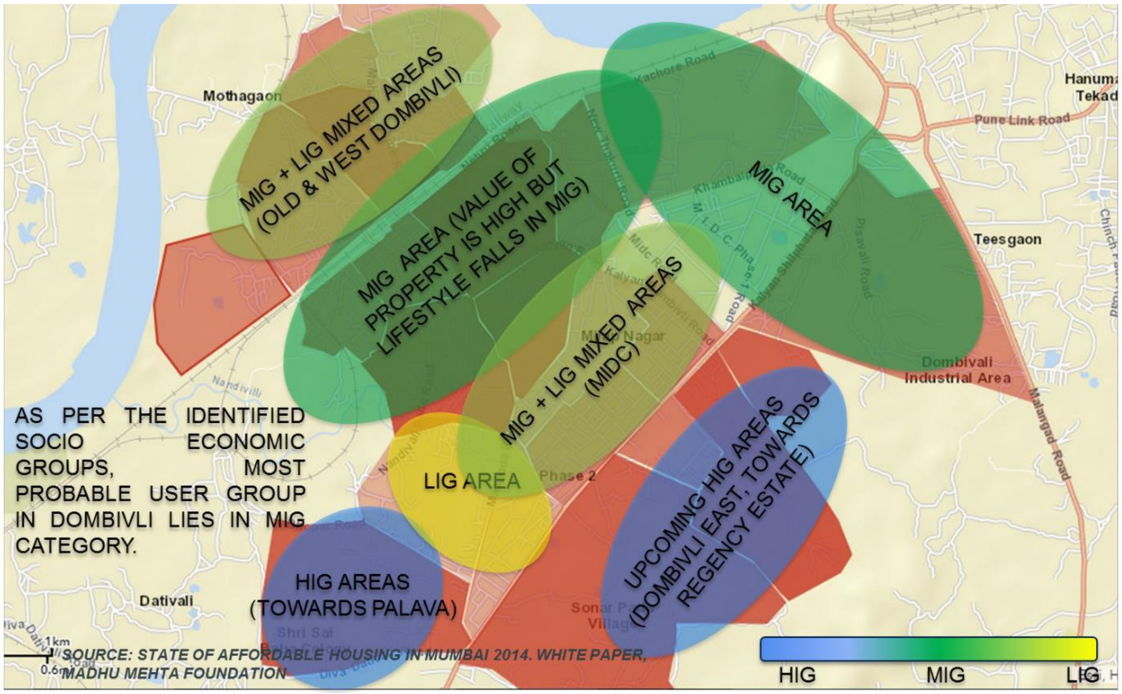


Figure 10 Area wise Rate Contour

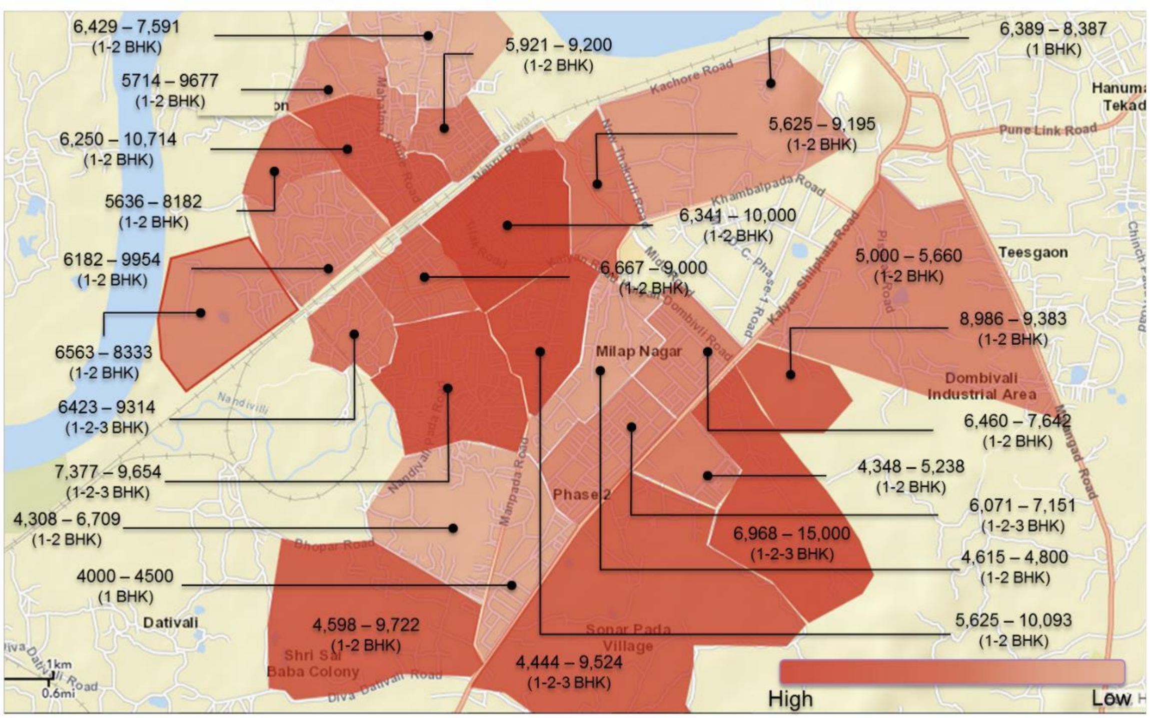


Figure 11 Area wise Rental Contour

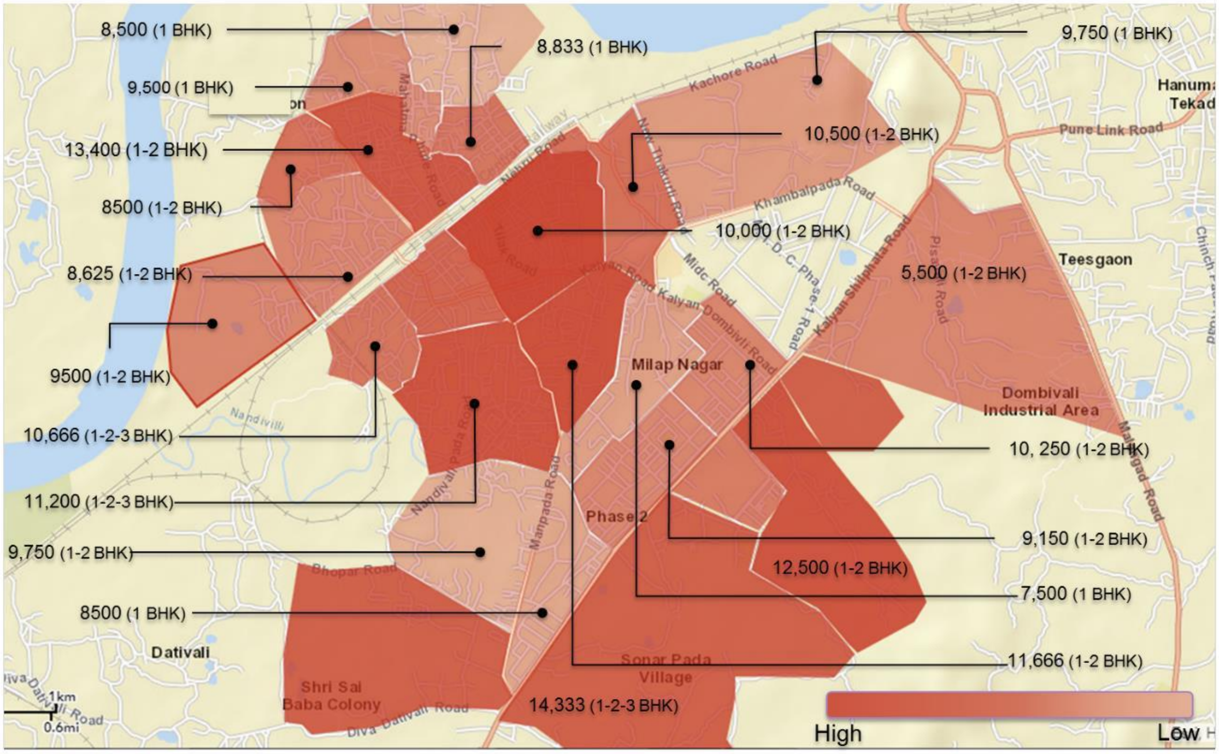


Figure 12 Dwelling Preference according to Census 2011

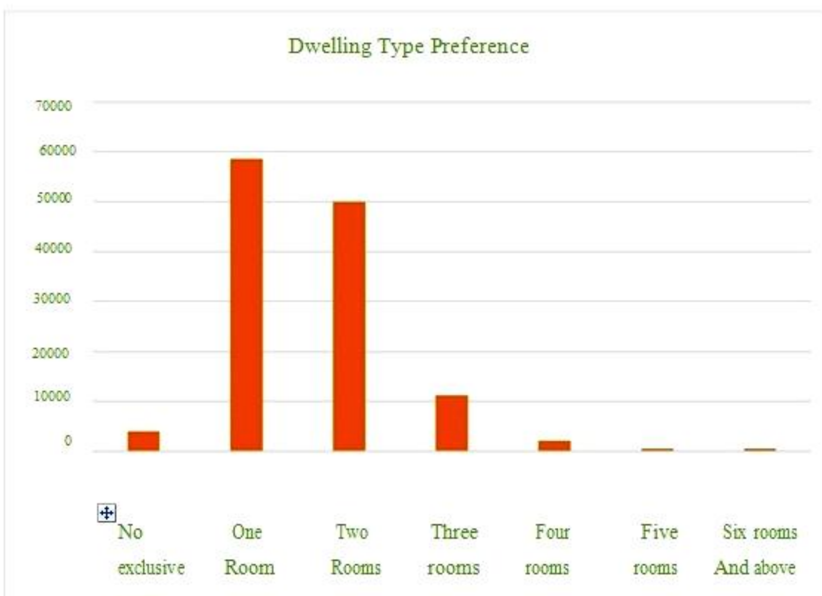


Figure 13 Residential Price Trend

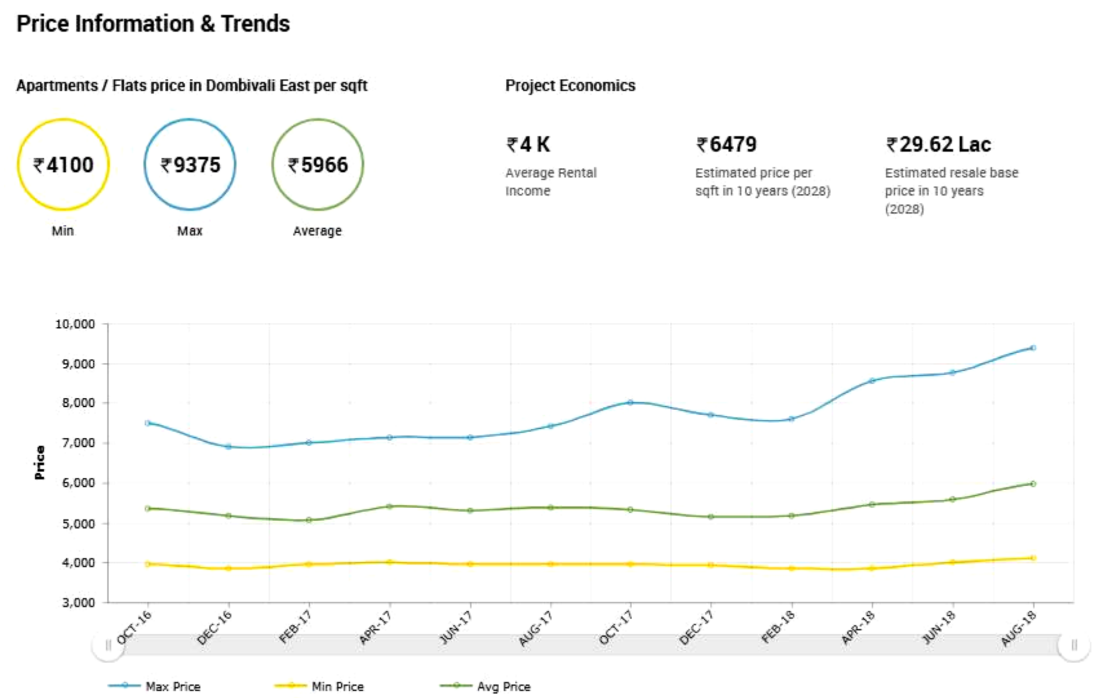


Figure 14 Occupancy and Rooms in Hotels

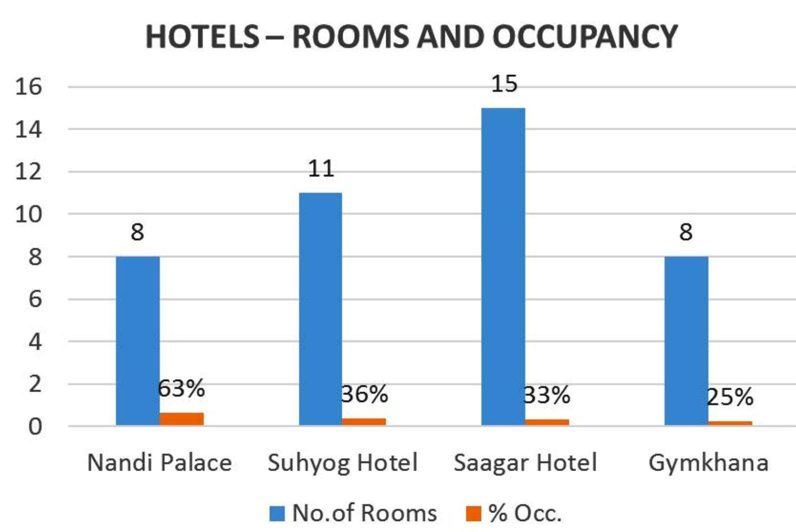
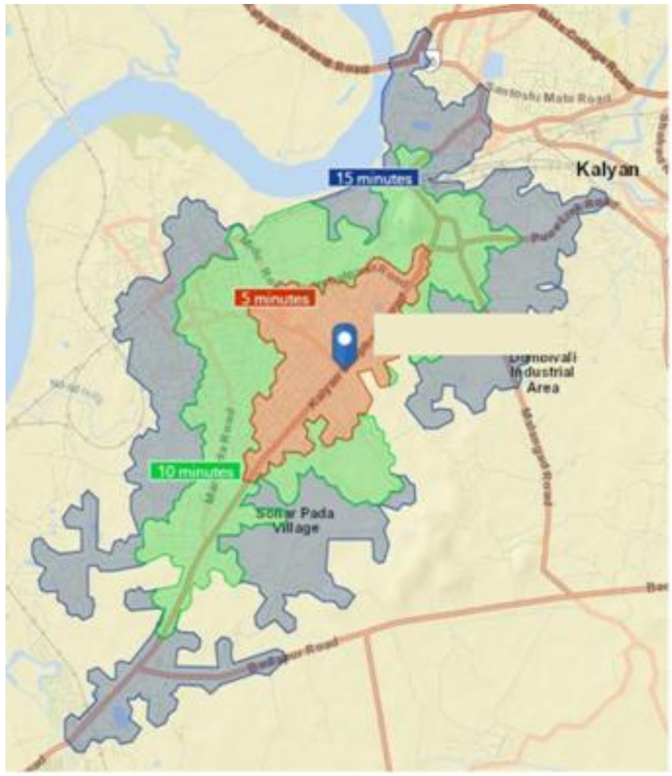


Figure 15 Sitting capacity of Restaurants

Figure 16 Distance Model

Figure 17 Time Model


15 minutes
Kalyan
5 minutes
10 minutes
Industrial
Area
Sonar Pada
Village

Proposed

Annexure – B

Scenario – RESIDENTIAL	Current Values	Worst Case	Best Case
Product Details			**Changing Cells**
Rent 1 BHK	9,000	8,000	10,000
% Booking-Yr 1	20%	10%	25%
Rent 2 BHK	9,000	8,000	10,000
% Booking-Yr 1	20%	10%	25%
Debt Equity Ratio			**Result Cells**
D:E = 50:50	21%	7%	28%
	₹ 4.66	₹ -60.33	₹ 60.86
D:E = 60:40	24%	10%	32%
	₹ 32.02	₹ -34.17	₹ 88.81
D:E = 80:20	33%	17%	43%
	₹ 86.73	₹ 18.16	₹ 144.71

Scenario – RETAIL	Current Values	Worst Case	Best Case
Product Details			**Changing Cells**
Rent Retail*	186	175	200
Occup. Retail	70%	60%	75%
Debt Equity Ratio			**Result Cells**
D:E = 50:50	25%	23%	26%
	₹ 70.76	₹ 50.36	₹ 94.08
D:E = 60:40	28%	27%	30%
	₹ 107.85	₹ 87.45	₹ 131.17
D:E = 80:20	43%	41%	45%
	₹ 189.35	₹ 168.96	₹ 212.68

Scenario – Residential + Commercial	Current Values	Worst Case	Best Case
Product Details			**Changing Cells**
Rent 1 BHK	9,000	8,000	10,000
% Booking-Yr 1	20%	10%	25%
Rent 2 BHK	9,000	8,000	10,000
% Booking-Yr 1	20%	10%	25%
Rent Comm	12,000	10,000	13,500
% Booking-Yr 1	35%	15%	50%
Debt Equity Ratio			**Result Cells**
D:E = 60:40	23%	13%	32%
	22.13	₹ -50.35	₹ 84.85
D:E = 80:20	33%	21%	45%
	₹ 80.90	₹ 5.53	₹ 145.23

Scenario – Commercial + Retail			
	Current Values	Worst Case	Best Case
Product Details		**Changing Cells**	
Rent Comm*	70	50	80
Occup. Comm	70%	50%	75%
Rent Retail*	186	175	200
Occup. Retail	70%	60%	75%
Debt Equity Ratio			**Result Cells**
D:E = 80:20	20%	17%	22%
	₹ 3.69	₹ -25.05	₹ 21.85

*Rents are in per sq. ft. per month

Annexure C

Comparison of NPV & IRR for various Product Mix						
Land Consideration	Debt-Equity Ratio NPV & IRR	0-100	20-80	50-50	60-40	80-20
Residential (- 7 Years including construction)						
With Land	NPV (Rs. Cr)	(₹ 132.1)	(₹ 77.4)	₹ 4.7	₹ 32.0	₹ 86.7
Cost	IRR	6%	11%	21%	24%	33%
Commercial (- 15 years including construction)						
With Land	NPV (Rs. Cr)	(₹ 379.8)	(₹ 331.2)	(₹ 258.4)	(₹ 234.1)	(₹ 185.5)
Cost	IRR	-1%	0%	1%	2%	3%
Without Land	NPV (Rs. Cr)	(₹ 213.7)	(₹ 165.1)	(₹ 92.2)	(₹ 67.9)	(₹ 19.4)
Cost	IRR	3%	4%	8%	10%	16%
Hospitality (- 15 years excluding construction)						
With Land	NPV (Rs. Cr)	(₹ 345.6)	(₹ 274.2)	(₹ 166.9)	(₹ 131.2)	(₹ 59.7)
Cost	IRR	-12%	-11%	-8%	-6%	0%
Without Land	NPV (Rs. Cr)	(₹ 347.6)	(₹ 276.2)	(₹ 168.9)	(₹ 133.2)	(₹ 61.7)
Cost	IRR	-21%	-19%	-15%	-13%	-6%
Retail (- 15 years excluding construction)						
With Land	NPV (Rs. Cr)	(₹ 244.2)	(₹ 192.0)	(₹ 95.4)	(₹ 58.3)	₹ 23.2
Cost	IRR	12%	13%	16%	17%	21%
Without Land	NPV (Rs. Cr)	(₹ 78.1)	(₹ 25.9)	₹ 70.8	₹ 107.8	₹ 189.4
Cost	IRR	17%	19%	25%	28%	43%

Comparison of NPV & IRR for various Product Mix						
Land Consideration	Debt-Equity Ratio NPV & IRR	0-100	20-80	50-50	60-40	80-20
Residential + Commercial (- 7 years including construction)						
With Land Cost	NPV (Rs. Cr)	(₹ 154.2)	(₹ 95.4)	(₹ 7.3)	₹ 22.1	₹ 80.9
	IRR	4%	9%	19%	23%	33%
Commercial + Hospitality (- 15 years excluding construction)						
With Land Cost	NPV (Rs. Cr)	(₹ 266.0)	(₹ 232.3)	(₹ 181.9)	(₹ 165.1)	(₹ 131.5)
	IRR	9%	9%	10%	11%	11%
Without Land Cost	NPV (Rs. Cr)	(₹ 99.8)	(₹ 66.2)	(₹ 15.8)	₹ 1.1	₹ 34.7
	IRR	14%	15%	18%	20%	26%
Commercial + Retial (- 15 years excluding construction)						
With Land Cost	NPV (Rs. Cr)	(₹ 649.1)	(₹ 527.4)	(₹ 344.9)	(₹ 284.1)	(₹ 162.4)
	IRR	3%	4%	7%	9%	12%
Without Land Cost	NPV (Rs. Cr)	(₹ 482.9)	(₹ 361.3)	(₹ 178.8)	(₹ 118.0)	₹ 3.7
	IRR	4%	6%	10%	13%	20%

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IMPACT OF BANK MERGER ON RETAIL CUSTOMER, SHAREHOLERS AND EMPLOYEES: A STUDY OF MERGER OF DENA BANK AND VIJAYA BANK WITH BANK OF BARODA FROM A FUTURISTIC PERSPECTIVE

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Abstract

In every economy, banking sector plays a vital role and it is one of the fast growing sectors in India. In pursuit of gaining a competitive advantage, both private and public banks are making intense efforts to sustain and outperform each other. In the present scenario, banking sector is facing a lot of challenges such as changes in regulatory environment, evolution of online banking, significant financial consolidation etc. which in turn makes Indian financial industry to be highly competitive. In order to gain a competitive advantage and positive synergy, banks are adopting consolidation strategy to have an impact on the market. Mergers and acquisition not only give a synergy advantage but also open up various opportunities and, varied challenges, which may affect the efficiency of the banks, its employees and thereby its customers.

***Key Words**: Banking sector, Consolidation, Public and Private banks, Synergy, Efficiency.*

I. INTRODUCTION

In the year 1991, Maidavolu Narasimham who was the governor of the RBI, suggested in a report on banking reforms, a consolidation of public banks to make them stronger. It has envisaged a three-tier banking structure with three large banks with international presence at the top, eight to ten national banks at tier two, and a large number of regional and local banks at the bottom. The main objective of the merger includes building scale and strengthening the risk taking ability. The Government is working on merger and acquisition plan for public sector banks, in order to create a multitier structure that will have approximately four global size banks and bring down the number of state-owned lenders to about 12 from 21. Consolidation of state run banks with weaker state run banks shall be carried in order to enjoy synergies, yield good results and also stabilize the weaker banks.

Over a period of time, public sector banks have started losing their market share, which currently approximates 70% of the industry. The Government of India is in favor of consolidation of state owned banks and any such merger between two public sector banking entities takes place under an Act that stipulates that two banks can initiate merger talks, but the scheme of the merger must be finalized by the government in consultation with the Central Bank and it must be placed in Parliament, which reserves the right to modify or reject the scheme. The approval of Parliament is mandatory even if the merger is between private banks and public banks.

Post liberalization, banking industry in India experienced numerous mergers and acquisitions. The main objective behind many consolidations was to stabilize weaker banks by merging them with strong bank, increase competition, economies of scale, synergy, and advanced technology and its integration, new product and services. Some of the mergers and acquisition are:

Year	Acquirer	Target	Type
1996	State Bank of India	Kashinath Seth Bank	Merger
1997	Oriental Bank of Commerce	Punjab Co-operative Bank ltd.	Merger
2000	HDFC Bank Ltd	Times Bank	Merger
2002	ICICI Bank	ICICI Limited	Merger
2004	Bank of Baroda	South Gujarat Local Area bank	Merger
2006	IDBI Bank	United western Bank	Merger
2010	State bank of India	State bank of Indore	Acquisition
2014	Kotak Mahindra Bank	ING Vysya bank	Merger
2017	SBI Bank	I. State bank of Bikaner and Jaipur II. State bank of Hyderabad III. State bank of Mysore IV. State bank of Patiala V. State bank of Travancore VI. Bharatiya Mahila Bank	Merger

On September 2018, Government of India had put a proposal to Bank of Baroda's management for the merger of Dena bank and Vijaya bank with them. The merged entity i.e. Bank of Baroda will be the third largest bank in India after ICICI Bank and State Bank of India. The reason behind the merger is to absorb Dena bank which has sunk under Non Performing Assets, by the healthier banks i.e. Bank of Baroda and Vijaya Bank so that the merged entity may enjoy increased lending ability and also to widen up the operations. Bank of Baroda and Vijaya bank have been in a better position in terms of earnings but Dena bank has been under the pile of Non-Performing Assets. The Reserve Bank of India has taken Dena bank under Prompt Corrective Action framework in view of high non-performing assets. Dena bank is restricted from any further funding and new hiring under PCA norms. Gross NPAs of the Dena bank mounted to 22.4% of the gross advances as on March 31, 2018, from 16.27% as on March 31, 2017. In terms of value, the gross NPAs rose to Rs 16,361.44 crore from Rs 12,618.73 crore. Net NPAs were also up at 11.95% from 10.66%. Currently there are 11 banks under Prompt Corrective Action framework out of 21 state owned banks.

The merger of BOB with Vijaya Bank and Dena Bank is quite singular for different reasons. In the history of Indian banking industry, the merger of BOB with Vijaya Bank and Dena Bank will be the first three public banks merger. Out of the three public banks, one bank is taken under Prompt Corrective Action framework and other two are healthier banks. This merger involves a revolutionary step to revive a bank which is being pull down by huge NPA, with two relatively stronger banks. Lastly this merger came into play where almost all public sector banks are facing negative profits.

Following are the financial parameters on the basis of which individual banks and merged entity are compared:

Financial Parameters	Bank of Baroda	Vijaya Bank	Dena Bank	Merged Entity
Total Business (Cr)	10,29,810/-	2,79,575/-	1,72,940/-	14,82,325/-
Gross advances (Cr)	4,48,330/-	1,22,350/-	69920/-	6,40,600/-
Deposits (Cr)	5,81,485/-	1,57,325/-	1,03,020/-	8,41,830/-
Domestic Branches	5502	2130	1858	9490
Advance Branches	81	57	38	68
Deposit Branches	106	74	55	89
Employees	56360	15875	13440	85675
Return on Assets	0.29%	0.32%	(2.43%)	(0.02%)
CRAR Capital Ratio	12.13%	13.91%	10%	12.25%
CET-1 Capital Ratio	9.27%	10.35%	8.15%	9.32%
Net NPA	5.40%	4.10%	11.04%	5.71%
CASA Ratio	35.52%	24.91%	39.80%	34.06%

Source: Compiled from Report on Trend and Progress of Banking in India, RBI, various issues.

Following is the comparison between merged bank with SBI and ICICI bank:

Particulars (Amount in Cr)	**SBI**	**ICICI**	**Bank of Baroda (Merged entity)**
Total Income	2,65,100/-	72,386/-	74,592/-
Net profit	(6,547/-)	6,777/-	(3,628/-)
Gross NPA	2,23,427/-	54,063/-	80,367/-
CRAR	12.6%	18.42%	12.25%
Total Advances	19,90,172/-	5,16,289/-	6,40,592/-

Source: Compiled from Report on Trend and Progress of Banking in India, RBI, various issues

II. RESEARCH METHODOLOGY

Objectives

- To study the purpose of merger of Vijaya Bank and Dena Bank with Bank of Baroda.
- To analyze the impact of merger on customers, employees and its shareholders.
- To know the challenges to be faced in merger and acquisition.
- To know about the benefits of mergers and acquisition.

Sample Selection

The study analyses three banks out of which two are profit making and one bank is piled under NPA. These are:

1. Bank of Baroda
2. Vijaya Bank
3. Dena Bank

Sources of data

Secondary data has been collected for the study. The required data for the study were collected and compiled from the websites of respective banks and their annual reports. In addition, other required data were collected from various journals, Government officials, newspapers and magazines.

III. REVIEW OF LITERATURE

Various aspects of Mergers and acquisition in the Indian banking system have been studied. Various research papers, articles and books have been examined. In this section, an attempt has been made to review some of the journals, articles and existing literature dealing with mergers and acquisition.

K. Subhashree and M. Kannappan (2018) in their paper, studied about the purpose and various procedures of mergers. It includes the study of various types of mergers like Horizontal combination, Circular combination and conglomerate combination. It examined different ways of amalgamation such as purchase of shares in open market, purchase of shares by personal treaty, to make a takeover provide to the final body of shareholder etc.

A.N.Tamragundi and Devarajappa S (2016) in their paper, analyzed the impact of merger on physical performance, financial performance of merged banks and also its effects on share price.

Dr. Smita Meena and Dr. Pushpender Kumar (2014) in their paper have studied the trends of mergers and acquisition in the banking sector of India and also examined the performance before and after the consolidation. The consolidation was between ICICI bank, SBI and HDFC. It includes the impact of merger like growth and development, synergies, enhanced managerial skills, gaining new technology etc.

Suresh Kumar (2013) in his paper has given an overview of Indian banking system and various mergers and acquisition post liberalization. It incorporates the study of how the size of the bank affects mergers and acquisition. It also examined the efficiency and profitability parameters of the banks get affected by consolidation.

IV. IMPACT OF MERGERS

On Retail customer

- Account holders may get a new account number and customer ID. Their email ID and mobile number must be updated with the bank so that they can receive official intimations on allotment of new accounts instantly.
- The customers having accounts in more than one bank which are subjected to merger, they will be given a single customer identity document.
- It is also possible that the new entity will add another layer of security. While the customer ID will be common across multiple accounts with the same bank, a different user ID can be generated for the joint holder so that he can access only the relevant account.
- Account holders of the merged entity will have to update their new IFSC code or new account numbers with Income tax department, Insurance companies, mutual funds, among others.

- The post-merger entity will have to honour all electronic clearing service (ECS) mandates and post-dated cheques. If required, fresh ECS mandates need to be issued and the same should be enquired with the bank.
- Account holders need to be provided with new Systematic investment plan registration cum mandate forms where there is an automatic debit for SIP. The same procedure has to be followed for loan EMIs.
- Account holders can use balance cheque leaves for the period of 6-12 months.
- The most difficult task will be to handle the rationalization of branches for the employees as well as account holders. Customer's existing home branch could shut down if the new acquiring entity has its own branch in the vicinity. The updated new IFSC and MICR code applicable to the branch and account must be followed as it will be required to quote it for funds transfer and other financial transactions. In case of merger of State Bank of India with its associates, only home branch was changed and new branch code was given. The account numbers remained same.
- The fixed deposit rate applicable will be the rate offered by Bank of Baroda on the date of merger. This rate will not be applicable to the existing holder as they enjoy the same rate which was applicable to them earlier. Even the loan agreements will remain same as it was before the merger. In case of home loans, the earlier rate will be applicable until the revised rate offered by Bank of Baroda.

On Shareholders

Bank of Baroda has decided to issue 402 and 110 equity shares for every 1,000 shares held. After the announcement of swap ratio, the share price of Dena Bank fell by 20% while Vijaya Bank was down by 7.25%. There was no significant change in the share price of Bank of Baroda. As it can be seen the swap ratio proves to be fair for Dena bank in spite of facing many challenges. Vijaya bank gains nothing from the swap ratio. It favors the Bank of Baroda as their book value and adjusted book value increases by 8.2% and 2.2%. It is estimated that return on equity of 10% for the financial year 2020 and 12.5% for the financial year. The earnings per share dilutive will increase by 4% from financial year 2020 to financial year 2021.

After the merger, the consolidated number of shares of the merged entity will be 3,425 million and its net worth amounts to RS 55,600 crore. With these the book value of Bank of Baroda will be Rs 80/- per share. After the swap ratio, Bank of Baroda is valued at 1.5 times which is fairly valued. Dena Bank, Bank of Baroda and Vijaya Bank have lost a total of Rs 6,839 crore or nearly $1 billion in market valuation after the proposal of merger.

On Employees

The merged bank will have 85,675 employees after the merger. Employees may not lose their employment as guaranteed by the Government. The new work culture of Bank of Baroda has to be adopted by the employees of Dena bank and Vijaya bank. All the three banks have similar core banking system so that will help the employees to work without much difficulty. Many employees may get transferred due to rationalization of branches as there may be overlapping of branches in same vicinity. The merged bank will provide all the retirement facilities and all other such considerations as they were receiving from their existing banks.

V. CHALLENGES IN MERGER

- There may be many common cities where all the three banks have their branches. Therefore, in order to reduce overheads, rationalization of such branches needs to be carried out. While doing so, handling the employees and their transfer may be burdensome.
- Integration and rationalizing people will be major challenges in this three-way merger.
- The mixture of personnel with different cultures from Dena, Vijaya and Baroda could cause some friction.
- Taking into consideration the employees of the merged bank, all the three banks employees will continue its employment in the merger bank which accounts to 84,675 employees. The merged bank will have to go through a lot hardship in order to handle such a huge manpower. In case of private banks, laying off the excess work force for cost cutting is the option but public sector banks have no such option but to continue with the total employees.
- The main task of the merger will be its business growth prospects and rapid growth of credit.

- Out of the three banks, Dena bank and Vijaya bank were corporate focused banks whereas Bank of Baroda was slowly shifting towards retail. The merger will be interesting to experience how these corporate-focused banks utilize their network and move in the direction of retail.
- The convergence of numerous data centres which manages more than 100 lakhs customers of all the three banks will be a great challenge. The integration of different operating platforms of these banks appears to be easy to integrate but implementation of the same will prove to be burdensome.
- Technology integration in theory is easy to achieve but in practice it will require a lot of hard work like just getting a new account code for all customers and communicating that will not be a simple thing.
- The total number of branches of all the three banks accounts to nearly 9489 and out of it approximately 10% of these branches are overlapped. So branches in the same city will have to be reduced without discontinuing single employee.
- The task of replacing cheque books will be difficult for the merged entity. It will require a lot more time integrate facilities like NEFT, net banking, RTGS etc.

VII. BENEFITS OF MERGER

- All three banks are on same core banking system which makes it easier for the operations to be carried out without any difficulty. The employees will also be able to adapt the working culture
- The merger will also give the merged entity room to provide credit facility to top companies in a simpler way.
- The merged entity will be benefited with network sharing, deposits at low cost and subsidiaries. The ratio of current and saving account ratio will be 34.06% and 12.25% of capital adequacy.
- The merged entity will also enjoy large customer base, widen market share, operational efficiency and inclusion of variety of products and services to customers.

- The merger will help Bank of Baroda to widen its network as due to merger the customer base will increase and will be tilt towards retail front. These benefits will also be enjoyed by Dena bank and Vijaya bank's clients.
- After the merger, Bank of Baroda will be the second largest bank in terms of assets.
- The merger will lead to cost, product and technology efficiencies and will also easy to manage**.**
- The merged entity will be provided with additional cushion by the Government to the extent of 50-100 basis points above the existing regulatory capital requirement.

VIII. SUGGESTIONS

1. The Government should not merge a weak bank with a strong bank as it will hamper the valuation of shares of strong bank and also degrade the quality of its assets.
2. In order to make a good competition with foreign banks, strong bank should be merged with another strong bank.
3. The thrust should be improving the quality of products and services of public sector banks as compared to privately owned banks so that PSB will not lose its market share in banking industry.

IX. CONCLUSION

Mergers of Dena bank and Vijaya bank with Bank of Baroda is the first ever merger of three public sector banks in India. After the merger the net NPA will rise to 5.71% from 5.40%. The return on assets also shows a negative impact as it falls by 6.45%. The study highlights that merger of weak bank with the strong bank will not prove to be a good step of the Government. The burden of NPA of Dena Bank will have to be borne by Vijaya Bank and Bank of Baroda. More over the employees will also be reluctant to accept the employment if they are transferred to other branches at other cities. The Indian banking system may not be able to see any short term contribution from the Bank of Baroda. Therefore, Government should and the policy makers should not promote the merger of weak bank with that of strong bank as it will badly affect the strong bank's momentum.

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EMOTIONAL, SOCIAL AND COGNITIVE INTELLIGENCE

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Abstract

Emotional, social and cognitive intelligence

When Emotional, Social and Cognitive Intelligences are used to manage one-self as a day to day practice, this will transcend in to all aspects of one's life. Most people operate based on their emotions, and in those irrational thoughts, irrational decisions are made and that can be detrimental to all involved. Many theorists in the past have discussed emotions and social and cognitive intelligence, and one of those theories are Emotional Intelligence (EI). According to Psychologytoday.com "Emotional intelligence refers to the ability to identify and manage one's own emotions, as well as the emotions of others". When it is used on a frequent basis to manage life in an organic way it will make the work environment more harmonious, there will be mutual respect if each person has self-respect first. Values are individual, but virtues transcend through all, and all can relate to the them. Virtues meaning Love, Peace, Happiness, etc. All human beings want these basic qualities in their lives. In expanding further, Carl Jung was a theorist who created 4 stages of Life and they are the athlete, the warrior, the statement, and the spirit. When one can understand the four stages in Life, one can be successful in living a life to its full potential in this era. This study will take us through the 4 stages of Life and how to use Emotional, Social and Cognitive Intelligence and other methods in every aspect of life.

Introduction

These three intelligences are unique and distinct and should be addressed in steps to see how when one has gained mastery, all three will be in sync. When the Human resources Management (HRM) realize that they should be concentrating on the leader's and the employee's emotional, social and cognitive intelligence, they will have a productive, engaged and untroubled workforce. The theorist has his/her own unique style of describing them and giving techniques on how they can be used for transformation in the form of coping, understanding, empathy, intellectual scaffolding in every situation, in a space of clarity. How does one do that? The general population has been conditioned to immediately react to any kind of situation, that they might be presented with, when there is time to take a second to process the facts, it gives time to do an in-depth research, an opportunity to reflect and then respond, based on what was found out by themselves and not what someone else has presented. This will cultivate an effective leader in any industry.

Emotional Intelligence theory

There are several scholars who have written about Emotional intelligence and leadership; many agree that it is how one copes and expresses oneself through moods and emotions. It is paramount that it is understood that it plays an important role in the type of leader one is or going to be. If this is not at the highest level of functioning, it can be detrimental to the person, the employees and the business, which will suffer from the effects of burnout and productivity will endure the consequence. It all points to being able to manage oneself, typically there has been the directive that we have to manage how others feel about themselves and their work, and it has been proven that it is not effective. There are four major aspects of emotional intelligence, and that is how one manages emotions, expression, "appraisal and the use of emotion to enhance cognitive processes "(George, 2000). According to Herndon, 2018, EI is important both in the workplace and personal life interactions, It is the only way that a leader will be able to effectively motivate others, If they are stable in their interactions, they will gain trust from their team members and be proactive instead of reactive, be able intervene and avoid confrontational scenes. (Herndon, 2018). How does one know if a person has emotional intelligence, it is done by quantifying it by using Emotional Quotient (EQ)? It is substantiated by leading psychologists that will look at measurable data. They look at how successful a person is in a range of situations (Herndon, 2018).

Social intelligence

EI is the precursor for many skills and supportive models, and social intelligence is one of them. It is supportive to EI skills, then the social emotional intelligence will then be enhanced, and interactions will be much better. It supports the EI intelligence in many areas communication enhances, behavior can be regulated, and then better relationships are fostered, there is more sensitivity around issues, which is a transferrable trait for a leader. (Brackett, Rivers, & Salovey, 2011). Like EI it is a tool for understanding oneself and others intuitively, it guides and fosters excellent relationships. There are many different definitions of leaders, and one category is teachers. They must have social intelligence which includes intelligence content, which encompasses knowledge, skills, ability to relate to themselves in all situations, It is always the self-first and then others. How can one be an effective teacher in a content area if there is not socially and emotionally demonstrating in the areas of self? How can deflection be positive with the students in the classroom? This transcends into every profession, nationally and internationally In Kazakhstan they have not fully done research into this area, however they have looked at foreign resources to corroborate their findings. Communication is the key to being able to foster social intelligence, both receiving and sending information. (Yermentaeyeva, Aurenova, Uaidullakyzy, Ayapbergenova, & Muldabekva, K. 2014).

Cognitive intelligence

Job performance and cognitive intelligence are positively related how one is able to perform on tasks and how they are able to interact organizationally. They involve the activities of the job and are not aligned to being part of the job. It is a supportive and enhancing aspect of job performance, being able to know the facts, rules, regulation procedures technically. However, when an individual has low cognitive intelligence, it can be supplemented to get tasks done by high emotional intelligence. EI is the precursor for social intelligence. (Côté & Miners 2006).

The intelligences are intertwined they collectively add supportive methods in leadership and self-transformation. However social and emotional intelligence are most important; without that the, cognitive aspect of intelligence would not be able to be successfully implemented. It helps the leader to effectively motivate, build relationships with ones who are under their supervisory care. There are different scenarios that drive when each one is used and being able to use each one when it is needed; it is a leadership skill that is an excellent quality. (Bass, B. M. 2002)

Scientific Best practices

Researchers have done studies to look at Executive groups who are high profile, to see how they compare to the general population, how effective they are when it comes to productivity such as profits, and retention, and how the employees are managed. The methodology approach that was taken was looking at the Emotional Quotient Inventory (EQ-i) A small core group of male and female executives were monitored. A total of 186, they was and they were asked them questions in a certain field. The top executives scored higher than the typical population. When executives showed higher levels of (EQ-i) it was because they were able to self-regard, show more empathy, good problem-solving skills, which is a combination of emotional, social and cognitive abilities. These findings aid in providing initiative, training, selection and professional development. (Stein, Papadogiannis, Yip & Sitarenios 2009)

Supportive/Alternative Best practices

A study looked at four companies and what they did was the questionnaires to the participants who did mindfulness, very close to meditation. In this case, a technique called Workplace Mindfulness Training (WMT) was implemented to address burnout and to make sure that the well-being of the individual supports the organization's culture and environment. Both intervention and preintervention methods were used. A told of 425 participated. When the intervention and preintervention methods were used it decreased the burnout and stress factors. The overall climate became much more of a team supportive environment, and performance indicators supported a positive productivity trend. It was suggested that more studies need to be done, more controlled randomized design.(Kersemaekers, Rupprecht, Tamdjidi, Wittmann, Falke, Donders& Kohl 2018)

The four stages of Life – Carl Jung

Car Jung addressed the different stages of life in a way which can be aligned very appropriately to the three intelligences. The first one is the Athlete. This is the self-serving stage in which one is more narcissistic. One is more engrossed in one's own personal selfish identity. External is the sense of how one perceives how one looks. Even though it is a very body conscious stage, it does serve its purpose when it is understood fully. This stage is purposeful when attention needs to be paid to the body, weight loss etc. It is not good to get stuck here because then it is self-serving. This kind of trait will not allow one to be an effective team player, a leader or and be adequately social.

The Warrior being open minded has awareness of what he/she wants and, to be in life, setting life goals and prepare for his/her journey. It can both be in an extravertive or in an introvertive way. The statement is personal development of self, but this is the stage where others around are included, looking at how one's action will affect those around them (DeVille, 2018). This is the Ubuntu stage which is of South African origin, meaning qualities that include compassion even if one has done something that is indifferent to the norms. These are essential human virtues. "I am because you are" Being compassionate and humane, where if one falls, the rest remind. We are all in this together, get up dust yourself off and join us. This is the development of a leader stag (Ifejika 2006).

The spirit which is the stage many may never achieve when one sees oneself as just a tiny molecule of the bigger grand picture. This comes when there is dedication to a religion, spiritual or self-actualization practice. It is a great stage to relieve oneself of struggles, disappointments, sorrow and challenges of life. There is a universal picture where each one shares a space for a short time. It is a transitional stage where some stay and some leave. Once steadied in that faith it gives the person true spiritual awakening. These four traits can also be the cycle of life. (DeVille, E. 2018)

Dealing with Emotions

When there is the presence of handling Emotions, it makes leaders be more present and have greater awareness when interacting with others. When time is taken to evaluate what truly is happening, a response happens in a more effective way. When those elements are absent, there is this constant barrage of reacting, which is not an effective way to lead. A complimentary statement can be perceived as an insult or defamation of character, especially if this done in a public forum (Ekman 2004).

Communicating Effectively

Having effective communication skills will be the winning tool in all situations. It can calm or escalate a situation, The ability to have the skill to diffuse conflicts coincides with the intelligences; it means that all three are working simultaneously. The ability to have ones emotions all in check, understanding the social implications of the work environment, being able to cognitively put the whole scenario together and come up with a solution that will benefit the environment is great for the work culture, personal relationships and total strangers (Hunter 2004).

Carl Rogers Theory

He agreed with Maslow's Hierarchy of Needs but expanded stayed that if a person needs to grow, there needs to be a genuine environment. Then there will be place for openness, self-disclosure and acceptance having unconditional positive regard and empathy. Also, he theorized that actualizing tendency supports development and growth in a positive way and supports that each one can realize their full potential. This also promotes the social aspect of intelligence. Dropping seeds helps to nurture the growth of a tree, in this case the work environment. According to Rogers, we need positive regard which consists of respect, acceptance, warmth or supportive behaviors that must be both unconditional and conditional coming from the self or others "(meaning the concept one holds of one-self as an emotional, cognitive, and behavioral being)". Conditional positive regard means 'what is in it for me'. (You will only get a promotion if you get to work on time every day for a month). Conditions are put on this with regard. In unconditional positive Regard there are "no strings attached". So even if you are late everyday, your work speaks for itself and you deserve the raise. It involves paying attention to how to overcome the lateness and looking at the quality of the work. We can also give ourselves positive regard. When you give regard, you receive regard automatically (Carlson, & Beins 2012). This is a variation of Carl Rogers Theory used for coaching.

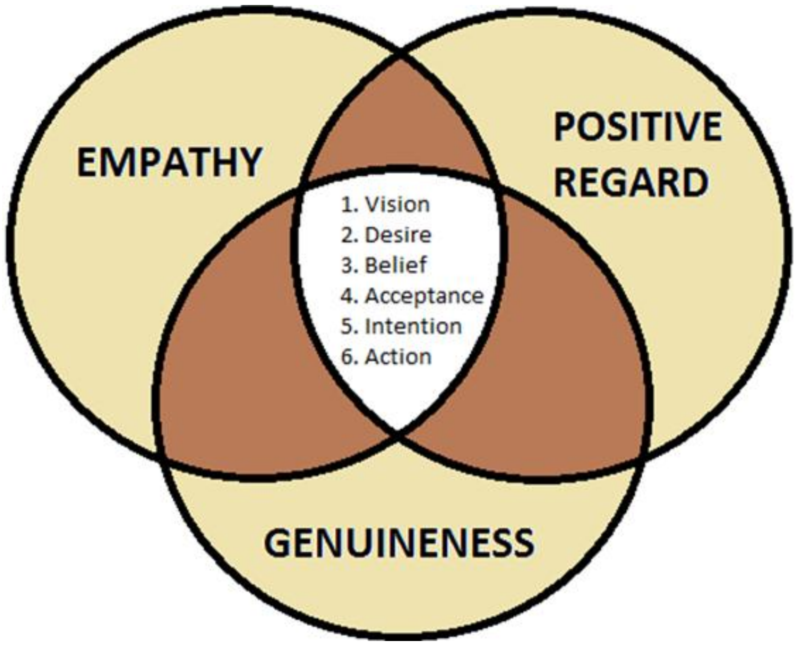

Fig 1: A Coaching Model Created by Mutriba Karimova

Social Interaction in group settings

Group settings are something that one chooses to be a part of, and that could also include a workplace. There are scientific definitions of groups highlighting the importance of influence. The strength of the group defines that individual's behaviors. Bruce Tuckman came up with the stages of group dynamics. Forming stage or initial stage, can also be the testing stage if the leader is not strong with the right leadership skills. They can lose the group dynamics in this stage. Storming stage can be when one or two will infiltrate the group and cause conflicts. Norming stage is where the development and dynamics of the group are cultivated. The leader takes charge and defines each person's role. The Performing stage is where each member then applies their skills to their new role's successfully completing tasks. The leader of the group dynamics must have the skill to implement this effectively. (Holmes & Singh 2012)

Utilizing the Virtues

To transcend beyond religion, beliefs, everyone is searching for Peace, Love, and Happiness in their lives. Peace is a state of being calm with mental composure. In that state negative thoughts are unable to enter that consciousness of being; it creates a mental balance and equanimity.

Once the state of being of Peace is acquired, there is a balance of being contented, joyful, having stability in mental capabilities. If there is an understanding that virtues transcend throughout all, then it can be implemented with a practice of meditation. There is a meditation practice called Raj Yoga meditation that teaches individuals how to stabilize their thoughts, actions words and deeds. They provide teachings to business organizations doing workshops. Regular meditation sessions have helped transform the individual's thoughts and the environment in which they interact. A virtuous being is a happy being. (Jagdish 1988)

Virtues in the workplace have been researched and there is a "return to virtue ethics" (Crossan, Mazutis & Seijts, 2013). They are described as intrinsic qualities that lie within us. When they are presently actively engaged, it will be seen, and others will appreciate those qualities. These virtues shape the character of a person. Greek philosophers such as Plato and Aristotle suggest that the goal of human beings is to live a life of excellence through virtues. They want to live in a "good society" and that means Happiness. There are other transcendent virtues such as having wisdom and courage. The question is whether it is human nature to be virtuous or not? (Crossan, Mazutis & Seijts 2013).When we look at human behavior, we see that joys of life give much more happiness than sorrow.

Conclusion

When looking at all three intelligences, Emotional, Social and cognitive they are all connected and are not successful, if they are used on a standalone basis. Different best practices have been shown along with theories and methods for transformation into being an effective leader that will transcend into effective employees who will increase productivity along with a harmonious environment. Carl Jung's stages of life remind us not to stay at the athlete stage but to transcend through the 4 stages which are the athlete, warrior, the statement and the spirit.

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Fig 1: A Coaching Model Created by Mutriba Karimova retrieved from https://coachcampus.com/coach-portfolios/coaching-models/mutriba-karimova-client-centered-approach

ROBOTIC PROCESS AUTOMATION:
CONCEPT, BENEFITS, CHALLENGES IN BANKING INDUSTRY

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Abstract

The banking and financial industry is in the midst of digital disruption. The industry is further challenged by the need to optimize cost, build scale and deliver swift responses to service requests. However, banks are not able to innovate due to fragmented processes and multiple legacy IT systems that manage these processes. In addition, banks also have to be compliant to regulatory requirements and maintain data privacy while processing a large number of documents and personal data.

Robotic process automation (RPA) or "automation" describes logic driven robots that execute pre-programmed rules on mostly structured and unstructured data to some extent.

The concepts have been around for nearly a decade, and they have advanced quickly. In financial services, insurance carriers have used RPA in claims processing for quite a while. Capital market firms are now turning to automation to reduce costs, provide better service, and even make complex regulatory implementations work more efficiently.

Financial institutions can reduce cost, improve quality of service and scale the existing resources to the major population. All services will be available and operate 24/7 basis.
This paper explains the basic concept, advantages, challenges of Robotic process automation in banking with the help of case study method in banking industry.

Objectives

1) To explain concept of RPA
2) To explain benefits of RPA with respect to banking industry
3) Real life case study to explain the benefits
4) Challenges to implement RPA process

Introduction

What is Robotic Process Automation?
Robotic process automation is an emerging form of clerical process automation technology based on the notion of software robots or artificial intelligence (AI) workers.

In traditional workflow, a software developer writes a list of procedure (step by step) to automate a task. Interface is also created for the back-end system using internal application programming interfaces (APIs) or scripting language specifically used for the interface. In contrast, RPA systems develop the action list by watching the user perform that task in the application's graphical user interface (GUI), and then perform the automation by repeating those tasks directly in the GUI. This encourages the use of automation in products that might not otherwise feature APIs for the purpose of automation.

RPA tools are similar to graphical user interface testing tools. These tools also automate interactions with the GUI. This is achieved by repeating a set of demonstration actions performed by a user. RPA tools are different from such systems in case of features that allow data to be handled in and between multiple applications. For example, receiving email containing an invoice, extracting the data, and then entering that data that into a book-keeping system. The data manipulation aspect is not something one would normally find in a testing tool.

Prerequisites to check suitability of process to convert into robotic process

- The process should be rule based and not depend on human judgment
- The process should be initiated by a digital trigger and be supported by digital data
- The process should be functioning and stable data.
- The process should have bigger volume of executions

RPA and Financial Industry

Over the past two decades, banks and other financial institutions have really had to step up their contribution for technology.

- ✓ To answer the following demands, robotic process automation has become a powerful and effective tool.
- ✓ To remain competitive in an increasingly saturated market specially with the more widespread adoption of digital banking
- ✓ To find a way to deliver the best possible user experience to their customers.
- ✓ To face the challenge to maximize efficiency and keep costs as low as possible while also maintaining maximum security levels has also increased.

Similar to many other industries, the financial field is heavily reliant upon documents and the many legacy systems that have been employed to help manage them most effectively.

There are a great deal of records of transactions involved in the life cycle of a banking customer. From the initial account opening application to account management documents. It involves deposits, withdrawals, loan documents.

Banking professionals struggled to connect the many legacy systems being used in order to manage and retrieve the information needed to do their jobs most effectively. Introduction of robotic process automation minimizes this struggle of banking professional. And given the large number of mergers and acquisitions in the financial industry, this problem was persistent. One of the greatest advantages of RPA has been the ability this technology to integrate with and bridge these legacy systems. This creates more uniform approach to data management without having to start from scratch. It has been revolutionary step for financial industry.

Beyond this, robotic process automation has also streamlined a wide variety of back office processes that once bogged down bank workers dramatically. These tedious, manual tasks are shifted from human to machine. Banks significantly reduce the need for human involvement. This approach has had a direct impact on everything from performance and efficiency levels to staffing issues and expenses.

The large volume of documentation required for financial transaction slowed down the processing times. In many examples, a process could be stuck in indefinite loops for days, weeks, even longer as it awaits approval. And with humans involved in every step, errors are unavoidable – some of which could be costly to the institution, both financial base and reputation-wise. By automating these back office processes, these delays and errors can be eliminated. Processes will be more productive, efficient and accurate.

With the help of robotic process automation, bank employees have knowledge about where information is stored .They are able to access it at the click of a button. All these things are possible only because off robot software running behind the scenes. Additionally, employing RPA can create a much more transparent environment in which data for every single transaction is properly recorded, categorized and stored for quick and easy retrieval and review at any time on demand.

RPA is beneficial to the financial industry is in compliance. In case of insurance field, banks and other financial institutions are required to constantly maintain a high level of regulatory compliance. Employees must keep constant watch on information against industry and government regulations; also stay up to date with the speed of changes, which can and do occur quite frequently. Because robotic process automation handles all of the documentation and eliminates errors, audits become much less cumbersome. Furthermore, this technology is capable of being altered rapidly; making it ideal for a field that evolves so often.

Case Study

The example for case study is a British multinational banking and financial services company headquartered in London. Wipro's team delivers loan operations for the client business.

Business challenge

Indexing is one of the key activities in loans, in which the documents are referenced in the document manager application.

The typical process includes

- More than 1,000 scanned documents are received per day for indexing process, which takes around 1.5 minutes to process a transaction
- Agents pick one document at a time, search for required fields and manually key in the data in to document manager application
- Quality check is performed on these transactions to ensure that all the documents are indexed accurately the client wanted to reduce high level of dependency on agents to perform indexing process and completely eliminate possibility of human errors.

Solution

- Complete process mapping at work instruction (L6) level
- Identification of opportunities through Value Stream Mapping (Wipro's proprietary BPMS) and DMAIC approach
- Automation code for a robot to pick the document, search for the required key fields (string search), validate and enrich the data, with automatic entry in to the document manager application
- Robot is programmed to search and pick the data, irrespective of the template being used, to handle future changes in templates)

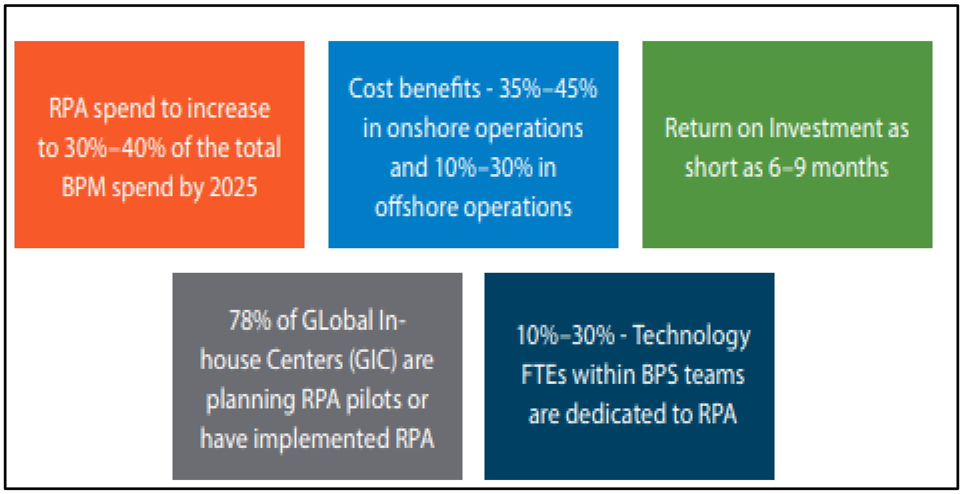
Business benefits

- 100% accuracy in the transactions processed by robot
- 95% of the process is automated post RPA implementation
- 85% time saving per transaction
- Improved capability to handle peak volumes as per predefined SLAs (highly scalable)
- Robot automatically routes the exceptions instead of manual handling to deliver

Benefits of RPA

Sl. No.	Opportunity for RPA	Related benefits				
	Use case	Enhanced accuracy and quality	Improved speed of operations	Increased staff productivity	Refined audit trail with accurate information	Increased time for strategic tasks
1	Validating existing customer information	✔	✔	✔	✔	✔
2	Documentation gathering	✔	✔	✔	✔	✔
3	Customer information gathering	NA	✔	✔	NA	✔
4	Compiling customer information	NA	✔	✔	NA	✔
5	Customer screening	✔	✔	✔	✔	✔
6	Customer servicing	✔	✔	✔	✔	✔
7	Regulatory monitoring and data collection	✔	✔	✔	NA	✔
8	Risk assessments	✔	✔	✔	✔	✔
9	Account closure processing	NA	✔	✔	✔	✔

Future of RPA



Impact of RPA on Employment

According to Harvard Business Review, most organizations adopting RPA have promised their employees that automation would not result in layoffs. Instead, they assured workers that they have been redeployed to do more interesting work.

One academic study proved that knowledge workers should not feel threatened by automation. They embraced it and viewed the robots as team-mates. The same study highlighted that, rather than resulting in a lower "headcount", the technology was deployed in such a way as to achieve more work and greater productivity with the same number of people.

Conversely however, some analysts have proofs that RPA represents a threat to the Business Process Outsourcing (BPO) industry. The thesis behind this notion is that RPA will enable enterprises to "repatriate" processes from offshore locations into local data centers, with the benefit of this new technology. The effect, if true, will be to create high value jobs for skilled process designers in onshore locations (and within the associated supply chain of IT hardware, data centre management, etc.) but to decrease the available opportunity to low skilled workers offshore.

Challenges to implement RPA

- **Employee resistance and on boarding -** Any changes that involves implementation of a new technology can be stressful for employees as they experience major shifts in their daily responsibilities. It is essential that company leaders and executive sponsors should ensure employees with continuous communication. Employees should be fully informed about what is expected of them throughout the implementation process. This approach leads to the essential and successful adoption of new technology. Fostering a culture of innovation within the company will only further accelerate this adoption.

- **Choice of the right processes -** The automation capabilities provided by RPA are ideal for tasks that are repetitive, rules-based, high volume, and do not require human judgment. This can include activities such as data migration and copy-paste tasks. RPA implementation is especially difficult for the business processes that are non-standardized and require frequent human involvement in order to execute. These more complex tasks include interacting with customers and developing human relationships. It is important for organizations to determine which of their processes are suitable for RPA so that automation runs smoothly.

- **Setting realistic expectations -** One of the biggest obstacles when it comes to implementing a new technology such as RPA is setting up realistic outcomes. RPA should not be seen as the panacea for operational problems and broken processes, organizations need to recognize the limits of what RPA can and cannot do. Decisions regarding the technology need to be made on an individual and company-specific basis. RPA's functionality, implementation timeline, and operational results will vary between different companies. Maintaining company-wide discussions about expected results will allow organizations to make the most of RPA and its benefits.

Conclusion

In conclusion, today's banking firms are facing increasing demands to maintain as lean an operation as possible while also delivering exceptional client experience at the lowest costs. Robotic process automation is making it possible for financial institutions to achieve these goals and remain competitive in a sometimes-turbulent, ever-changing environment.

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WORKFORCE DIVERSITY: BOON OR BANE TO THE ORGANISATION

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Abstract

Workforce diversity is a critical area of competence for any organisation. It is an important asset for every organisation that seeks competitive advantage in the global economy. With the change in needs at the fast pace, the association among the people from varied culture, background, beliefs etc. has increased substantially. Wambui et.al.state that HRM practices need to promote diversity for business to grow effectively. The paper discusses the various benefits of a having a diverse workforce along with the challenges linked to it (post #me too movement also). The study of various literature and research papers and books has been done which reveals that diversity is all about differences. The manner in which we analyse and use these differences will determine whether diversity is an asset or liability to the individual and the organization. Workforce diversity can prove to be a strong pillar to the organisation if managed appropriately. There is need to lead a diverse workforce that can give diverse benefits to the organisation.

Keywords: *Diversity, Managing workforce diversity, challenges.*

Introduction

As an imperative part of promoting justice and fairness in the workplace, workforce diversity has evolved as a core strategic value that many organizations believe they have an obligation to pursue (Mor Barak, 2015; Ng & Sears, 2012). "Diversity is generally said to mean acknowledging, understanding, accepting, valuing and celebrating differences among people with respect to age, class, ethnicity, gender, physical and mental ability, race, sexual orientation, spiritual orientation and public assistance status"(Esty, Griffin, and Schorr-Hirsh,1995).Organizational efforts to incorporate and promote diversity have been encouraged inorder to establish and improve positive perceptions in business environments, recruit highly competent workers, and generate innovative ideas (Mor Barak et al., 2016). To date, relevant research has primarily examined the effects of workforce diversity on organizational performance (Pitts, 2005; Richard, Roh, & Pieper, 2013; Thomas & Ely, 1996). A number of research initiatives have identified the benefits that diversity can bring to an organization, including to role stress (Findler, Wind, & Mor Barak, 2007), organizational commitment (Cho & Mor Barak, 2008), retention (Hobman, 2003), and innovation (Gonzalez & DeNisi, 2009; Richard et al., 2013). Other studies, however, have reported that workforce diversity can have negative effects on an organization's overall well-being (Choi & Rainey,2010). Work force diversity is the bringing together of a mixture of people to one workplace. It's a notion that does something that many other business-related concepts don't – it diverges from the professional and fundamentally concerns the *personal*.

Diversity refers to the differences, similarities, and related tensions and complexities that can characterize a collective mixture like the workforce. These similarities and differences can be demographic in nature for example, race, gender, ethnicity, sexual orientation, and age), or they can represent behavioural variations like thought, problem-solving approaches, or behavioural traits associated with personality. (Roosevelt Thomas,2011). Organisations are adjusting and learning to treat women as equal to men. Discrimination against female employees in terms of hiring & advancement and treating them in sexual manner are now against law. Diversity refers to the exist in harmony despite of difference in ideologies, interest and culture backgrounds within the company and even comprises of cultural factors such as race, gender, age, colour, physical ability, ethnicity, etc. The broader definition of diversity may include "age, national origin, religion, disability, sexual orientation, values, ethnic culture, education, language, lifestyle, beliefs, physical appearance and economic status" (Wentling and Palma Rivas, 2000).

Literature Review

This study tries to access the benefits of having a diverse workforce along with the challenges associated with it. (Ashok Chanda, Dec 2006) Workforce diversity is a burning issue in every organization of current scenario. Every HR manager must take care in managing this diversity and there is a lack of awareness towards diversity management approach; the manager doesn't have enough knowledge and competency to manage diversified workforce. Sharbari Saha, Dewpha Mukherjee Patra, 2008 state that without the diverse workforce the organization is not competitive enough to compete (Saumya Goyal, Aug 2009) The author has used four models to describe various dimensions of diversity. First is Diversity wheel model which has two dimensions i.e. primary like age, gender and secondary like income, religion etc. Second model is four layers of diversity and the dimensions it includes are personality at the core and external dimension. Third is Diversity iceberg and the added dimension into this is tertiary dimension i.e. assumptions, values etc. and last model is kaleidoscopic perspective of individuals (K Mallikarjunan, 2007). Everyone is different; everybody has his/her perception, attitude and thoughts, and to manage such type of different individuals, requires a specific skill because of the complexities involved in this process. (Maria Riaz Hamdani, M. Ronald Buckley, 2010). In this, researchers have said that we need to understand the dynamics of workplace diversity to promote it. And to understand the complex dynamics of workplace diversity institutional factors like regulatory structures, governmental agencies, lawmakers, courts, professional organizations, interest groups, and the public must be considered. Employees must not be merely treated as a means for producing fiscal benefits for an organization, but we must also pay attention towards the aspects that promote diversity at workplace. A comprehensive organizational culture would lead to job satisfaction among female employees leading to higher retention and increased organization commitment. Schwartz (1989) revealed that women at higher positions were two and half times more likely to leave their employment than men, not because of family obligations but due to dissatisfaction with their career prospects. In a longitudinal study of mid-career MBAs, Schneer & Reitman (1994) reported that gender did not affect the work environment during initial careers, but mid-career women compared with their counterparts were not much satisfied, on lower salaries, feeling less appreciated by their bosses, and experiencing more discrimination.

Diversity Management

"Diversity management refers to the pursuit of organizational productivity and profitability by means of an organizational culture that encourages diverse values and cultural backgrounds"(Lim, 2010). To endorse, employ, maintain and compensate minority and female employees the devotion, loyalty, obligation, dedication is much needed from the organization(Thomas, 1991). Mor Barak (2000) defines diversity management as a way to achieve profitability by leveraging the organizational culture with diverse values and cultural background. Globalization has brought changes in the composition of the workforce and therefore it is a vital issue for every kind of organization be it profit or non-profit organization. (Mor Barak, 2017). As diversity management has increasingly been engaged as a tool for addressing unemployment, poverty, crime, and environmental issues, it has also become more important for organisations to consider the role of diversity management in their organizations.

Benefits

Managing diversity can create a competitive advantage. Organizations cannot survive in this era of globalization without the diverse workforce. Organizations should critically evaluate the benefits of the diverse workforce and form such strategies that enhance the diversity and can make the organization competitive both internally and externally (Evans, Henry 2007). According to a study by Watson et al in 1993, culturally diverse groups relative to homogeneous groups are more effective both in the interaction process and job performance; these benefits occur after a varied group has been together for a period. Organizations with a varied workforce understand the market better and thus can offer enhanced services. (Wentling and Palma-Rivas, 2000). Recruiting, managing and maintaining diverse workforce including women and minorities will not only led to capture the niche market but can also lead to the growth and development of the society. (Mueller, 1998). As globalization is growing, diversity will help organizations to enter the international arena (Cascio, 1998). Diversity enriches creativity and innovation (Adler, 1997; Jackson et al., 1992), and produces competitive advantages (Coleman, 2002; Jackson et al., 1992). Diverse teams make it possible to boost flexibility (Fleury, 1999) and rapid response and adaptation to change (Adler, 1997; Jackson et al., 1992). Alder (2008) also listed several internal advantages of having a diverse workforce in organizations that operate on foreign land. The primary advantages she listed expand the bounds of organizational rationality through the flow of new ideas, outlooks, and elucidations. As she noted, the resulting development surges problem-solving skills, flexibility, and creativity within the organization. Though all this requires free and open interpersonal communication, 'if expanded, problem-solving, flexibility, and creativity will be the result. Organizations can obtain a wider range of strategic ideas from employees with diverse backgrounds, and such ideas can play a crucial role in meeting the needs of consumers, as well as the broader social issues that such enterprises seek to address (Cho et. Al. 2017) Prior research shows that diversity promotes organizational creativity and innovation, which in turn affects organizational growth (Bell, Villado, Lukasik, Belau & Briggs, 2011).

Challenges

Discrimination occurs when someone is denied opportunities based on a personal characteristic that has no bearing on job performance. Racial and ethnic minorities may have distinct perspectives, customs, or approaches to communication in the workplace. These differences can pose challenges for organizations that seek harmonious employee relations. Such issues can be addressed through appropriate training and education. Religious diversity in the workplace elicits freedom of expression issues and can lead to conflicts over employee leave for religious observances. Religious discrimination suits are on the rise, so this is another important area for managerial attention. Conflicts arise when two or more individuals or groups do not see eye to eye on a situation. With the diversity, conflicts arise largely due to varied opinions, ideas, beliefs and assumptions including unawareness. This can create negative dynamics such as stereotyping and culture clashes (White, 1999). And this ultimately leads to increase in the cost of training programs. The training is provided to all staff of the organization so as to educate them to accept the personalities and ideas or opinions of others. Such programs also train how to deal with conflicts and prejudice in a professional and appropriate manner (White, 1999). Alder (2008) added specific communication-related drawbacks of cultural diversity in the workplace. Among those were increased ambiguity, complexity and confusion due to miscommunication. The effects of cultural diversity on problem-solving, decision-making, and consensus- building each of which stands or falls on the quality of the communication process. Discrimination causes huge harm and is illegal in most cases. HR specialists say #MeToo has increased awareness of harassment, made it easier for victims – female or male – to report offensive behaviour and prompted enhanced employee training, especially among larger corporations. But they also raised various destructive effects. The perplexity about workplace etiquette and, paradoxically, the possibility of fewer opportunities for women, as male executives struggle to adjust to the new rules of engagement. Such perplexity results from the cultural differences in a country as vast and diverse as the United States and thus leads to negative effects. What may be considered as a pleasant hand shake or compliment in one setting could be interpreted differently in another. A poll directed this year by LeanIn.org and Survey Monkey found nearly half of male managers are uncomfortable participating in common work activities with a woman, and senior-level men are 3½ times more apprehensive to have a work dinner with a junior-level woman – and five times more hesitant to travel with one for work – than with a junior-level man. Male managers also have grown significantly more uneasy mentoring women than before, the survey said. Maybe for the first time, employees have learnt to distinguish between flirting, sexual assault and sexual harassment (Christine Naschberger). #MeToo helped to notably raise the understanding of unacceptable behaviour in the workplace and the movement helped many women to break the silence and speak up. Organizational workplace and culture have been drawn-out to hold up as several prominent companies' incidents have pointed out in the past year. Organizational cultures do often change very gradually, especially if no specific actions are taken. Every desired change demands concrete actions and a follow-up plan with clear HR indicators. (Forbes, 2018) A survey conducted by BBC revealed that despite 50% of women experiencing sexual harassment at work, 63% didn't report the incident. Reporting sexual harassment could lead to further harassment from co-workers, isolation, or even dismissal. Whatever reason, employers need to encourage a culture where women feel comfortable reporting incidents of sexual abuse. There are various ways be it groundbreaking and unimaginative, available to employers which may include launching such corporate policies that shields whistle-blowers and provides them with some anonymity while more advanced approaches include autonomous whistle blowing phone lines.

Discussion

This study explored workforce diversity, diversity management, and benefits and demerits after reviewing various literatures. This diversity was identified at both surface (e.g., gender and race/ethnicity) and deep levels (e.g., education and sexuality) implying that we need to value and embrace diversity. To acclimate diversity in a flexible and properly manner could be a challenging task. Managements need to form appropriate strategies so that diversity can be promoted, and benefits of the diversity can be reaped properly. Leadership plays a significant role in governing social enterprises. The author also illustrated that having diversity in leadership enables the implementation of diversity management policies (Sangmi, Ahraemi, Barak, 2017). Diversity has potential drawbacks as well as benefits. It encourages creativity, innovation and agile culture which in turns leads to growth and development of the organization. To prevent or resolve the potential drawbacks of the diverse workforce organization should introduce such policies and take such actions that are harmonious for the wellbeing of the organization. Such actions and policies could be diversity committees, work-life balance, trainings etc. Kellough and Naff (2004) emphasized the important role of leadership in managing diversity, and leader can play a crucial role in implementing diversity management programs. Alice Hallsworth, solicitor at Child & Child of Globalaw, reasoned that further transparency is needed within organizations in 2019 to create a workplace culture where victims feel truly confident about speaking out. The prohibition of non-disclosure agreements will prevent companies from being able to quietly shut down inappropriate behaviour.

Conclusion

Diversity policies and systems be initiated and implemented when hiring, evaluating, and empowering workforce. Affirmative action's, diversity committees, work-life balance, and diversity training for employees are proposed as potential diversity management policies. As prior studies on discrimination and minorities have proposed, social support policies can also consider managing diversity (Cheon & Chung, 2016; Ween & Hanley,2016). Cox (1991) suggested the use of focus groups, support groups and informal networks between those of the various cultures in the organisations as good ways of breakdown barriers and building the relationships that fosters open communication. It is natural that tension will arise among individuals in a diverse workforce, so it's important for employees to have diversity management policies in place. Most large organisations have taken steps to promote diversity awareness and understanding. These diversity initiatives contribute to a progressive work environment that is free from discrimination.

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UNDERSTANDING OF INFORMATION TECHNOLOGY ACT FOR E-GOVERNANCE IN INDIA

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Abstract

Information Technology Act has introduced E-Governance by facilitating electronic filing of data and documents. Chapter III of Information Technology Act, 2000 has defined the emergence and existence of E-Governance. This paper presents a brief to understand the defined structure of E-Governance provided in IT Act 2000 with respect to different sections falling under IT Act.

E-Governance

Chapter III of IT Act 2000, has introduced the foundation of legal recognition of paper-based documents and concepts into recognised and acceptable electronic form under Government policy. E-Governance is such a government which works with aid of electronic media. This type of government makes their policies flexible, accessible to general public in terms of effective service delivery by making massive use of Information Communication Technology (ICT) and its related web-based services. This kind of government aims to fulfill needs of layman in fastest mode of time. It involves e-filling of documents, namely uploading, downloading legal assets, digital certificates, digital signatures and other vital documents over internet. All ongoing transactional activities take place under secured environment that includes cryptography, ensuring user end security with one time passwords. It eases functionality of public sector with use of ICT, encourages citizen participation in decision making process and improves service delivery. This makes the Government more reliable, accountable and fast.

Indian Government is also updating its policies and changing its spectrum to E-governance. This is implemented at many places and states. Food and Drug Administration, Government of Maharashtra has adopted E-Governance by issuing drugs and cosmetics licenses at various manufacturing and food industry levels online under Drugs and Cosmetics Act. Income Tax Department, Government of India has initiated issuing Income Tax Certificates by following procedures of e-verification of return using Adhaar OTP, Demat Accounts and Net Banking. The linked PAN and Adhaar details help to retrieve the Cibil score of the tax payers to banks and ombudsman authorities. Some of the Indian states like Tamil Nadu, Himachal Pradesh, Jharkhand, Maharashtra, Delhi, Madhya Pradesh, and Haryana have started the initiatives of filling a police complaint online, namely the E-FIR. This measure is very useful for deprived social groups of the society i.e. women, minorities and economically backward classes. In field of education our Government has launched education portals and MOOCS; also Universities across India are provided the guidelines to implement digitization of admission formalities. Indira Gandhi National Open University (IGNOU) has already implemented online admission mode of learning, where a student can go to their portal, have a look at various available courses and can enrolling them online.

Such an E-Government fastens the work; it integrates the nation and thus binds the citizens to work in collaboration towards Nation Development.

Functional Equivalence Approach

Defined under Chapter III, this approach serves the purpose to replace the paper-based requirements with that of those functions which could be fulfilled through electronic medium of trade techniques. For instance, if a contract is signed digitally using digital signatures and sent over electronic medium by issuing a digital certificate, it would be considered as a valid document. And this document will have the same weightage as that of a paper based contract document. This digital contract function is the same in terms of readability, traceability with legal sanctions as a paper-based contract. Section 2(R) serves the same purpose with reference to information generated, sent, retrieved, accessed over a magnetic, micro-chip, memory or any similar devices. Section 4[4] of this Act provides fulfilment of any document to be typewritten or printed in electronic format. Section 5[5] is based on recognition of digital signatures. This states that any information or matter shall be authenticated by affixing digital signatures. These digital signatures and certificates must be issued by authorized legal firms.

Adjudication

The IT Act, Chapter IX provides the details of adjudications for such E-Government. It provides detailed mechanisms and procedures to appoint concerned adjudicating officers. It also provides controller under various provisions that constitutes a Cyber Regulations Appellate Tribunal (CRAT).

Section 46 has enlisted the powers, functions and appointment procedures for an adjudicating officer. The requirement criteria for appointment is given under sub-section (1) which defines that Central Government should appoint any officer holding rank of Director at Government of India or under some State Government adjudicating bodies.

Cyber Regulations Appellate Tribunal

The Central Government, under Chapter X of IT Act, by notification, establishes one more tribunal known as Cyber Regulations Appellate Tribunal (CRAT). This tribunal has one presiding officer. The person holding the rank of a Judge of High Court, who held a post as Grade 1 officer under Indian Legal Service for minimum of three years can only be appointed as a 'presiding officer'. Section 57 gives the jurisdiction rights and controlling authorities to them. Section 58 provides a special right which states that CRAT is not bound by any procedures under any code of Civil Procedure, 1908. Section 62 provides the CRAT the right to question the appeal of high court. Therefore, the order of CRAT becomes quite wide.

Penalties and offences

Chapter IX and XII deal exclusively with the matter of cyber crimes, which fall under E-Governance. These chapters enumerate various penalties, offences and civil consequences.

Penalties

Section 43 defines the penalties pertaining to loss or damage of data related to computer system. This deals with person who is involved in data damage over a computer network or a system. Sections 44 in return thus looks for the failure of data recovery, failure to retrieve the lost information, returns, etc. Section 45 contains the clause for such cyber crime. Some such clauses are:

A. Unauthorized accessing to a computer network or system.
B. Copying, extracting or downloading of any data from computer information system, network system and database. This includes removal of important data leading to data theft. This also includes infringement of Copyright Act like downloading of an unreleased movie or music.
C. Introduction of virus, malware, Trojans to any computer system or network.
D. Damaging or causing loss of data, by deleting crucial files from hard disk.
E. Denying or causing Denial of Access to any person on their own system.
F. Charging extra services and tempering the computer network.

Offences

Chapter XII makes provision of punishment of fine, imprisonment or both for enumerated various cyber crimes and penalties. Section 85 of this Act, charges the guilty for the conduct of business, company or some organizations. It also deems that a director, manager, if proved guilty, falls under liability of punishment. Section 79 deals with Hacking offences under network security providers. Section 78 gives the power of investigation to the Police Officer under cyber crimes. Section 80 enables the police officer to enter the search operations for such crimes.

Amendments to Indian penal code (IPC)

Thus with emergence of E-Governance, its statuaries and impact of cyber crimes, many amendments have taken place in Indian Penal Code (IPC).Section 91 of IPC has been amended to include 'electronic records'. It has made provision to move from paper-based to paper-less, so as to minimize the cases of forgery. IPC, 1860 has amendment in section 29A by section 2(1)(t) of IT Act to introduce definition of 'electronic record'. In purview of above some of amendments are:

A. ***Offences to public servants*** – This was taken cared in Section 167, which enables the punishment for the offence in case of framing or translating an electronic record by a public servant with intention of damage and injuries.

B. ***Offences to contempt of the lawful authority of public servants***– sections 172[3], 173[4] and 173[5] have been amended for electronic records. It deals with contempt of the lawful authority to enforce obedience.

C. ***Offences relating to evidences*** – Section 463 makes provision for forgery by electronic record. Section 464 is amended for making of false document and affixing digital signatures to it. Section 2(1)(d) of IT Act has been amended with same effects in IPC for sections 466[8], 468[9], 470[10], 471[11] and 474[12] for forgery and fraudulent of affixing digital signatures.

Section 92 provides amendments to the Indian Evidence Act, 1872. Under this important amendments are:

A. Section 34[13] and 34[15] that include preserving of electronic documents as evidence.
B. Section 47A has been inserted with respect to issue of Digital Signature Certificate by relevant Certifying Authorities.
C. Sections 65A and 65B provide the bases for contents of electronic records.
D. Section 67A and 73A are related to verification of digital signatures.
E. Section 90A allowed keeping the electronic records to be five years old.

Conclusion

In this paper we have tried to understand the objects and reasons for the IT Act, the applicability of IT Act in forming a powerful, possessive and in form, the E-Government. We have seen how it deals with legal recognition of electronic records, digital signatures and digital certificates as an alternative to paper-based documents and records. We also discussed the penalties and offences, and related amendments made in Indian Penal Code wherever required. The purpose of these amendments is to redefine various offences under this digital and technically sound era.

The adjudicatory mechanisms are a powerful medium in controlling the regulatory authorizes to an E-Government.

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Section 172. (Indian Penal Code) – Absconding Services

Section 173. (Indian Penal Code) – Preventing Services

Section 175. (Indian Penal Code) – Omission to produce documents

Section 466.(Indian Penal Code) – Forgery of record of public register.

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