



MET MANAGEMENT RETROSPECT

... A Refereed Biannual Management Research Journal

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न भातृभाज्यम् नच भारकरी ॥
व्यये कृते वर्धते एव नित्यम् ।
विद्याधनं सर्वधन प्रधानम् ॥

Knowledge can neither be stolen by a thief,
nor snatched by king.
It is indivisible unlike ancestral property,
It never burdens the bearer,
It multiplies manifold when offered to others.
Knowledge is the supreme form of wealth.

विद्ये विना मती गेली, मती विना नीती गेली,
नीती विना गती गेली, गती विना वित्त खचले,
इतके अनर्थ एका अविद्येने केले
- महात्मा ज्योतिराव फुले

Lack of knowledge leads to indiscretion;
Indiscretion leads to lack of ethics
Lack of ethics leads to absence of direction and momentum;
Absence of direction and momentum results in bankruptcy;
Such is the HAVOC caused by the lack of knowledge.
- Mahatma Jyotiba Phule

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The editors and editorial board with great pleasure place before the readers the new issue of MET Management Retrospect, a refereed bi-annual management research journal. The research contributions by the scholars have made the journal enrich. The journal has diversified areas covered under its ambit giving maximum option for the research scholars. We thank all the authors and editors for their contribution.

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A study on investor's perception regarding various investment avenues available at the stock market in today's digital world

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Abstract:

A study on investors perception regarding various investment avenues available at the stock market was done with a primary objective to know various options available in the Capital Market to invest for long term also get knowledge about investor's perception regarding investment in stock market. It also explored the factors that influences customer to make investment choice in capital market and to know the satisfaction level of investors with respect to return of various investment avenues. For this research a questionnaire was developed & a survey was done in Ahmedabad city for getting the data from respondents for different perception regarding various investments avenues available at the stock market. A sample of 101 investors was taken for the purpose of the study.

Key Words: Indian Stock Market, National Stock Exchange (NSE) , Bombay Stock Exchange (BSE), Investment

INTRODUCTION:

A securities exchange is a place in which long term capital is raised by industry and trade, the legislature and nearby specialists and it is viewed as capital market. The cash gets from private investors, insurance organizations, benefits finances and banks and is typically masterminded by issuing houses and shipper banks. Stock trades are additionally part of the capital market which gives a market to the offers and credit that speak to the capital once it has been raised. Securities exchange is where the securities can be sold and acquired at a concurred cost. Indian securities exchange is the most established stock exchange consolidated in 1875. The term speculation alludes to the dedication of assets at show in foresee of some positive rate of return in future

course of time. There are three sorts of investors to be specific preservationist financial specialists, direct and forceful speculators. There are additionally extraordinary roads accessible to contribute for financial specialist's to be specific share debentures/securities/ADRs/GDRs, common assets, corporate securities, equity shares, preference and so on. The investor can get training about their venture from monetary establishment, money related markets, media and so forth.

National Stock Exchange (NSE)

For the setting up of the Indian economy, it was found for the general population of the Indian securities exchange exchanging framework comparable to the universal benchmarks. Based on the suggestions of powerful Pherwani Committee.

The National Stock Exchange was built up in 1992 by Industrial Development Bank of India (IDBI), Industrial Credit and Investment Corporation of India (ICICI), Industrial Finance Corporation of India (IFCI), all others Insurance Corporations, There are chosen business banks and others.

The National Stock Exchange (NSE) is India's driving stock trade covers all the distinctive urban areas and towns everywhere throughout the nation. It was set up by driving organizations to give a cutting edge, completely mechanized screen-based exchanging framework with national reach to all the Indian individuals. The Exchange has realized unparalleled straightforwardness, speed and effectiveness, wellbeing and market honesty. It has set up offices that fill in as a model for the securities business as far as frameworks, practices and methods for exchanging the share trading system. Trading at NSE can be classified under two broad categories:

- ❖ Wholesale debt market
- ❖ Capital market

Bombay Stock Exchange (BSE)

The Bombay Stock Exchange is one of the most seasoned stock trades in Asia and built up in Mumbai. It was built up as "The Native Share and Stock Brokers Association" in 1875. It is the principal stock trade in the nation to get lasting acknowledgment in 1956 from the Government

of India under the Securities Contracts (Regulation) Act, 1956. The Exchange fundamental Moto and part in the advancement of the Indian capital market is generally perceived and its list to the individuals from the capital market. In the course of recent years, BSE has encouraged development of the Indian Corporate part by giving it an effective capital rising stage. The value showcase capitalization of the organizations recorded on the BSE was US \$1.63 trillion as of Dec. 2010.

Investment

The word can be described in many ways according to different theories from different people and principles. This term can be used in a number of contexts. There are different meanings of "investment" are more alike than dissimilar. So according to me investment is the application of money for earning more money. Investment also meant that savings or savings made through delayed consumption. There are number of economics gives definition for that, investment is the utilization of resources in order to income level increases or production of output in the future is also increases. An amount deposited into a bank or machinery that is purchased in anticipation of earning income in the long run is both examples of investments.

Finance professionals define an investment as money use for buy the financial assets like stocks, bonds, bullion, real properties, and precious items.

Characteristics of an investment decision:

- ❖ Generally in charge of business cycles.
- ❖ The speculation prompts obtaining of a plot, house, or offers and debentures.
- ❖ Real determinant of monetary development.
- ❖ Self-ending and self-financing

Principles of investment

As per the study on Investing Principles Fundamental to Successful Outcomes

by KenFaulkenberry three basic principles serve as the foundation for the investment approach which are as follows:

- Focus on the long term

The investment is for income in future so for that investment more focus on long term investment so that in future from those investments there is more income generated.

- Diversification is vital

Investment diversification in small no provides you to enormous benefits. It also means that five investments are better to the two investments.

- Maintain a margin of safety

If you buy an asset for less than its real value you have a total no of margin of safety with you. A low price is nothing but your greater upside appreciation.

LITERATUREREVIEW:

Bhardwaj (2003) has expressed the writing on globalization; He found the inescapability of the west's impression of the world effect on Indian financial specialists that influences the patterns in investor's decision. They are immensely influenced by the west's perspectives thus changes in Indian patterns happen.

Shrotriya (2003) conducted a survey on investor preferences in which he delineated the linkage of speculation with the factor so considered while making venture. He says "There are different variables and their linkage too. These elements help us how to guarantee wellbeing, liquidity, capital gratefulness and tax cuts alongside returns."

Mayank (2009) has analyzed the part of two imperative powers - the regulator and the capital market as determinant of outside back on the move economies investigations the changing example and future outline of outer fund to India and surveys the part of outer back. Under this structure, the investigation assesses current Indian corporate administration hones in light of outside back.

Tarak Paul and Sitesh Bajaj (2012) found that understanding the level of mindfulness about value showcase and the statistic profile of offered value speculators in light of essential information, optional information and the information investigated by utilizing SPSS. The creator reasoned that the majority of the financial specialists' technique normal levels of

mindfulness about value advertise. Mindfulness projects should plan to enable value to advertise as a speculation opportunity and to make individuals mindful of its long haul benefits. In this esteem, broking houses must to assume a crucial part and demonstrate the speculators in grabbed the correct offers at the right time.

SonaliPatil (2014) discovered that the examinations in light of individual meetings with salaried individuals, utilizing an organized poll really, the present investigation recognized the favored venture roads among the individual financial specialists utilizing self-evaluation test. The scientist has broken down that salaried representatives estimated the security and also great quantifiable profit on standard premise. Respondents know about the speculation roads accessible in India with the exception of female investors.

Mishra(2015) clarified that this examination meant to research impression of financial specialist towards common assets with venture to every part of the essential parts of shared assets influencing view of speculators and it inspected distinction of view of huge and little financial specialists in light of investigated factors. Little financial specialists concentrated on expense forms and reserve funds however extensive speculators expect future return. In this manner shared store organizations must give due hugeness to these size for their survival and development in Indian setting.

Priti Mane (2016) discussed the client recognition with respect to the common subsidizes that the plans they favored, the plans they are picking, the purposes for such choices. This examination managed distinctive venture choices, which individuals incline toward alongside and separated from common assets, as postal sparing plans, repeating stores, securities, and offers. Infer that common reserve connected with share market and speculators are not taking counsel from expert guide to lead them for their interest in common store so it makes the trouble to choose the shared reserve design great for them.

Objectives of the study:

The study has been undertaken in order to achieve the following objectives

- To know various options available in the Capital Market to invest for long term
- To know investor's perception regarding various avenues available for investing in stock market.

- To study the factors that influences customer to make investment choice in capital market.
- To know the fulfillment level of investors with respect to return of various investment roads.

RESEARCH METHODOLOGY:

Data Collection:

Information has been collected from both Primary and Secondary Data.

- Secondary sources- Secondary data are those which have already been collected by person and which already had been passed through the statistical process and collect the data on bases of same topic. The secondary data was collected through web sites, books and magazines and many more documents which are giving the data.
- Primary sources- Primary data are those which are fresh and are collected for the first time, and thus happen to be original in character from person to person. The primary data was collected through direct questionnaires(open ended and close ended questionnaires)

Sampling unit – The target population must be defined that has to be sampled. The sampling unit of research included students and professional traders who are residing in Ahmedabad city.

Sample size – This refers to number of respondents to be selected from the universe to constitute a sample for data collection. The sample size of 101 Investors was taken.

DATA ANALYSIS & INTERPRETATION:

H₀₁- There is no relationship between Income of the respondents and awareness of investments.

Income	shares	mutual fund	Debentures	Bonds	Derivatives	Row Totals
below 250000	28 (24.91) [0.38]	35 (33.66) [0.05]	2 (3.37) [0.55]	2 (3.37) [0.55]	1 (2.69) [1.06]	68
between 250000 to	5 (5.86) [0.13]	8 (7.92) [0.00]	1 (0.79) [0.05]	1 (0.79) [0.05]	1 (0.63) [0.21]	16

500000						
between 500000 to 1000000	3 (4.03) [0.26]	5 (5.45) [0.04]	1 (0.54) [0.38]	1 (0.54) [0.38]	1 (0.44) [0.73]	11
above 1000000	1 (2.20) [0.65]	2 (2.97) [0.32]	1 (0.30) [1.66]	1 (0.30) [1.66]	1 (0.24) [2.45]	6
Column Totals	37	50	5	5	4	101 (Grand Total)

The chi-square statistic is 11.5938. The p-value is .478828. The result is not significant at $p < .05$.

Interpretation: since the result is not significant at $p < 0.5$ therefore we accept the null hypotheses & There is no relationship between age of the respondents and awareness of investments.

H₀₂:- Age of the respondents is not associated with avenues of stock market.

Age	shares	mutual fund	Debentures	Bonds	Derivatives	Row totals
18-30	33 (31.68) [0.05]	44 (38.81) [0.69]	1 (3.17) [1.48]	1 (3.17) [1.48]	1 (3.17) [1.48]	80
31-45	5 (4.36) [0.10]	3 (5.34) [1.02]	1 (0.44) [0.73]	1 (0.44) [0.73]	1 (0.44) [0.73]	11
46-60	1 (1.98) [0.49]	1 (2.43) [0.84]	1 (0.20) [3.25]	1 (0.20) [3.25]	1 (0.20) [3.25]	5
Above 60	1 (1.98) [0.49]	1 (2.43) [0.84]	1 (0.20) [3.25]	1 (0.20) [3.25]	1 (0.20) [3.25]	5
Column Totals	40	49	4	4	4	101 (Grand Total)

The chi-square statistic is 30.646. The p-value is .00223. The result is significant at $p < .05$.

Interpretation: since the result is significant at $p < 0.5$ therefore we accept the alternative hypotheses & thus Age of the respondents is associated with avenues of stock market.

H0₃:- There is no relationship between genders with avenues of stock market.

Gender	shares	mutual fund	Debentures	bonds	Derivatives	Row Totals
male	31 (29.63) [0.06]	37 (37.58) [0.01]	3 (2.89) [0.00]	1 (1.45) [0.14]	1 (1.45) [0.14]	73
female	10 (11.37) [0.16]	15 (14.42) [0.02]	1 (1.11) [0.01]	1 (0.55) [0.36]	1 (0.55) [0.36]	28
Column Totals	41	52	4	2	2	101 (Grand Total)

The chi square statistic is 1.2655. The p-value is .867201. The result is not significant at $p < .05$.

Interpretation: since the result is not significant at $p < 0.5$ therefore we accept the null hypotheses & thus There is no relationship between genders with avenues of stock market..

FINDINGS OF THE STUDY.

1. There is no relationship between age of the respondents and awareness of investments
2. Age of the respondents is associated with avenues of stock market.
3. There is no relationship between genders with avenues of stock market
4. The respondents do not invest in a single avenue of stock market. They prefer different avenues and maximum investors prefer to invest in shares, mutual funds & debentures.
5. Highest number of investor's wants their investment grow at an average rate.
6. The investment decision taken by investors is influenced by their own decision and through friends & relatives and also help by agents.
7. Different factors considered by investors while investing are return, risk, tax benefits, capital appreciation and the most prominent factor is the return on any investment avenue.
8. Most of investors invest up to 10% of their annual income in stock market of different avenues.
9. More number of investors invests in different avenues on monthly basis.

10. The investors investing in different avenues are highly satisfied with the return generated by their investment option.
11. More number of investors has no other investment policies in stock market.
12. the most important factor is Return which was influenced the decision regarding investment by the respondents.

Conclusion:

The nature of investment differs from individual to individual and is unique to each one because it depends on various parameters like future financial goals, the present & the future income model, capacity to bear the risk, the present requirements and lot more. As an investor progresses on his/her life stage and as his/her financial goals change, so does the unique investor profile. Maximum investors are aware of all the investment options. Investors do not invest in a single avenue. They prefer different avenues and maximum investors prefer to invest in shares, mutual funds & debentures. The investment decision of investors is influenced by their own decision and through friends & relatives and also get suggestion from agents. Majority of investors invest below 10% of their annual income.. The most important factor is Return which influenced the decision regarding investment.

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A study on decision making skills between male and female leaders

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Abstract:

There are only few who are destined to become a leader; rest are the followers. A leader is rich in decision making style; whether it is expected or sudden situations. While taking a decision a leader has to evaluate the pros and cons of the consequences thereon. However, despite the inherent risks, leaders take the decision. The great leaders are known for taking decisions, which seemed inappropriate in the first instance; later, their decisions are appreciated by all. This paper is an attempt to explore the difference in decision making style between male and female leaders working in various corporate sectors.

Keywords: Decision making, style, male, female, leader

INTRODUCTION:

Leading is the most crucial element in an organization. In a dynamic and ever changing environment, corporate leaders have to take many decisions which directly affect the organization. While managers lead the teams in all situations, at times their decisions are questioned. However, an ideal leader thinks well before the decision making. There are numerous examples where a business leader has taken a strategic decision and has proved his/ her mettle. The focus of leaders is on long term impact of the decision, which others may not be able to foresee. Ivancevicti et al (1993) define leadership as the relationship between people where leader attempt to influence the members for accomplishment of goals. According to Davis (1967), leadership refers to the ability to convince others to seek out distinct objectives earnestly. Leaders enhance the personal and group improvement, share inspiring vision and morale for important goals (Bass, 1985). These leaders like Mahatma Gandhi, Nelson Mandela, Martin Luther King are revolutionary leaders, who have been followed by billions of people across the world. Successful organizations are characterizing by dynamic leadership (Hersey & Blanchard, 1977). In a typical decision making process, nowadays, there is much uncertainty. All the

decisions are having innate risks and challenges. In the wake of such situations, the best leaders are those, whose decisions are appreciated by many. The most practical oriented and far-sighted decisions are always remembered from generations to generations. The fate of the entire organization depends on a single decision, which is taken by the leader.

LITERATURE REVIEW:

Eagly et al. (2003) studied transactional, transformational and laissez-faire styles of leadership and found that in terms of gender, the difference is insignificant. The other features of transactional along with laissez-faire leadership were more observed in male leaders. Neubert and Taggar (2004) explored strengths and weaknesses of women going to the higher positions. Relational aspect of leaders' genuineness was studied by them.

Hassan (2008) delved into gap in literature related to gender and leadership behavior in community development since contribution of women was seen more but without much documentation. Data analysis results have revealed that style shown by women leaders and leadership understanding is largely collaborative. Ahmad and Nawaz (2010) explored the leadership styles in teachers teaching in colleges and universities. These were employed in varying occupations and organizational backgrounds. This study tried to find and compare the leadership style of teachers working in public and private sector colleges and universities. The analysis showed that all teachers exhibited transformational along with passive leadership styles in the same degree.

Kent et al. (2010) studied transformational leadership behavior to differentiate between males and females. The leaders' followers ranked the usage frequency in terms of transformational leadership behaviours across varying classes. Results indicated that there was no difference in this regard in men and women. Khan et al. (2012) observed the function of transformational and transactional leadership styles among managers in Pakistan. By using Leadership Questionnaire and Innovative Work Behavior Scale, data were analyzed and results showed that both styles completely forecasted innovative work behavior.

Deveshwar and Aneja (2014) the study explored the attention on the most popular leadership style used currently. This study focuses on the existing literature on transformational and transactional leadership style and they also examined cross-cultural dimensional model given by Hofstede. In this study they focus on two type of objective- Comparative study of Transactional

and Transformational Leadership Style, Determine the cultural factors affect the leadership style. Naga (2015) studied about values and attitude of women being a leader. This research focused on the morals and attitudes of women as a leadership positions. Szymanska and Beth (2018) explored the differences in evaluations of job performance between male and female managers by the immediate supervisors and peers. Results suggested that while male peers rate female managers' job performance significantly lower; female peers do not discriminate between genders in their performance evaluations.

RESEARCH METHODOLOGY:

Objective: To study the difference in decision making style between leaders working in private and public sector organizations.

Hypothesis:

H₀₁: There is no significant difference in Decision making skills between male and female leaders as perceived by leaders

H₀₂: There is no significant difference in Decision making skills between male and female leaders as perceived by subordinates

Data Collection: Secondary data was collected from books, journals, Internet. Primary data were collected from leaders working in selected private sector companies in Bhopal and Indore. The respondents were 100 male and 100 female leaders working in middle level positions. Based on Likert scale of agreement, a self administered questionnaire was developed, where responses of leaders and their subordinates towards decision-making skills were recorded. Respondents were from service as well as manufacturing sector. For data analysis t-test was applied. Prior to t-test, reliability of instrument was established through Cronbach's alpha and was considered adequate.

FINDINGS OF DATA ANALYSIS:

Table 1: Group Statistics for Decision Making Skills between male & female leaders as perceived by leaders

	Gender	N	Mean	Std. Deviation	Std. Error
Clear Instruction Decision	Male	100	3.98	.985	.098
	Female	100	3.66	1.224	.122
Proper Commu Decision	Male	100	3.37	1.031	.103
	Female	100	3.24	1.055	.106
Too Much Time Decision	Male	100	3.50	1.059	.106
	Female	100	3.44	1.048	.105
Develop Structure Decision	Male	100	3.59	1.093	.109
	Female	100	3.48	1.096	.110
Align Personal Org Goals	Male	100	3.62	1.153	.115
	Female	100	3.36	1.235	.124

The mean for each of the two groups in the “Groups Statistics Section” shows that both males & females have approximately similar opinion in case of Decision Making Skills. The mean values of all attribute is close to 4 which means leaders have shown their agreement towards the attribute like “I instruct clearly to my subordinates for taking an immediate action”, “I communicate properly regarding the implementation of decision”, “I generally take too much time before making the decisions”, “I develop structures to foster participation in decisions” etc. The standard deviation in all the cases is near to 1 which indicates less deviation in leader’s opinion.

Table 2:

Independent Samples Test for Decision Making Skills between male & female leaders as perceived by leaders

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	T	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Clear Instruction_ Decision	Equal variances assumed	8.619	.004	2.037	198	.043	.320	.157	.010	.630
	Equal variances not assumed			2.037	189.273	.043	.320	.157	.010	.630
Proper Commu_ Decision	Equal variances assumed	.000	.988	.881	198	.379	.130	.148	-.161	.421
	Equal variances not assumed			.881	197.896	.379	.130	.148	-.161	.421
Too Much Time Decision	Equal variances assumed	.016	.900	.403	198	.688	.060	.149	-.234	.354
	Equal variances not assumed			.403	197.977	.688	.060	.149	-.234	.354
Develop Structure_ Decision	Equal variances assumed	.000	.984	.711	198	.478	.110	.155	-.195	.415
	Equal variances not assumed			.711	197.998	.478	.110	.155	-.195	.415
Align Personal Org Goals	Equal variances assumed	.453	.502	1.539	198	.125	.260	.169	-.073	.593
	Equal variances not assumed			1.539	197.064	.125	.260	.169	-.073	.593

The above table shows the Levene's test of equality of variance & t test. The P value of Levene's test is higher than 0.05 for 1st & 5th attribute of Decision Making Skills, so equal variance are assumed for these cases. The respective p values for t test are 0.043 and 0.125. The P value of Levene's test is less than 0.05 for 2nd, 3rd & 4th attribute of Decision Making Skills, so equal variance are not assumed for this case, the respective t test p value for the same is 0.379, 0.688 and 0.125. So, test is accepted for majority of the variables so overall we can say that the hypothesis1 is accepted. Hence, there is no significant difference in Decision making skills between male and female leaders as perceived by leaders.

Table 3: Group Statistics for Decision Making Skills between male & female leaders as perceived by Subordinates

	Gender	N	Mean	Std. Deviation	Std. Error Mean
Clear Instruction Decision	Male	100	3.94	1.023	.102
	Female	100	3.66	1.224	.122
Proper Commu Decision	Male	100	3.38	1.033	.103
	Female	100	3.20	1.082	.108
Too Much Time Decision	Male	100	3.36	1.115	.111
	Female	100	3.37	1.125	.113
Develop Structure Decision	Male	100	3.50	1.106	.111
	Female	100	3.39	1.171	.117
Align Personal Org Goals	Male	100	3.60	1.181	.118
	Female	100	3.11	1.392	.139

The above table provides very useful descriptive statistics, including the mean, standard deviation and Standard error. The mean scores are close to 4 which indicate that leaders irrespective of their gender similar opinion for transformational leadership attribute "Decision Making Skills" as perceived by their subordinates. The column standard deviation depicts the variability in the data which is of low degree.

Table 4: Independent Samples Test for Decision Making Skills between male & female leaders as perceived by leaders

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	T	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Clear Instruction Decision	Equal variances assumed	5.558	.019	1.755	198	.081	.280	.160	-.035	.595
	Equal variances not assumed			1.755	191.938	.081	.280	.160	-.035	.595
Proper Communication Decision	Equal variances assumed	.027	.869	1.203	198	.230	.180	.150	-.115	.475
	Equal variances not assumed			1.203	197.561	.230	.180	.150	-.115	.475
Too Much Time Decision	Equal variances assumed	.014	.907	-.063	198	.950	-.010	.158	-.322	.302
	Equal variances not assumed			-.063	197.983	.950	-.010	.158	-.322	.302
Develop Structure Decision	Equal variances assumed	.217	.642	.683	198	.495	.110	.161	-.208	.428
	Equal variances not assumed			.683	197.345	.495	.110	.161	-.208	.428
Align Personal OrgGoals	Equal variances assumed	2.723	.100	2.685	198	.008	.490	.183	.130	.850

	Equal variances			2.685	192.869	.008	.490	.183	.130	.850
	not assumed									

The p value in levene's test of equality is higher than 0.05 except in 1st attribute of Decision Making Skills. So for attribute "He/she instructs clearly to the subordinates for taking an immediate action", we will look at equal variances not assumed i.e. bottom row for t test result i.e. 0.081. For all the other attributes of Script equal variances are assumed & therefore upper row of t test will give the correct result. So, test is accepted for majority of the variables, so overall we can say that the hypothesis2 is accepted. Hence, there is no significant difference in Decision making skills between male and female leaders as perceived by subordinates.

DISCUSSION AND IMPLICATIONS:

When it comes to decision-making style, significant differences were not found between male and female leaders. One can easily acknowledge that gender has no roles to play in terms of decision making of the leaders. Typically, gender issues were being dominated; now the changes are visible to all. All it needs is the right approach to decision making with no consideration for gender issues. Prior studies by Eagly et al. (2003) and Kent et al. (2010) also support this view. Few decisions of leaders may be proven wrong; but gender has not been a distinct element in this aspect. The findings are highly significant in the notion that the rationality of the decision making process is now highly dynamic in nature. Due to many constraints in business, the scenario is highly unpredictable. In the wake of such business scene, the way decisions are taken are always considerate.

Limitation and Scope of study: The sample may appear small to represent the population in the area. There may be possibility of biasness towards selection of respondents along with time limitations. The findings of this study may not be generalized for other sectors. Further studies can be done on large sample size; more demographic variables like education and qualification can also be explored.

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Role of Technology Evolution & Innovation in Improving Farmer's Life & Loan Repayment Capabilities

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Abstract:

INDIA with, as much as, 69% of its population living in rural parts, depending on agriculture and its allied industries, is ranked 8th in Agricultural land availability, but just 52.6% of the agricultural land is only Arable. The Arable land is reducing at the rate of 0.12% on an average every year. Farmers giving up farming and moving towards cities for construction works are very common. The climatic uncertainties such as sudden flood, hail storms, excess heat, etc., which ultimately result in failure of the crop is a continuing phenomenon. Occasional bumper growth also had not made them happy as they face the heat to sell them at a profitable rate. Many a time, such excess grown farm products are thrown as waste on the roadside, as the minimum price that they get on selling does not even cover the freight charges. They suffer a lot to repay their loans and debts that were borrowed and migrates towards urban locations where they earn a meagre amount for their daily living. While politicians, businessmen, industrialists, and other elite profile people wants their generations to continue in the same profile and expand, most of the farmers do not want their sons and daughters continue farming and struggle for their future livelihood. After 72 years of independence, the gap and struggle keep increasing. Government's initiatives in the financials of the farming sector to improve farmers life has shown little change. A study is made to understand what can change farmer's life and bring in prosperity to them by taking in the perspective the various new ideas, technology and innovations that exist and are emerging relative to the agriculture sector. I feel it is appropriate to discuss digital initiatives in the farming sector when Government is also focusing on various digital initiatives for payments, subsidy benefit transfers, communication and awareness creation. Can Digital be further used in the direct operations of agriculture which can narrow the digital divide?

INTRODUCTION:**➤ The agriculture sector in India:**

Agriculture is the primary source of livelihood for about 58 per cent of India's population. Gross Value Added by agriculture along with forestry etc is estimated at Rs 17.67 trillion (US\$ 274.23 billion) in FY18. Agricultural exports from India, in total, grew at a CAGR of 16.45 per cent over FY10-18 to reach US\$ 38.21 billion in FY18. In April-August 2018 agriculture exports were US\$ 15.67 billion.

Although India is blessed with highest agricultural land, the highest number of cattle's and poultry has the highest manpower deployable in the agricultural sector, the contribution of Agricultural sector to GDP was less than 17% in FY16-17 which had fallen down continuously from above 50% at the time of independence. Globaleconomy.com reports that India has 42.74% of the population directly dependent on Agriculture, while China which is the largest producer of agricultural products is just 17.51% and Israel, which has the highest innovation in the agricultural sector, is just 1.07%. Proper consistent focus on Agriculture sector will bring prosperity to the population who are directly and indirectly dependent on the agriculture sector for their livelihood. Natural calamity, absence of proper land records, absence of insurance coverage, timely processing of insurance claims, frequent claim rejections, lack of coverage of government schemes uniformly across the country, illiteracy, lack of awareness, absence innovative technologies to support farmers, lack of funds, lack of rural infrastructure facilities, absence of timely credits to farmers, absence of timely support to protect farmers in selling their produces, absence of early warning system on natural calamities absence of disaster management preparedness and disaster management training, etc., are the growing challenges since independence without any concrete solution.

➤ Government Action and Results on Digitization of Rural :

The state of Government participation to elevate the farmers from trouble is highly dependent on the extent of cooperation between the State and Central Government. There is no uniformity in the actions at the state level that percolates till the village panchayat level. Many of the digitization initiatives like web applications, mobile based applications are not maintained and monitored after the first few years of implementation. Not all state governments participate in the central government initiatives. Most of the government schemes are politically influenced

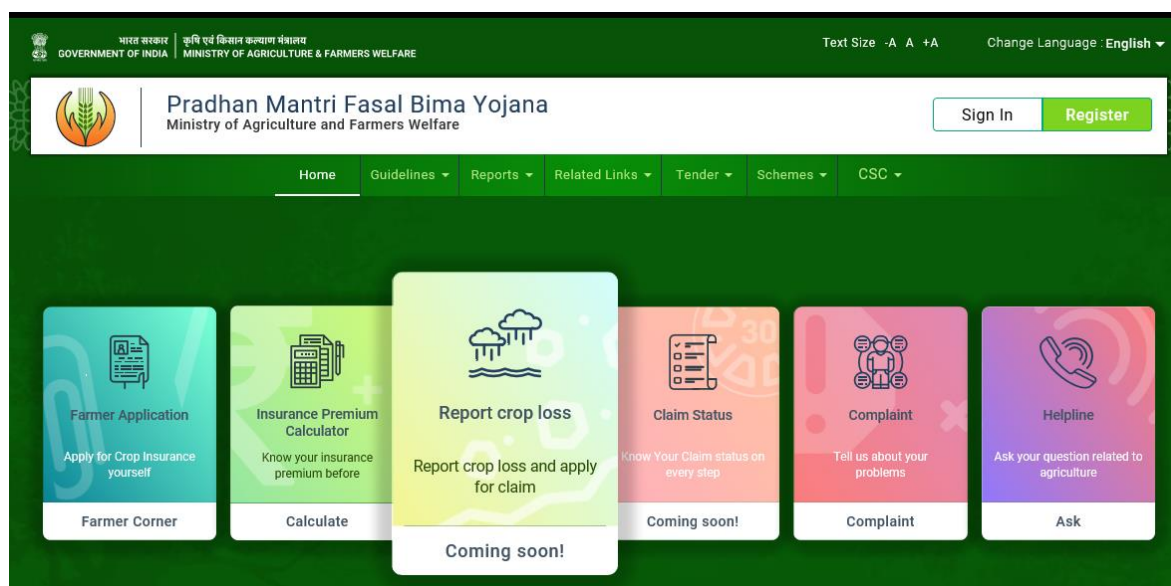
and are not consistently implemented across the country. Government authorities blame it on the paucity of funds allocated for these initiatives and the lackadaisical attitude of the government officials adds further to the pains and forces farmers to stay away from such initiatives of the portals of government meant for rural development are still in under construction state. The National Agriculture Market site meant for cashless transparent trading of agricultural commodities had just included 585 mandis across 13 states of India out of 7557 APMC regulated mandis and another 20000 small and large mandis across India

➤ **Training Farmers.**

While it is accepted universally, that a basic education or practical training is required for all the jobs and profiles to maintain and improve the skills and productivity, Agriculture is the only profile which is an exception and most of the time the farmer continue to do it as a family occupation without any special training and the latest trends and technology. Even governments training programs are not so attractive to pull enough farmers to go for the training. Most of them consider these training as publicity program and try to leverage mileage for their personal fame and popularity. Ultimately the farmer continues to suffer a failure of crops consecutively leading to the suicide of farmers is becoming common in all states. The government portal <http://csa-india.org/> is not updated post-September 2017 on training.

➤ **Agriculture Insurance:**

Agriculture/crop Insurance, that can play a major role in securing farmer's yield, had failed continuously. The continuous changes in the various government crop insurance schemes such as comprehensive crop insurance scheme (CCIS) in 1985, Rashtriya Krishi Bima Yojana (national Agriculture Insurance Scheme-NAIS) in 1999, Modified NAIS (MNAIS) in 2010 which evolved to address the flaw of the previous schemes could not improve the demand for them at farmers level due to additional cost involved, poor awareness, delay in settlement of claims in the absence of land records, crop records, careless attitude of agencies and employees. In Jan 2016 a new insurance scheme 'Pradhan Mantri FasalBima Yojana (PMFBY)' was introduced and the positive results of this new scheme are yet to be seen. Important features that will enable the empowerment of rural farmers are under construction in PMFBY site.



➤ **Farmers Loan: Behavioral aspects of loan usage and repayment by farmers.**

Debt plays an essential role in the lives of rural households in developing countries in more than one ways. It is an important instrument for smoothing consumption, in a context where incomes typically experience large seasonal fluctuations. Loaning or credit markets, however, in developing nations importantly in rural households do not behave entirely as competitive markets. They are dual structured, wherein theinformal and formal financial systems like gov. entities for the former and private players to the latter goes side by side. Lack of availability of a properly structured and need specific debt market in the rural areas of the country has been one of the reasons formajority of the households borrow from informal sources of finance which lend them on high-interest rates and often lead to informal agents acquiring the assets of the households. To provide easier access to credit its observed often find governments intervening in the workings of the credit market in multiple ways.

To understand loan repayment behavior, it is important to look into the purpose of borrowing, the source of borrowing, interest rates and consumption details. For the specialized context the Innovation and Financial services part of this very relative to our topic in focus that directly d deals with agriculture, innovation in tech and financials.

OBJECTIVE & METHODOLOGY:

This paper focuses on understanding the technology innovations that's been implemented by govt and non-govt entities in the Indian agriculture sector. Put forth limitations of these initiatives that are helped very little to improve the farmers' life majorly its influence on the financial aspect of farmers life.

This paper focuses on the research the farmer loaning system, loan distribution, crop insurance, loan usage behavior within the agriculture community i.e. behavior when it comes to borrowing loans, their needs, their usage of loans, borrowing effect on their lifestyle.

Discussing technology that's available today to comprehensive track the farmer's data on each aspect mentioned above and more detailed data, to better understand the farmer's needs, their requirements, and their behavior on loan consumptions.

Along with the above stats and technology have an insight into the further development of these within the agriculture sector to facilitate better services to farmers based on their specific needs based on their data available within the system and framework, thus initiating a much more fluent process of identifying the needs and disposal of services with little to none hindrances.

There are many Fintech players that have to work with the Government of India with respect to how to build and enable the agriculture sector in this Digital Transformation. This paper also examines the idea of these fintech initiatives, discusses the requirements that would help these financial services serve better to the farmers agricultural finances and also help the source or providers with better data to manage their, Technologies such as Big data for that would be useful storing large-scale farming data and allied innovations like Hadoop that's going to be instrumental in supporting the massive data and its services.

It also touches on Agricultural Innovation Systems (AIS} i.e. How the supply-chain demand would be met in the future. Big data and other tech innovation scenarios within the sector.

The research is descriptive in nature. The study is conceptual and based on secondary data collected from company websites, newspapers and journals.

The scope of the study is restricted to financials in the agricultural sector only.

METHOD/RESEARCH:**➤ Behavioral analysis of farmers- Loan borrowing and repayments.**

Formal and informal sector vary greatly in their providing methodologies. The various aspects and needs of loans such as size offered, the interest rates charged, the loans tenures, repayment options and schedules etc are different when a household borrows from a formal source as opposed to an informal source. A study on household sectoral selection between formal and informal finance points out that informal rural credits are still quite popular even in this day and age, in spite of the availability of formal loan from formal entities. Ease and enough access to informal sources are one of the reasons.

There is an awareness that formal and informal loans have different terms of the loan. Hence it is possible that the borrowing source affects the expectation of households about the associated penalty. This, in turn, is likely to affect the way households decide to utilize loans from different sources. To get a further insight into this and explore why this happens we need to understand how farmers utilize loans taken for agricultural purposes from formal sources. One of the main arguments for the pushing of governments to set up rural banks was to provide easier credit access to agricultural households and combat the high-interest rates charged by moneylenders. But over the years several questions have been raised at the efficacy of political interventions in the credit systems. On the one hand, lower interest rates on formal sources should drive productivity. However, easier availability could also increase unproductive spending which could lead to non-repayment. In order to understand this better this paper analyses the borrowing behaviour of households. It studies both investment and consumption patterns of households to analyze their relationship with loan repayment

Loan repayment and consumption data from the 2005 India Human Development Survey (IHDS), a nationally representative data of 41554 households, collected by the National Council of Applied Economic Research in New Delhi and the University of Maryland.

This paper focuses only on those households that have taken a loan, thus the sample size to 16,900 households out of the 41,554 households. To understand loan repayment behavior, it is

important to look into the purpose of borrowing, the source of borrowing, interest rates and consumption details. The IHDS is a unique survey, providing detailed information on consumption, investments, social spending and borrowing behavior of these households. The govt. has put aggressive efforts via social banking program and various other policies to increase access to loan from formal sources, through the IHDS data shows that the impact of this has been marginal as we see more than or close to 70% of the households still borrow from informal sources like moneylenders, relatives and friends. Table 1 provides a summary of the borrowing behaviour of households in urban and rural regions. 32.75% of households borrow from formal sources like banks, NGOs and employers, while 67.25% borrow from informal sources like moneylenders, relatives and friends. 47.3% households that's almost half of the formal loans are agricultural or business loans. The numbers are smaller i.e. 16.67% of informal loans. The percentage of households who borrow from informal sources for the purpose of agriculture is higher in rural households.

Table 1: Summary: Household

Sr. No.	Particulars	Formal Source		Informal Source	
		Freq.	%	Freq.	%
1	No of households	5536	32.75%	11,369	67.25%
2	Borrowed for the purpose of agriculture	2619	47.31%	1895	16.67%
3	Mean Income	75367		33024	
4	Social Spending	4719.64		3353.43	
5	Monthly Consumption Per Capita	1239.55		786.31	

Source: IHDS 2004–2005, own calculations. Notes: Summary Statistics Table giving details about the characteristics of households borrowing from Formal Sources and Informal sources like social spending, number of households borrowing for the purpose of agriculture, income and monthly consumption per capita.

Table 2 summarizes the behavioral patterns of people who have repaid their loan as opposed to those who have not. On analysis, we understand that 73% of the households who have borrowed a loan have not repaid their loan. On checking these households data we learn that the majority of them belong to the rural areas as opposed to urban. Of the 12,284 households who have not repaid their loans, households who have the largest group (29.66%) constitute borrow for the purpose of agriculture, for marriage (16.15%) and buying a house (15.89%). Its certain from the data that the people borrowing for agriculture purpose default the most loans. Does this mean that people who borrow for agricultural purposes indulge in unproductive expenditure or are there any other underlying socioeconomic characteristics within these households which contribute towards the non-repayment?

Table 2: Analyzing Repayment Rates of Households by Purpose of Borrowing

	Frequency		Non Repayment	
			RURAL	URBAN
Total Households	16934	12284	71%	29%
HH borrowed for the purpose of agriculture	5196	3635	83%	17%
HH borrowed for the purpose of marriage	2604	1980	71%	29%
HH borrowed for the purpose of buying a house	2758	1948	59%	41%
HH borrowed for the purpose of consumption	2078	1569	67%	33%
HH borrowed for the purpose of education	409	306	44%	56%
HH borrowed for medical purposes	2393	1833	70%	30%
HH borrowed for the purpose of buying land	171	121	65%	35%

Source: *IHDS 2004–2005, own calculations. Notes: Repayment Rates: Table giving details about repayment rate of households and segregating them according to the purpose of borrowing.*

The households that have lower mean spending have found to have repaid their loans against the household that did not repay their loan amounts even with higher mean spending. This observation is striking also in line with how the society flows, hence it's a slice of facts representing the socio-economic scenario of India. This also highlights that income of a household is not a determining factor or a guarantee in deciding who repays the loans. Tracking this data is would prove to be important as this would allow govt and private entities to allow load distribution based on the credibility of a households reputation than the financial prowess of them.

➤ **Fintech:**

Fintech, a portmanteau of 'financial technology,' is used to describe new tech that seeks to improve and automate the delivery and use of financial services. At its core, fintech is utilized to help companies, business owners and consumers better manage their financial operations, processes and lives by utilizing specialized software. When fintech emerged in the 21st Century, the term was initially applied to the technology employed at the back-end systems of established financial institutions. Since then, however, there has been a shift to more consumer-oriented services and therefore a more consumer-oriented definition. Fintech has expanded to include any technological innovation in — and automation of — the financial sector, including advances in financial literacy, advice and education, as well as streamlining of wealth management, lending and borrowing, retail banking, fundraising, money transfers/payments, investment management and more

Fintech and Agritech having been rated as the hottest sectors by investors, the reality remains that no large-scale impact has been seen in the farming community especially in the financial credit. P2P lending companies have emerged in quite a numbers promising small and medium-sized loans for those not being enrolled in banks yet, but the agricultural community has been left out of this. Like every new idea, innovations even this has been plagued with inherent issues that need to be addressed before Fintech can increase the improve upon fulfilling its potential to decent extent that would greatly benefit the efforts of the nation and also influence farmers financials in a positive way.

Current limitations in fintech are more innate and data dependent than other things.

Credit lethargy and lack of focus: As agricultural sector requires heavy capital commitment as procurement of equipment remains a major spend for the most farmer. More importantly, the lack of viable customer data has become a stumbling block.

Lack of Ground Presence: Rise Fintech has bought a lot of visibility and this exposure has attracted quite a few big players in the zone actuating fund flow but the presence of these funds should be seen in real-world usage thus confirming and complimenting the virtual presence of the fintech industry

Sensitive in Loaning: Unlike business and public sector where the data of its ecosystem is available, tracked and can be used by financial systems for their and clients needs, very few farmers data, his credit data and other relative data are enrolled in any kind of record-keeping platforms that can help track their farming activity and build a credit profile. This makes receiving loans at crucial moments even more difficult. There is almost 60% increase in borrowing money in peak times from the informal sources as compare formal sources highlighting the desperation of the farmers for credit in hardest times.

Need For Large-Scale Impact: an effective marriage of data sciences and financial technology innovation revolutionize India's agricultural credit scenario Private and govt initiatives synergy along with innovative and effective technology is the need that can be addressed by increasing understanding of the available ones around

➤ **Big Data :**

Big Data is a phrase used to mean a massive volume of both structured and unstructured data that is so large it is difficult to process using traditional database and software techniques. In most enterprise scenarios the volume of data is too big or it moves too fast or it exceeds current processing capacity

Big Data, Smart Farming is quite new concepts and technology that has been imparted in this field. Since they are quite new their applications, implications and research foray though quite limited in some sense could not suppress their vast array of possible service applications and the their imminent impact on a large scale on the agriculture industry. Some authors refer to the advent of Big Data and related technology as another technology hype that may fail to materialize, others consider Big Data applications may have passed the 'peak of inflated expectations' in Gartner's Hype Cycle (Fenn and LeHong, 2011, Needle, 2015). This mention here aims to provide insight into the state-of-the-art Big Data applications in relation to Smart

Farming and to identify the most important research and development challenges that can address futureservices. Here in this section of big data focus on the socio-economic aspects more than tech innovation as such. However, technology is changing rapidly in this area and state-of-the-art of that will probably be outdated soon after this paper is published. Therefore the analysis primarily focuses on the socio-economic impact Big Data will have on farm management and the whole network around it because it is expected that this will have a longer-lasting effect

Big data of agricultural mainly has the following characteristics that are quite handy in the data gathering storing and crunching for preferred results.

1. Large-scale With the continuous development of agricultural intelligence and information technology, the scale of data come from agricultural production, financials process come from the TB level to the level to PB level and ZB level.

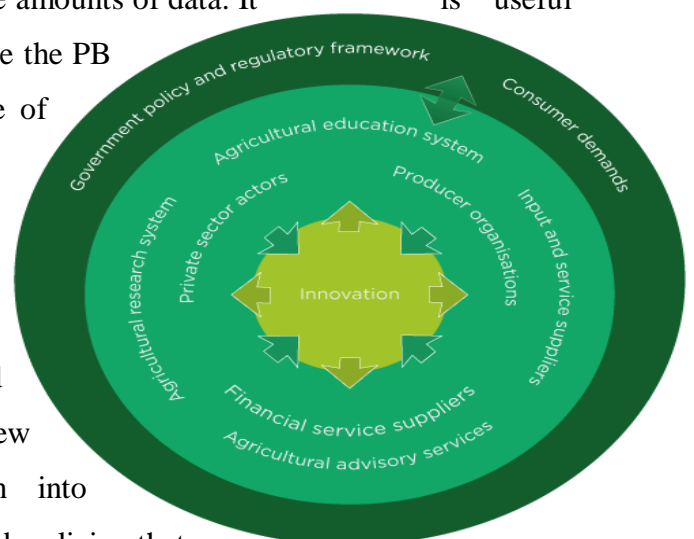
2. Isomerism There are many types of agricultural data, including text, pictures, charts, videos, etc.

3. Real-time requirements Agricultural production in the big data is real-time changed, most of the agricultural data processing services are required in a short time to make feedback, not timely control and management will affect the growth of the crop

Hadoop: With the advent of the cloud computing era, large data attracted more and more attention. Hadoop is a distributed system infrastructure developed, a software platform for developing and running large data. It provides storage services for massive amounts of data and also provides computing services for massive amounts of data. It is useful to handle very large files, has been able to handle the PB [Petabyte] level of data, and has a high degree of fault tolerance characteristics

➤ **Agricultural Innovation Systems; India:**

A network of organizations, enterprises, and individuals focused on bringing new products, new processes, and new forms of organization into economic use, together with the institutions and policies that



affect their behavior and performance

Agricultural Knowledge and Information System (AKIS) indicates a system that links people and institutions to promote mutual learning and generate, share, and utilize agriculture-related technology, knowledge and information. The system integrates farmers, agricultural educators, researchers and extensionists to harness knowledge and information from various sources for improved livelihoods. Farmers are at the heart of this knowledge triangle (World Bank, 2012).

The major focus as seen in the system is innovations within and along with it are the support structures where financial services are one of the major elements.

DISCUSSION/CONCLUSION:

As put forth above the main focus of this paper was to focus on the financial aspects of farmer's life, primarily loan that's research the technology innovations that's been implemented in the financial agriculture sector by govt and non govt entities with one thing in focus to improve the life and betterment of finances within this sector . There has been a lot of awareness and positives that's been achieved from these initiatives as digitalization percolated within the agricultural realm of India. Having said that this is a zoomed out approach and only on zoom in the specificities could we see a larger more effective and efficient impact of these innovations, initiatives.

As observed the importance of data gathering is immense. It needs to be streamlined, data gathering of household according to the purpose of borrowing, the source of borrowing, interest rates and consumption also the classification of % repayment of loan amount by various households needs to be done.

Various Fintech players are emerging in tech and financial grounds with innovative ideas to attend the financial requirements that's been inefficiently dealt with hitherto. Fintech could address major requirements with a lot of specificities like Efficient loan facilities, Synergy between farmers and lending institutions.

Payment model: instead of bulk lending more efficient programs tailored according to farmers needs. Affordability of financial services, Effective and targeted insurance schemes. These Fintech solutions are data driven and the efficiency of these services is directly proportional to the amount of data; information that can be mined from it. Hence to

have a meaningful impact of these innovations, to have a good reach, proper presence for financing with internet usage without actual inventories tracking of household data is vital that can be done by innovations like big data and Hadoop.

The 3 V's are fundamental to big data: volume, variety and velocity, which is in line with the vast amount of varied data that needs fast access. Big data has the ability to store large amounts of data, that's the primary requirement for agriculture sector players. Analyzing this tracked data would prove to be important as this would allow govt and private entities to allow load distribution based on the credibility of a households reputation than the financial prowess of them.

Also, Hadoop with its IT platforms and infrastructure has the ability to handle large-scale data within a distributed network that would facilitate and empower the fintech sector for better services. IT is useful to handle very large files, has been able to handle the PB [Petabyte] level of data, and has a high degree of fault tolerance characteristics.

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Usage of mobile applications in NBFC and its significant impact

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Abstract:

The researcher emphasized that usage of mobile application and its significant impact in NBFC. In this research paper the researcher focused on current research issues on of usage mobile banking and its services in NBFC sectors. Mobile Banking is a valuable, and effective services at terribly low value to the shoppers and customers. Banks maintains as several physical branches if a lot of customers do banking via their mobile. Mobile banking is as secure. All reliable institution use cryptography that defends and protects your privacy, identity and your money info. The researcher given a security assurance to form your use of mobile banking really stress-free. Mobile Banking is alleged to be a lot of secured and innocent than online/internet Banking. Mobile phones currently typically contain face-recognition technology, fingerprint scanners, and even iris scanners. Unlike the related internet banking it uses software, usually called an app, provided by the financial institution for the purpose. Mobile banking is usually available on a 24-hour basis and is dependent on the availability of an internet or data connection to the mobile device in NBFC.

Keywords: Mobile Banking, NBFC,

1. INTRODUCTION

Mobile banking is used for many of constant tasks that you simply would execute at a bank branch or on your home microcomputer. Additionally, several banks give customers with the power to deposit checks. All of this can be done through an app that's downloaded to your smartphone or pill from your provider's app store. The app makes navigation abundant stress-free than if you were attempting to use on-line banking through the browser on your phone. Sensible phones are one among the foremost impactful inventions in human history. The impact of sensible phones, likewise as tablets, is felt in only regarding each aspect of standard of living in terms of however we have a tendency to communicate, gather info, shop, access amusement, and in fact, however we have a tendency to bank. For those that area unit aiming to accompany mobile banking, here are a unit few benefits to stay in mind. Mobile Banking is

accessible 24*7 and additionally straightforward and convenient mode for several Mobile users even within the rural areas. This can be one among the largest advantages of mobile banking. Notwithstanding wherever you're, you'll "take care of business" while not interrupting the remainder of your life. Mobile banking is having the ability to handle your money life while not having to run into a branch throughout open hours is a true time- and schedule-saver.

The researcher given a security guarantee to form your use of mobile banking really stress-free. Mobile Banking is alleged to be a lot of secured and innocent than online/internet Banking. Mobile phones currently typically contain face-recognition technology, fingerprint scanners, and even iris scanners. This biometric knowledge aids the bank make sure the "customer" is absolutely WHO they claim to be, and this biometric knowledge offers a lot of security and protection for purchasers than straightforward phone banking passwords or requests for birth-date confirmations will give. For each the institution and client, this suggests fewer instances of compromised knowledge and fraud. You can get reminders once to pay bills thus you ne'er got to pay a late fee. You'll even created revenant bill payments thus you don't even have to accept once a bill is due.

II. LITERATURE REVIEW

SubhamoyChakraborti and SugataSanyal(2015) emphasized that that each one over the planet, the population in rural and semi-urban areas may be a major concern for policy manufacturers as they need technology enablement most to induce elevated from their living conditions. Money Inclusion comes area unit meant to figure during this space likewise. But the reach of monetary establishments in those areas is far lesser than in urban areas normally. New policies and methods area unit being created towards creating banking services a lot of accessible to the folks in rural and semi-urban space. Technology, specifically net of Things (IoT) and quality will play a significant role during this context as an enabler and number. This research paper discusses regarding an IoT and quality driven approach that the money establishments might contemplate whereas attempting to figure on money inclusion projects [1].

Priyanka S. Kotecha (2018) studied the paradigm shift in Indian industry with relevancy mobile wallets. The means of M-Wallet is simply the system wherever you'll store your cash in digital type on-line. It merely kills the necessity to hold physical money or cards in our physical case. Mobile wallets area unit basically digital versions of ancient wallets that

somebody would carry in their pocket. Whereas there are a unit several variations, sometimes they will hold digital info regarding credit and debit cards for creating payments, store coupons and loyalty programs, specific info regarding identity and a lot of. Mobile case has assisted the wants of business owner and client on a same go. The complexness of cash transactions forces and additionally promotes the usage of mobile case in today's times [2].

M. Manikandan, and Dr. S. Chandramohan (2018) declared that a mobile case may be a virtual money case is used for fast payments and different transactions through a mobile application. With the assistance of Smartphone one will do all the money transactions these days. With the preamble of mobile case, it's become very convenient for someone to form cashless transactions. We will say it as a technology development however it additionally offers a lift to business through the event of digital commerce and banking. The mobile case, particularly the post-paid feature, is proving terribly effective in rising economies like Republic of India, wherever access to the net and banking opportunities area unit a privilege, however mobile accessibility is high. an outsized range of firms have cropped up in Republic of India, giving customers this product referred to as 'mobile wallet', there's still a scarcity of awareness among folks regarding the thought and its utility. Young and comparatively affluent customers area unit astonishingly, a lot of inquisitive about mobile wallets [3].

Vijayalakshmi Srinivas and RuskiMahal (2018) expressed that microfinance in Asian nation has undergone forceful and dramatic evolution. It had its ups and downs, however the strength has perpetually song within the noble reality of union the poor, underprivileged plenty with associate degree aim of upliftment or poor through monetary inclusion. Microfinance is operational intensive business and achieving operational excellence is vital to success because it eliminates bottlenecks and reduces prices thereby increasing profitableness for the business. Until recently, the complete dealings was money based mostly. Concerning ninety nine of the disbursements and repayments are obsessed with money. In numbers, over eighty mn disbursements and one, 000 mn reimbursement transactions occur each year in money mode. this is often the most reason that the world was at the receiving finish throughout the conclusion amount and was compact the foremost in terms of unfold and for a protracted period of time and baby-faced a fulminant slump in growth. Although many Microfinance establishments (MFIs) have created forays into digital technologies, they still resort to manual interventions for many frontend money based mostly transactions of disbursements and repayments [4].

The widespread use of good phones and mobile technologies has bit by bit begun to have an effect on not solely our use of merchandise and services, however conjointly however we tend to obtain them. What we tend to are witnessing is that the starting of technologies that mixture payment strategies on mobile. One among the recent developments is mobile wallets, usually mistaken for mobile banking. instead of providing mobile communications just as suggests that to try to to dealings through typical modes of payments like net-banking and credit cards, mobile wallets look for to use mobile phones as a post-paid accounts wherever you will store cash which may be used for transactions[5].

Currently, principally telecommunication services suppliers are providing mobile pocketbook services, with other forms of players from e-commerce and dedicated payment services suppliers wanting to extend their presence during this section. As long as a lot of range of individuals have access to mobile technologies, than even staple items like correct sanitation, as well as web banking and physical debit and credit cards, it stands to reason that mobile wallets provide a section with nice potential [5].

The market is flooded with newer, smarter, quicker mobile phones. The phone to procure last month may already appear to be out-of-date, with the sheer range of mobile phones being introduced a day. United Nations agency wouldn't desire a spic-and-span phone to stay connected with their dearest, keep tuned to the newest happenings, and keep oneself digitally updated? Perhaps you've set it's time to upgrade your recent phone! There's a small catch to purchasing that much-desired phone—the higher the phone, the vessel the value. Is your dream of owning a phone taking a back seat because of the price factor? Well, let it not trouble you, since there's perpetually the simplest way out for such a situation! As an operating skilled United Nations agency has simply started on the career path. whereas obtaining a MasterCard may not be doable for everybody because of the demanding policies of the bank together with the requirement of getting a super-good credit history, an honest remuneration and different such criteria, there are some without delay on the market and easy choices, sort of a 'mobile loan' to shop for it even while not having a credit card [6].

Digital Asian nation is experiencing a revolution in disposition practices and processes. Digital disposition is invasive the area of ancient disposition. It begun to indicate signs of prominence and is changing into a number one technique of funding, significantly for the small, tiny and medium sector. Globally, on-line disposition has begun to remodel the standard disposition business through the employment of technology so as to scale back

operational prices, underwrite with surrogate information points and remarkably speed up disposition processes TAB Capital Ltd, a Non-Banking no depository financial institution (NBFC) registered with run batted in, is getting to position itself because the best digital disposition NBFC for SME finance in Asian nation, supported its speed and convenience. [7].

A vulnerability may be outlined as an inherent configuration flaw in an organization's data technology base, whether or not hardware or software package, which might be exploited by a 3rd party to collect sensitive data relating to the organization. Vulnerability management is an in progress method to see the method of eliminating or mitigating vulnerabilities based mostly upon the chance and price related to the vulnerabilities. NBFCs might devise a method for managing and eliminating vulnerabilities and such strategy might clearly be communicated within the Cyber Security policy [3][4].

III. PROBLEM STATEMENT AND RESEARCH OBJECTIVES

The researcher stated that some of the significant research issues on the usage of mobile banking application and its significant impact in the NBFC.

1. To study the usage of mobile application in NBFC.
2. To identify its significant factors of mobile banking in NBFC

IV. CONCEPTUAL FRAMEWORK OF THE RESEARCH STUDY

Fig.5.1: Source: Statist- Mobile Banking and NBFC

Mobile Banking is very easy and then convenient, it helps keep you up to the mark of your finances. You'll monitor your balances and perpetually recognize wherever you're at financially. It's an additional advantage for your monetary life. With account alerts, you'll determine if your account falls below an explicit brink and directly transfer cash into that account and avoid draft fees. You'll credit checks instantly that could be a nice facilitate after you would like the money. Of these options leave you up to the mark of your cash on some time. Digital-only customers currently account for nearly half-hour of retail bank patronage within the us. However, consistent with the 2018 U.S. retail banking satisfaction study, customers United Nations agency solely use on-line or mobile channels are the smallest amount happy.



The foremost happy ones are those that will access the branch additionally as digital channels. The rationale behind low satisfaction level among the digital-only customers is as a result of the below 3 factors that don't meet the expectation. The banking system still has place a great deal of effort to bridge this digital divide. Here are a number of the trends that monetary establishments have already started specializing in in 2018.

V. RESEARCH METHODOLOGY

This research study is based on the secondary data which is collected from the different research portal, research articles and web sources. The researcher identify the significant factors of mobile banking usage in NBFC sectors with respect to security parameters. The researcher also focused on some of the security parameters which are significant for the usage of mobile application in NBFC financial sectors.

VI. USAGE OF MOBILE BANKING IN NBFC

1. **Chabot's:** Banks have started victimization catboats. Chabot's facilitate banks to speak with their customers on an outsized scale in a very user friendly means. Bank of America launched its Chabot "Erica" in 2017. True heath is integrated with Boa's mobile banking app. It uses AI (AI) and prognostic analytics to assist customers create smarter monetary choices. It also, permits customers to form payments, check balances, economize and pay down debt. Equally different banks have conjointly, started victimisation their own version of catboats.
2. **Open API Economy:** today, an Identification and Classification of knowledge Assets. NBFCs shall maintain elaborated inventory of knowledge quality with distinct and clear identification of the quality. Segregation of functions: There ought to be segregation of the duties of the safety Officer/Group (both physical security still as cyber security) dealing solely with data systems security and also the data Technology division that truly implements the pc systems. The knowledge security perform ought to be adequately resourced in terms of the quantity of workers, level of ability and tools or techniques like risk assessment, security design, vulnerability assessment, rhetorical assessment, etc. Further, there ought to be a transparent segregation of responsibilities about system administration, info administration and dealing process.
3. **Role based mostly Access management:** Access to data ought to be supported well-defined user roles (system administrator, user manager, application owner etc.), NBFCs shall avoid dependence on one or few persons for a specific job. There ought

to be clear delegation of authority for right to upgrade/change user profiles and permissions and conjointly key business parameters (egg. interest rates) that ought to be documented.

4. **Personnel Security:** many approved application owners/users might have intimate data of monetary establishment processes and that they create potential threat to systems and information. NBFC ought to have a method of acceptable check and balance during this regard. Personnel with privileged access like computer user, cyber security personnel, etc. ought to be subject to rigorous background check and screening.
5. **Physical Security:** The confidentiality, integrity, and convenience of knowledge may be impaired through physical access and harm or destruction to physical parts. NBFCs have to be compelled to produce a secured setting for physical security of IS Assets like secure location of important information, restricted access to sensitive areas like information centre etc.
6. **Maker-checker:** it is one in every of the necessary principles of authorization within the data systems of monetary entities. For every dealing, there should be a minimum of 2 people necessary for its completion as this may scale back the chance of error and can guarantee dependableness of knowledge.
7. **Incident Management:** The IS Policy ought to outline what constitutes an occasion. NBFCs shall develop and implement processes for preventing, detecting, analysing and responding to data security incidents.
8. **Trails:** NBFCs shall make sure that audit trails exist for IT assets satisfying its business needs together with regulative and legal needs, facilitating audit, and serving as rhetorical proof once needed and aiding under consideration resolution. If A worker, for example, {attempts makes AN attempt tries} to access an unauthorized section, this improper activity ought to be recorded within the audit path.
9. **Public Key Infrastructure (PKI):** NBFCs might increase the usage of PKI to make sure confidentiality of knowledge, access management, information integrity, authentication and nonrepudiation.

The adequacy of and adherence to cyber resilience framework ought to be assessed and measured through development of indicators to assess the amount of risk/preparedness. These indicators ought to be used for comprehensive testing through freelance compliance checks

and audits applied by qualified and competent professionals. The attention among the stakeholders together with workers can also kind an area of this assessment [4].

A Cyber Crisis Management set up (CCMP) ought to be like a shot evolved and will be an area of the general Board approved strategy. CCMP ought to address the subsequent four aspects: (I) Detection (ii) Response (iii) Recovery and (IV) Containment. NBFCs have to be compelled to take effective measures to forestall cyber-attacks and to promptly notice any cyber-intrusions thus on respond / recover / contain the autumn out. NBFCs square measure expected to be ready to face rising cyber-threats like 'zero-day' attacks, remote access threats, and targeted attacks[5][6].

VIII.CONCLUSION

In this researcher paper the researcher focused on the usage of mobile applications and its significant impact in NBFC. The researcher emphasised that some of the significant usage of mobile applications in NBFC financial sectors. The NBFC providing mobile pocketbook services, with other forms of players from e-commerce and dedicated payment services suppliers wanting to extend their presence. As long as a lot of range of individuals have access to mobile technologies, than even staple items like correct sanitation, as well as web banking and physical debit and credit cards, it stands to reason that mobile wallets provide a section with nice potential. With the help of mobile technology the NBFC provides technology services and can acquire shares, stocks, bonds, debentures and securities from Government as well as local authority or any other marketable securities. Marketing securities are considered to be leasing, hire purchase, insurance brokerage, chit fund etc. The number of the safety parameters that square measure applicable for mobile banking in NBFC. NBFCs ought to place in situ a cyber-security policy elucidating the strategy containing an acceptable approach to combat cyber threats given the amount of quality of business and acceptable levels of risk, punctually approved by their Board for the usage of mobile application in NBFC financial sectors.

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About

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Challenges in Motivation in Public Sector Units in India –A secondary research based study.

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Abstract:

Governments are the key provider of services such as health, education, infrastructure, and property rights in most developing countries. Yet, low productivity and performance among government employees is a noteworthy problem hampering the effectiveness of service delivery. Governments face fundamental challenge of motivating them to perform well.

The general impression of public sector units is that the utmost motives of the employees in public sector are an increase in their salaries and with work life balance. This Paper ties to explore the challenges the PSUs face in motivation.

Keywords: Motivation, Salary, Promotion, Pay, Autonomy, PSUs, Goals

INTRODUCTION:

A state-owned enterprise is called a public sector undertaking (PSU) in India. The ownership of these companies is by the union government of India, or one of the many state or territorial governments, or both. The government should be in possession of majority stocks of the company to be a PSU.

In general, an individual's willingness to work harder and invest additional effort in their work" is considered motivation. Happiness takes a freeway when motivation is the guiding force, especially when it comes to professional arena. De Cenzo and Robbins (1996)¹ define motivation as the willingness or desire to do something, habituated by the activity or the ability to satisfy some needs. The studies on employees' motivation have extensively been practiced in today's enterprises across all sectors, regardless of their size. Those organizations realized that the actions of motivating their employees are crucial in order to achieve the organizations' goals.

Notion that people are motivated to work in the public service as a result of humanity, a desire to serve, or a wish to have an impact on society is a very old one. It is closely associated with the idea of public service ethos, which is deep-seated in a perceptive that the public service is different from the private sector, equally because of the tasks it carries out and the behaviors it expects of its employees.

Often the environments in which government managers operate can actually make it more difficult to motivate their employees.

Objective: To find the challenges faced by PSUs in motivating their workforce

METHODOLOGY:

A secondary research was conducted for this paper. Various journals, online sites and publications were studied for the same.

LITERATURE REVIEW:

In recent years, the Government provides Public Sector Enterprises (PSEs/PSUs) the essential flexibility and autonomy to operate effectively in a competitive environment. The Boards of Navratna and Miniratna companies are assigned with more powers in order to facilitate further improvement in their performance.

The government has also put into practice revised salaries for executives of PSEs/PSUs. Some innovative procedures such as Performance Related Pay have been introduced to make them more efficient. These incentives for the employees have been associated to individual, group as well as company performance. For further intensification, the government is also encouraging the listing of Public Sector Enterprises on the stock markets. However, despite all these changes, there are many challenges encountered to motivate the workforce in PSUs.

Motivation is an epithet of factors which drive or push workers to work happily and satisfactorily. Motivation activates and directs behavior. Motivated employees are much more likely to work harder and happily. Motivation is, therefore, tied to job performance. High job motivation is much more likely to lead to high job performance, which is the expectation of employers. Ascertaining the directly proportional relationship between motivation and job performance, Baba Gana and Bababe (2011) ⁽²⁾ explain that lack of motivation could lead to low job performance amongst workers.

The motivated employees relate to the manners of self satisfaction, self-fulfillment and commitment that are expected to produce better quality of work and oblige to the organizations' policies which will extensively materialize efficiencies and competitive advantage. Motivation increases the job involvement by making the work more meaningful and interesting as well as the fact that it keeps the employees more productive and improves their subsequent job performance (Kamery, 2004)³

Age has an impact on work motivation, and the Generation Y is a good example. Values most important for the Generation Y are a sense of belonging/teamwork, the ability to learn new things, flexibility and short term rewards.

Jung and Ritz (2014)⁽⁴⁾ point out that goal-setting theory has been researched in a variety of public sector settings, clearly suggesting that government organizations tend to have multiple, often competing, opposing, and vague goals .

To a certain extent, this is due to lack of profit indicators (Rainey 2010)⁽⁵⁾, clash among values (e.g., preservation and development of natural resources) (Wildavsky 1979)⁽⁶⁾, political intervention, or competing demands by multiple interest groups (Rainey 2010) ⁷.

Thus, such goal characteristics in the public sector may be a cause of complexity both as regards to motivating employees and in terms of determining performance (Chun and Rainey 2006)⁸.

The first motivation concept with a prime focus on public organizations is public sector motivation. As per institutional theory, public sector motivation implies“logic of consequentiality” involving institutional rules and understandings to be treated as alternatives in a coherent choice dilemma (March and Olsen 1989). ⁹

Rational choice theory characterizes administrators as generally rational individuals (constrained by certain informational and cognitive boundaries) who have a permanent set of preferences and who look for to maximizing their utility (Brennan and Buchanan 1985). ¹⁰

As far as the charisma of public sector employment is concerned, there are several institutional values and extrinsic incentives that allow for individual utility maximization. Public sector organizations, for instance, put forward relatively high job-security and protection against removal from office, good career perspectives, relatively high salaries in low- and mid-level ranks, stable salaries overall, as well as a robust salary development scale, all of which can be attractive to certain individuals motivated by such benefits (Buelens and Van den Broeck 2007)¹¹.

Furthermore, pension schemes for public employees generally guarantee security and independence, and the attractiveness of a civil service career is that it practically guarantees a certain standard of living during retirement. It should also be noted that public sector units often offer more favorable working hours and vacation schemes.

Thus, we define public sector motivation as the desire to behave in accordance with motives beached in an individual's self-interest and aimed at extrinsic incentives typically found in the public sector. This includes, for instance, job-security, definite salary- and career-development, and further privileges. That said, we may also conclude that certain incentives motivate individuals regardless of their employers' sector (French and Emerson 2014).¹²

In this line of reasoning, the affiliation between employee and employer reflects a form of psychological contract based on an exchange of loyalty and duty in return for salary and privileges. This kind of relationship is different from an exchange of effort and performance in return for skill development and employability.

Public sector motivation is based more on the former type of psychological contract, in which the achievement of output and outcome of goals is of secondary interest to an employee.

Primarily, an employee performs certain actions based on the experience of individual needs being satisfied. Skirting behavior is a typical consequence if public sector organizations are unable to satisfy employees' needs in regard to the incentives described above, since organizational outcomes are not to the fore for the individual (Francois 2000).¹³ Thus, public sector motivation is closely linked to the specific work context and working conditions within government organizations. Nevertheless, such working conditions also exist in the private sector, although they are far more common in the public sector (Wright 2001).¹⁴

Research firmly suggests that goal-setting is an extremely effective tool for public managers to motivate and improve the performance of public employees (Durant et al.,2006)¹⁵.

However, goal-setting is hardly implemented in the public domain, due to several reasons.

First, public sector often has a weak link between performance and rewards, thus employees motivation to peruse the goals is diminished.

Second, the politicized environment in which administrators operate is vulnerable to constant goal changes.

Third, employees suffer from political procedural constraints that impede their ability to attain the target; no matter what effort they put (Perry/Porter, 1982)¹⁶.

FINDINGS:

The following factors by and large mar the motivation in Public sector Units in India.

1. Frequent and abrupt changes in leadership- Many government units are led by elected or politically-appointed leaders with brief tenures, specific policy schemas, and short-term perspectives. This makes it difficult for them to implement a policy for a long term and measure its impact. Also, these leaders do not understand the unit's values, mission and goals and especially how employees are critical to achieving policy goals.

2. Prevailing negative attitudes about Public Sector Employees- Critics of government often spread news that the public sector employees are overpaid and underworked. Justifiably, these images hurt employee's morale and work commitment

3. An older workforce- The government workforce is older than the private-sector workforce which makes it difficult to adapt to new technologies

4. Job security- The fact that public employees have stronger job protections, even in nonunion organizations, than their private-sector colleagues, makes it more difficult to deal with poor performers

5) Restrictions on the exercise of financial resources-PSUs usually can't provide performance incentives like large pay raises and bonuses, or perks like stock options, gym or club memberships to motivate its workforce.

6) Public visibility of government assisted units - The work of PSUs is exclusively visible, due to open meetings that require them to meet in public and also provide, on request, meetings minutes, decision documents, email exchanges, and even text messages.

7) Commitment towards goals- In most PSUs, the relationship between employee and employer reflects a form of psychosomatic contract based on an exchange of allegiance and duty in return for salary and privileges. Such a relationship is entirely dissimilar from an exchange of effort and performance in return for skill development and employability.

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Entrepreneurial Prospects of Dairy Farming through Digital Advancement

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ABSTRACT

The Dairy sector plays an important role in the development of agro base economies like India. The world of dairy farming is really starting to change. According to “Indian Dairy Industry Database 2017-2022”, over the years, India has emerged as one of the world’s biggest producers of milk, with the total milk production rising from 122 Million Metric Tons in 2010-11 to 165.4 Million Metric Tons in 2016-17. India’s milk production is estimated to have increased by 6.6 per cent to 176.35 Million Tons during the last financial year. “Milk production in the country is 165.4 Million Tons during 2016-17 and 176.35 Million Tons (provisional) during 2017-18”. Dairy sector per se is a slow growing sector due to the perishable nature of milk. But pasteurization technique and refrigeration facility helped this sector to grow big. The future of dairy farming with the help of technology is quite bright. Emerging digital technologies hold promise for revolutionizing dairy, from management of the herd to management of the individual cow. Government is encouraging dairy farmers to use technology in their process and to make digital environment the National Dairy Development Board (NDDDB) launched a mobile app, ‘Pashu Poshan’, to educate the dairy farmers about balanced diet for the cows and buffaloes. Government has set a National Goal of 300 million ton milk production by 2024 thus giving a major boost to the production of milk in India. Dairying has become an important secondary source of income for millions of rural households engaged in agriculture. In this context, the paper will discuss the economic implications of Dairy farming sector in country as well as transformation of Dairy industry from unorganized to organized sector. This paper will explain the necessity and importance of digital advancement in Dairy sector. There is a greater scope for Dairy farming business in our country. Apart from economic development, dairy sector contributes to women empowerment, offers self employment, confidence and of course enhance the living standard of people through entrepreneurship. However, proper research could enable entrepreneurs to take informed and considered decisions by which the objectives can be achieved.

Key Words: Entrepreneurship, Innovation, Dairy Farming, Livestock, transformation, wastage management, organized, unorganized, Economic development

INTRODUCTION

Dairy farming has the prospects to offer quality lifestyle to rural India. Proper investment structure and strategies are required in this sector to turn it into organized and profitable business. Dairy industry is of crucial importance to India. Dairy products are a major source of cheap and nutritious food to millions of people in India and the only acceptable source of animal protein for large vegetarian segment of Indian population, particularly the landless, small and marginal farmers and women.

By 2067, the per capita consumption of dairy is expected to increase from 87 kilograms (kg)/person to 119 kg (projections). Compounded by a growing population, the dairy industry will need to produce 600 billion kilograms more milk.

From the point of view of size and nature, five broad typologies of dairy systems can be derived in the Indian context:

- Large commercial dairies (Mega dairies)
- Urban and peri - urban dairies
- Government breeding farms and research facilities
- Small holders (both, within the cooperative framework as well as outside it)
- Gaushalas (or cattle shelters)

The most common milking parlor designs are parallel parlors, herringbone parlors and rotary parlors in different dairy systems.

In India, it is expected that digitalization will cover the most complex regions of dairy farming to offer seamless profits by overcoming the Indian dairy business difficulties and framework. In India, it is expected that digitalization will cover the most complex regions of dairy farming to offer seamless profits by overcoming the Indian dairy business difficulties and framework.

In 2015, Hydroponics, Kenya, founder Peter Chege, made it possible for the dairy farmers to grow the cattle feed in just 7 days, that too without soil. If such technology is applied in India, the Dairy Farming can get a boost.

Param Singh, Founder of EduTech startup UDAY has come up with Project Moo which will help the Indian Dairy farmers with the three step solution:

- Going into rural communities through fully equipped mobile vans,

- Leveraging data analytics through an app to offer demand-led-extension training to farmers (specialized training via Bootcamps),
- Developing rural youth and women as village entrepreneurs.

Currently, under Project Moo, team UDAY is training 10,000 of dairy farmers of three districts and 337 villages in Punjab and by 2021 it aspires to spread its wings in other states of India including Rajasthan, Haryana and Uttar Pradesh.

Table I : Brief Profile of Indian Dairy Sector

Sr. No.	Particulars	Unit	Figure
1	Total Bovine population (LC 2012)	Million	299.6
2	Adult Female Bovine (LC 2012)	Million	133.3
3	In Milk Bovine population (2015)	Million	88.35
4	In Milk animal productivity	KgPD	4.65
5	Milk Production (2015-16)	MMT	155.5
6	Per capita availability of Milk (2015-16)	gm PD	337
7	Rural retention (2015-16)	-	48% of Milk Production
8	Marketable Surplus (2015-16)	-	52% of Milk Production

(Source: National Action Plan for Dairy Development Vision 2022)

Table shows brief profile of Indian Dairy sector. Milk production in India has come a long way over the years from a low volume of 17 Million MT in 1951 to 163.7 million MT in 2016-17. Currently India is the world's largest producer and consumer of milk accounting for 19% of the world milk production.

According to the livestock census 2012, the country has 133.2 million adult female cattle and buffalo. The average productivity of cattle and buffalo in the country is about 4.65 KgPD (2015 16) which is far below as compared to the productivity levels of In-milk animals in dairy developed nations.

Dairy Industry: Over the time

Traditional Dairying:

Traditionally, all the milk in the past had been produced in the villages in India. Even today the bulk of the country's milk supply comes from the cattle owners in the rural areas. In the old days, the farmers produced milk usually for their own consumption. Most of the milk was converted by them into butter, ghee and butter milk, which constituted important food items for the family. As marketing facilities for milk did not exist in those days, the surplus milk was generally turned into ghee for sale in the villages or in the near-by town markets. Later on, this pattern changed and most of the surplus milk was either sold by the cattle-owners to the consumers, in the nearby areas or collected by the middlemen for sale in the urban markets.

Modernization of Dairy Industry:

Modernization of the dairy industry in India gained momentum with the commencement of India's first five Year plan in 1951. : With the aim of catering to the requirement of clean milk for the growing population in urban areas, the initial government action in this regard consisted of organizing milk schemes for the large cities.

The basic objectives of these schemes was to facilitate arrangement for the efficient flow of milk produced in the rural areas to the dairy plants located in cities and distribution of the processed milk to the urban consumers. The working of the milk schemes was quite helpful for the development of the dairy industry on modern lines in India.

Co-operativization:

The establishment of milk co-operatives is another feature of the modern dairy industry in India. In most developed countries, co-operative have emerged as the most cohesive organization of farmers.

They provide the middle course between the acquisitive and individualistic trends of economy on one hand and too much centralization and regimentation on the other. In India, though the co-operative movement was initiated by the co-operative credit societies Act, 1904, dairy co-operative could not be promoted till the passing of the co-operative societies Act, 1912.

Though, with the establishment of the first cooperative dairy society at Allahabad (U.P.) in 1913, the movement of dairy cooperative got initiation and spread subsequently in different parts of our country. Its real large sale and systematic break through could be noticed since 1946 when Kaira District Co-operative Milk Producers' Union Limited (KDCMPUL) popularly known as 'Amul Dairy' which was set up at Anand in the Gujarat state.

Table II Daily average milk in Dairy Cooperatives per day

Year	Daily average milk per day	Sale of Liquid milk Per day
2016-17	428.7 Lakh Kg per day	331 Lakh liter per day
2017-18	475.6 Lakh Kg. per day	349.6 Lakh liter per day

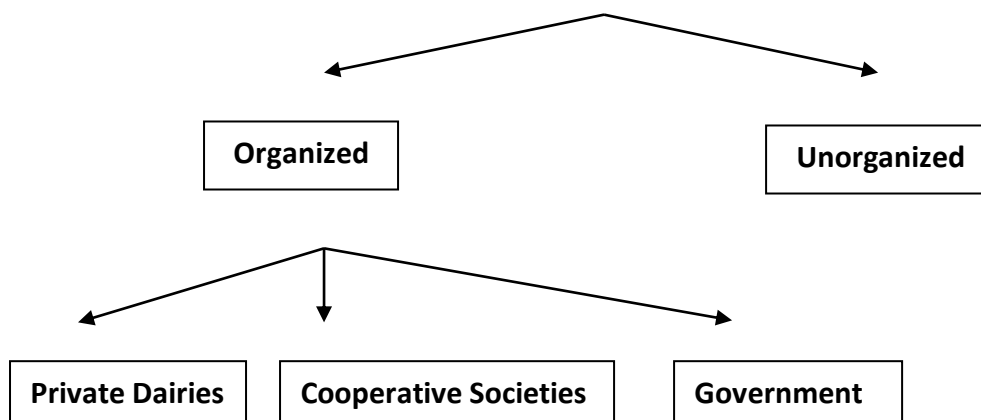
(Source: Department of Animal Husbandry, Dairying and Fisheries)

The dairy cooperatives have procured daily average of milk about 475.6 Lakh Kg per day (LKgPD) during 2017-18 as compared to 428.7 lakh kg procured during 2016-17. The sale of liquid milk reached to 349.6 Lakh Liter per day (LLPD) during 2017-18 recording a growth of 6% as compared to 331 LLPD marketed during 2016-17.

ANAND PATTERN – THREE TIER MODEL

A big success story in India's dairy development is of dairy cooperatives. In the forefront is Gujarat Cooperative Milk Marketing Federation (GCMMF), the apex body of farmers' milk cooperatives. It markets the milk products produced by its member cooperatives under the brand name Amul and Sagar. Milk is sourced from 15,301 village dairy cooperatives where more than three million farmers collect their milk produce.

Structure of Indian dairy Industry



Operation Flood:

Government started with White Revolution under the title Operation Flood (OF) Program launched in 1970. By promoting Anand Pattern of dairy cooperatives, OF envisaged sustained increase in resource productivity culminating in improved quality of life of milk producers and assured supply of quality of milk and other dairy products to consumers at reasonable price in a free market environment.

The objectives of Operation Flood included:

- Increased milk production ("a flood of milk")
- Augmenting rural incomes
- Ensuring fair prices for consumers

Dairy Policy

Domestic dairy policy has transitioned from the "Operation Flood" period covering 1970-96, to a "Perspective Plan" period between 1996 and 2010, to the current National Dairy Plan (NDP) period covering India fiscal years 2011/12-2018/19 (April/March).

Investment in Dairy Development

Overall, Government investment in dairy development dropped off following the end of Operation Flood III in 1996, but has picked up since the implementation of the NDP in 2012. But, even with the sharp increase in funding in 2012, dairy development funding under the various Government plans averaged just \$32 million annually during 2000-14.

Milk production in India:

Over the span of three decades, India has transformed from a country of acute milk shortage to the world's leading milk producer. India is the largest producer of milk in the world since 1998 . During 2016-17, the annual output was 165.40 million tons accounting for 20% of the world milk share.

Breed wise estimated milk production 2016-17 by Bovines (%)

(Source: Department of Animal Husbandry, Dairying & Fisheries, Ministry of Agriculture)

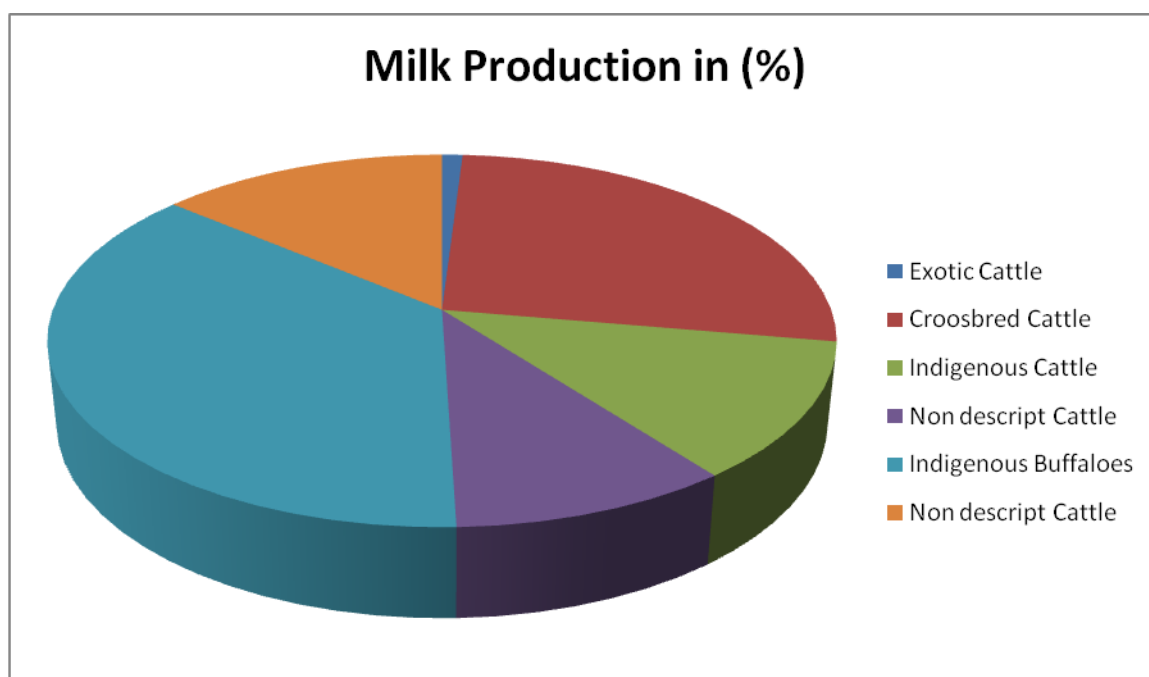


Table III Top 10 states by Per capita availability of Milk in India in 2016-17

Sr. No.	States	Per capita availability of milk (grams per day)
1	Punjab	1075
2	Haryana	930
3	Rajasthan	785
4	Gujarat	563
5	Andhra Pradesh	522
6	Himachal Pradesh	521
7	Madhya Pradesh	468
8	Uttarakhand	440
9	Jammu & Kashmir	400
10	Uttar Pradesh	348

(Source: Department of Animal Husbandry, Dairying & Fisheries, Ministry of Agriculture)

Per Capita availability:

The per capita availability of milk during 2016-17 was 355 gm per day in India as against world average of 299 gm per day.

Table IV

Milk Production and Per Capita Availability

Year	Per capita availability (grams/ day)	Production (million tones)
1950-51	132	17.00
1960-61	127	20.00
1970-71	112	22.00
1980-81	131	31.06
1990-91	178	55.6
2000-01	220	80.06
2010-11	281	121.8
2011-12	290	127.9
2012-13	299	134.4
2013-14	307	137.7
2014-15	322	146.3
2015-16	337	155.5
2016-17	355	165.4

(Source: Department of Animal Husbandry, Dairying & Fisheries, Ministry of Agriculture)

Table V shows the production of milk from 1950-51 to 2016-17. The country is stressing on the milk product industries to increase their production rate. The projected estimate production for 2016-17 was 165 million tones. The Annual milk production in India has grown more than six times since independence

Dairy Farming: Major livelihood by many households in rural areas

Dairy farming includes rearing milk cattle – cows, buffaloes, goats and sheep. Dairying has been considered as one of the activities aimed at alleviating the poverty and unemployment,

especially in the rural areas, rain – fed and drought – prone regions. In India, about three-fourth of the population lives in rural areas and about 38per cent of them are poor. The progress in this sector will result in a more balanced development of the rural economy. As agriculture is mostly seasonal, there is a possibility of finding employment throughout the year for many persons through dairy farming. Thus dairy also provides employment throughout the year.

Milk Processing

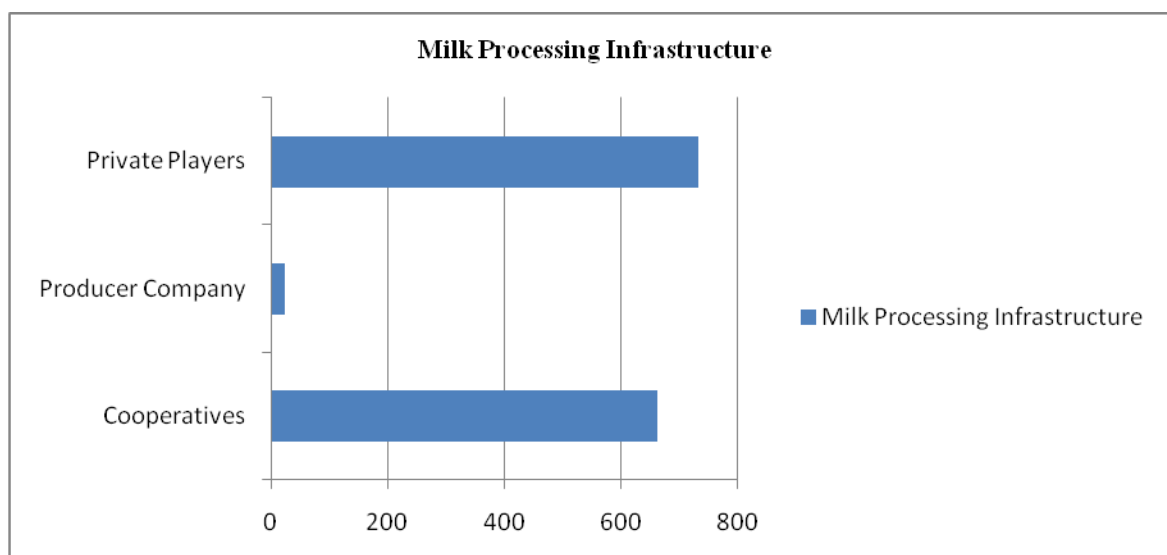
A specific Indian phenomenon is the unorganized sector of milkmen and vendors, which handles around 65-70 percent of the national milk production. They collect milk from local producers and sell it to both urban and non-urban areas.

In the organized dairy industry, the cooperative milk processors have a 60 percent market share. Cooperative dairies process 90 percent of the collected milk as liquid milk, whereas private dairies process and sell only 20 percent of the milk collected as liquid milk and 80 percent for other dairy products with a focus on value-added products.

Total milk processing infrastructure available with organised sector is indicated in the graph below:

Table V Milk Processing Infrastructure with organised Sector

(Source: Department of Animal Husbandry, Dairying & Fisheries, Ministry of Agriculture)



The Chilled milk is transported in insulated tankers to the Processing Plants where it is pasteurized and packed to be sold as packed liquid milk and processed further into different milk products. At present, most of the milk processing plants with Cooperatives are old and

majority of these plants have never been expanded and/or modernised. These plants are operating with old technology, which may not be energy efficient in comparison to available modern technologies. Therefore, there is urgent need to create/ upgrade/ modernise the milk processing infrastructure with the Cooperatives.

Domestic Consumption

The huge volume of milk produced in India is consumed almost entirely by the Indian population itself in a 50-50 division between urban and non – urban areas. The most important consumers in current scenario are fast – food chains and food and non-food industries using dairy ingredients in a wide range of products

National Importance of dairy farming

More than 19 percent of the total world production of milk is contributed by India. The industry has seen rapid growth in recent years. With high milk production, the scope of milk processing industry has increases and with that the purchasing power of the consumers also increases.

Entrepreneurs can opt for Innovative Technology in Dairy Business:

There are some amazing gadgets used by some dairy farmers across the world, for making a profitable business:

Robotic Cow Milking Equipment

Apart from being a convenient and easy gadget for milking, Robotic cow milking equipment has many advantages over the traditional way of milking. As per the dairy experts, the Robotic cow milking equipment is one of the best gadgets for dairy farming because the process of milking is precise and monotonous. It requires same way of milking at the same time every day. If done by using a gadget, the process becomes seamless and the quality standards are met. There are systems in which a collar is hung around the neck of the cows. It also gives information regarding the health of the cow.

Source: www.developmentlogics.com

Swinging cow brush: Cows love the swinging brush. However, this gadget is almost a decade old but it is one of the most loved gadgets among cows. The rotation of brush and the movements make cow



happy and they love to get their body brushed up. It stimulated blood circulation and helps in keeping the cows stress free and healthy. *Source: www.developmentlogics.com*

Drone Technology: The use of Drone technology in dairy sector is rising these days. It helps in monitoring the herd and the land. It helps the farm owners in keeping a check on the activities of the entire farm. One can respond to the emergencies immediately without wasting any time.



Face recognition technology for cows: Yes, you read it right! There is computerized dairy farming technology available for farmers where they can identify their herd with the help of cameras with face recognition system. It helps in situations where a particular cow is having symptoms of disease and the farmer will know exactly which one is ill and respond immediately.

Applications for selling milk: There are apps available for dairy farmers where they can sell milk and manage all of their data related to the business. It helps in managing the business and finding if there are any loopholes. *Source: www.developmentlogics.com*

Sensors

More than any other technological advancement, sensors can fill the data gap in dairy farming, particularly when animals are outside in a field. Before the use of technology, monitoring an individual cow's health was difficult, time consuming and cost-intensive. However, the use of sensors and wearable technologies allows farmers to monitor individual cows. No longer do producers have to work from herd averages; they are now able to determine individual illness or lameness more effectively and react accordingly, quite possibly before milk production or the rest of the herd is affected.



Wearable sensors have proven valuable in managing a cow's health, and there is no shortage of companies producing this type of technology. Leaders — such as SCR Dairy, which is assessed to have about 80 percent of the market share — produce all manner of wearables worn on a cow's ears, neck, legs or tail. They can even be implanted subcutaneously or inside

the rumen. Sensors help monitor cow comfort and welfare. Cows need to rest for an average of 11 hours per day; any less than that affects blood flow to the udder and can negatively impact milk yield. Sensors can detect a lack of locomotion and alert producers when to circumvent these negative effects.

Livestock Labs has created a tracking technology called EmbediVet, which is implanted underneath the cow's skin using a local anesthetic. This tracker claims to be less bothersome than wearable sensors and more accurate in gathering data and monitoring

behavior. Ingenera offers a line of various sensor products designed to measure cow conformation, weight, udder health and other body metrics.



Moocall, also a participant in the Pearse Lyons Accelerator, produces sensors that detect the heat cycle of the cow by evaluating her responsiveness to a teaser bull. His proximity and behavior can determine her receptivity and alert the farmer's smart device if she is in heat. Afimilk makes a pedometer for cows, alerting farmers of the best time for insemination on the basis that cows walk and move more as they come into estrus. *Source: Image courtesy by Moocall*

Artificial intelligence

Big data promises precision agriculture; however, if farmers can't interpret the data and use it to take action, the data is useless. Artificial intelligence allows producers to analyze the data collected by sensors and other hardware technologies and can provide interpretations and solutions by mimicking human decision-making — potentially transforming how a dairy farm operates.

Source: Cainthus' imaging technology

Some Mobile Apps for Dairy Farming:

Dairy Husbandry Practices: This App offers the comprehensive information towards the beneficial practices related to dairy husbandry practices along with the essential knowledge of dairying related to:

- Cattle Farm Management
- Day to Day income and expenses report
- Daily cattle wise milk yield report
- Cattle data storage
- Alerts for cattle health activity

Live Stock Care:

- Live Stock Care is a multi-lingual Mobile Application related to Dairy Farming which offers a complete knowledge of general diseases, tips & suggestions related to the farm animals. It also gives an insight to the details about the symptoms of diseases and how to take precautions if an animal is sick.

The Dairy App:

- For dairy related updates and news, The Dairy App is perfect. It also offers the market related information by giving the collective data of Milk with global trade numbers. For people in dairy farming it serves great knowledge to boost the business.

Grass2Milk:

- For nutritional related information regarding cattle, Grass2Milk is a well made application. It allows the dairy farmers to know if they are giving proper diet to their herd in order to reach the product related goals. It also helps in planning the feed per day.

Production and scope of dairy farming**Growth Rate Target**

As per the report of the Working Group on Crop Husbandry, Agricultural Inputs, Demand and Supply Projections and Agricultural Statistics for the 12th FYP (2012- 17) published in Oct, 2011 (Page no. 52), a behavioral Approach method was adopted for estimating the future milk demand.

The Organization of Economic Cooperation and Development (OECD) projected a GDP growth of 5.8% for India during a period of 2015-16 to 2033-34. The same has been taken for milk demand projection. The Organization of Economic Cooperation and Development (OECD) projected a GDP growth of 5.8% for India during a period of 2015-16 to 2033-34. The same has been taken for milk demand projection.

19th Livestock Census: The number of milch animals (in-milk and dry), cows and buffaloes, has increased from 111.09 million to 118.59 million, an increase of 6.75%.

- The number of animals in milk, cows and buffaloes, has increased from 77.04 million to 80.52 million showing a growth of 4.51%.
- The Female Cattle (Cows) Population has increased by 6.52% over the previous census (2007) and the total number of female cattle in 2012 is 122.9 million numbers.
- The Female Buffalo population has increased by 7.99% over the previous census and the total number of female buffalo is 92.5 million numbers in 2012.

(Source: Press Information Bureau Government of India Ministry of Agriculture & Farmers Welfare)

Table VI The parameters considered for the projection are given below

Parameter	GDP Growth (in real term) %	Population Growth (%)	Growth in per capita income (%)	Expenditure Elasticity
2015-16 to 2020-21	5.8	1.32	4.5	0.94
2015-16 to 2021-22	5.8	1.31	4.5	0.85
2015-16 to 2025-26	5.8	1.24	4.56	0.70
2015-16 to 2028-29	5.8	1.21	4.59	0.70
2015-16 to 2032-33	5.8	1.19	4.6	0.70
2015-16 to 2033-34	5.8	1.19	4.6	0.70

(Source: Ministry of Agriculture and Welfare, Government of India, January 2018)

Table VII Accordingly the Projected demand of Milk is furnished as under

Year	Per capita demand (grams per day)	Population (million)	Demand (million tones)
2015-16 (actual)	333	1280.2	156
2020-21	409	1366.8	204
2021-22	417	1384.1	211
2025-26	456	1447.9	241

2028-29	502	1497.6	274
2032-33	571	1566.5	327
2033-34	590	1584.3	341

(Source: Ministry of Agriculture and Welfare, Government of India, January 2018)

In the interests of livelihood and economic well-being of the milk producers, it is essential to provide rural milk producers with greater access to the organised milk processing sector. This would not only ensure remunerative prices to farmers for their produce but also encourage more farmers to adopt dairying as a source of livelihood.

Scope of Entrepreneurship Development:

Dairy entrepreneurs can effectively contribute to the society in the areas mentioned below:

1. Create jobs for the large section of unemployed educated youth.
2. Creates market opportunities for the indigenous products through product diversification and innovative marketing.
3. Utilizes the non-conventional resources like solar energy, rain water, agricultural by products and other locally available resources.
4. Entrepreneurs introduce new technologies and new products through entrepreneurial spirit.
5. Reducing Poverty, nutritional hunger through dairy development
6. Export orientation of the dairy products (food safety and quality). Export of animals, milk products.
7. Surveillance and monitoring of emerging livestock disease due to decline in genetic diversity.
8. Developing breeding policy/conservation of elite indigenous germplasm.
9. Integrating small holder dairy production in value chain.
10. Adapting dairy production to climate change (methane mitigation, housing scheme).
11. Sustainability of commercial dairy production.

The above contribution would enhance the socio economic development of India but for quick developments, entrepreneurial capabilities should properly channelized by opting proper digital and technological advancement wherever needed.

Knowledge and Skills required becoming a Dairy Farming Entrepreneur:

- Trained in artificial insemination

- Knowledge of disease and injury treatment and calf pulling
- Knowledgeable in dairy nutrition
- Ability to motivate employees
- Ability to communicate
- Knowledge of milking procedures
- Knowledge of Dairy Herd Improvement Records

FUTURE SCOPE OF DAIRY FARMER:

Dairying as an occupation is subsidiary to agriculture and is an important source of livelihood for small and landless laborers. The Honorable Prime Minister has given the vision of doubling the farmer's income by 2022.

Dairy market:

India is a land of opportunity for investors looking for new and expanding markets. Dairy food processing holds immense potential for high returns. The dairy market in India has witnessed a growth in recent years on account of rising demand for milk and its products fueled by expansion in milk production.

Rising consumption:

India is not only the largest producer of milk but also the largest consumer of milk. The policy approach should be to create growth path for the dairy industry. Currently, milk constitutes 15 per cent of the average households' expenditure on food.

However, with increasing urbanization and growing GDP, income rises are leading to fall in share of food as percentage of total expenditure.

Sustained Growth:

- Undoubtedly, dairying has provided gainful employment to millions, primarily women, in the villages. Investments under 'Operation Flood' have resulted in sustained growth and self-sufficiency in dairy:
- Amul Model has demonstrated the capacity of a single commodity to have multi dimensional effect on producers, consumers as well as the economy of the country. This model has also delineated the importance of commercial approach to development and nil interference of government in commercial enterprise.
- By the year 2020, India's GDP is targeted to cross that of UK and will be ready for a steep rise till 2050. But it can be realized only by active government support to vital

sectors like dairying and implementation of well formulated ideas provided by dairy scientists and experts.

Cooperatives:

- Amul apart from being Asia's largest milk brand is a vehicle for economic and social development through which farmers manage their own resources.
- Amul has long been dedicated to providing best prices to its member producers for their milk and at the same time providing value for money to its consumers.
- Amul is also developing wide range of products to meet future demand, including calcium fortified milk, flavored yoghurt, frozen yoghurt, sugar free ice-cream and pro-biotic products.
- In order to keep pace with the growing market and production base, GCMMF has planned a total investment of \$600 million for milk processing and village level infrastructure enhancement in the next five years.

Milk Production Outlook:

- India's White Revolution has attracted world-wide attention and Indian performance is expected to continue to play a major role in the future of the dairy industry in the world in coming years.
- It is expected that the world milk production will rise to 867 MMT by 26 per cent from current 714 MMT. However, as per the current CAGR of 4 per cent and optimistic projection of 4.5 per cent, India's milk production is estimated to touch 180 million MT by 2020.
- This will lead to increase of India's share in the world milk production from the current 16 per cent to 21 per cent in 2020.
- Hence, the state of milk producing farmer is crucial for the dairy industry. To sustain the milk production there has to be a right mix of social, environmental and economic factors influencing the farmer.

National Policy:

- Against this backdrop, the national policy on dairy is critical for the growth of dairy industry. Milk production in US has been growing at a very good pace as a result of policies of the US government which nurture and protect cooperative marketing by dairy farmers.

- Experts feel India should also continue its emphasis on dairy development through cooperatives and private investments to ensure long term growth and sustainability of the industry.

Constraints and Challenges faced by Dairy Farmers:

Major challenges being faced by Indian Dairy sector are given below:

- Low Productivity of Indian bovine
- Imbalanced feeding to animals
- Limited access of milk producers to organized sector
- Age old infrastructure operating on obsolete technology
- Lack of organised credit system
- Lack of manufacturing facilities for Value Added Products.
- Lack of efficient chilling infrastructure at village level
- Lack of penetration in smaller cities/ towns in terms of milk marketing
- Lack of efficient cold chain distribution network.

B.S. Gupta, S.P.S. Somvanshi, V.K. Jain and H.K. Trivedi (2017) identified that Keeping in view of these constraints, it has been suggested that conclusive strategy should be awareness camps and training programmes should be arranged regarding scientific animal health care and management practices to minimize the knowledge gap of the dairy farmers.

Rosie Woodroffe, Christl A. Donnelly (2006) constructed a “base model,” including covariates likely to influence observed prevalence (see *Materials and Methods*). This model suggested that, as predicted, the prevalence of *M. bovis* infection increased with successive culls. This increased prevalence was particularly marked when multiple operations were used to complete each annual cull (details in supporting information).

Meenakshi Chaudhary and Intodia (2000) identified the major constraints as perceived by cattle owners in adoption of dairy practices as breeding constraints – inadequate knowledge of breeding practices (45.00%), high cost of cross bred cattle and superior quality bulls (44.40%) and perception of artificial insemination as unnatural method (37.00%), whereas feeding constraints poor irrigation facilities for growing green fodder (48.10%) and high cost of concentrate (42.50%). Management constraints such as lack of knowledge in weaning new born calves (80.00%), health constraints – lack of knowledge about cattle diseases and their control (36.60%), lack of veterinary clinic and health care

centers (29.60%) and high cost of veterinary medicines (24.80%) and miscellaneous constraints were lack of educational programs on dairying (21.46%) and lack of trained rural youth in village (20.70%).

Anujkumar et. al., (2002) reported that majority of dairy farmers faced moderate constraints under different categories of constraints such as management (80.47%), followed by breeding (66.41%), health care (55.47%) and feeding constraints (53.12%).

Aravindkumar and Vasanthakumar (2003) observed that the major constraints faced by small and marginal farmers in dairy farming were low price of milk (96.67% and 100.00%), followed by high cost of feeds and fodder by high costs of feeds and fodders (93.33% and 100.00%), non-availability of land for fodder cultivation (86.67% and 96.67%), less fat content in crossbred cow milk (70.00% and 96.67%), and non-availability of loans and lengthy procedure (66.67% and 83.33%), respectively.

Manoharan et. al., (2003) observed that the major constraints faced by farmers in dairy farming were higher feed cost, low price for milk, high investment, infertility problem, low productivity, higher rate of calf mortality, frequently becoming sick, inadequate availability of grazing lands, costly veterinary treatment and aids.

Singh et. al., (2004) reported that the major constraints in rural livestock farming were feeds and fodder shortage, poor animal productivity, poor breeding facilities, poor veterinary services, poor livestock extension service and poor credit and marketing facilities.

High-risk spread is probably the result of the cattle–badger–BTB interaction, though there is potential for contributions from other clustered risk factors. Evidence that cattle-to-badger transmission is important is sparse (Woodroffe *et al.* 2006), however if true, seedings via cattle infections may contribute to the broadening of high-risk areas

CONCLUSION

Dairying is practiced by 70 million households with an average herd size of 2 animals per farmer. India has 299.6 million bovine populations out of which 190.9 million are cattle and 108.7 million are buffaloes. "Rashtriya Gokul Mission" has been launched in Dec. 2014 with an outlay of Rs 2025 crore for development and conservation of indigenous breeds

through selective breeding especially for genetic up gradation of 11.3 crore low milk yield nondescript bovine population. Project period is from 2014-15 to 2019-20.

Dr. Torsten Hemme, Managing Director of the Dairy Research Network (IFCN) stated in 19th IFCN Dairy Conference on 14th June 2018: “More milk will be needed in the market. The increase of demand is not only due to more people living in the world, but also the per capita consumption will increase, due to growing prosperity and worldwide investments in dairy product development.” In current scenario about 876million tone of milk is produced worldwide with Oceania, EU and India among the leading producers. Dr. Hemme said that by 2030, IFCN forecasts growth of worldwide milk production and demand in total by 35%.

The study observed that entrepreneurial capabilities should properly channelize by opting proper digital and technological advancement wherever needed.

The study identifies that amazing milking techniques and innovative digital advancement would definitely give positive effects in Dairy Farming.

Equally urgent is the need for strategic alliances with some of the leading dairy companies in the world for technical collaboration and marketing tie-ups. The adoption of Good Manufacturing Practices (GMP) would help manufacture milk products that conform to international standards and thus make exports competitive.

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Book Summary – The Effective Executive

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Work is becoming increasingly unstructured and creative in today's knowledge-based economy. Effectiveness is hence becoming more critical to individual and organizational success. Since its publication in 1967, "The Effective Executive" by Peter Drucker has helped many executives to improve their effectiveness. It shows how personal effectiveness—doing the right things—can be developed through 5 key practices. In this summary, we'll outline these 5 key practices in The Effective Executive.

We cannot effectively manage others if we cannot first effectively manage ourselves. The good news is, effectiveness can be learned. Specifically, it is the result of learning and practicing a small number of simple practices until they become habit.

The Need for Effective Executives

Today, organizations and workers are increasingly knowledge-based. Unlike manual workers who use physical force or manual skills and need to focus on efficiency (doing things right), knowledge workers (e.g. accountants, designers) use knowledge and concepts to create ideas, solutions and new knowledge. *Executives are paid to be effective, i.e. to get the right things done.*

An "executive" may not necessarily be in a leadership position – every knowledge worker is an "executive" if his role and contributions affect the organization's capacity to perform and obtain results. Based the book "The Effective Executive" by Peter Drucker following learning out comes can be considered by a professional

THE 5 PRACTICES OF THE EFFECTIVE EXECUTIVE

The workplace comes with realities beyond our control; unless we make a conscious effort to be effective, we will simply be operating without real impact. To become effective, we must acquire 5 habits:

- Manage our time

- Focus on results and contribution to the organization
- Build on strengths (self, others and situation), rather with weaknesses
- Set priorities and concentrate on the few major areas that will deliver outstanding results.
- Make effective decisions

1. KNOW AND MANAGE YOUR TIME

An executive “loses time” in many ways:

- Being largely self-directed; a knowledge worker must invest time to know what is expected of him and why, and also to understand how others can/ will use his knowledge output.
- Being part of a wider organization, an executive inevitably spends time on planning, discussions, reports, people-relations etc. The larger the organization, the less actual time he has.
- Many tasks require minimum chunks of time for completion, e.g. developing a strategic plan or direction or finishing a report. When done in dribs and drabs, much of the time is actually wasted.

Everything requires time; yet, time cannot be bought, is perishable and is irreplaceable. Time is hence the key resource to be managed for effectiveness. Before moving into planning, we should start by identifying where our time actually goes, so we can organize our “discretionary time”. There are 3 steps you can use:

Record Time

Record actual time-use (using any method that works for you), so you become aware of where your time is going.

Manage Time

Identify unproductive, time-wasting activities by asking 3 diagnostic questions:

- o What would happen if these were not done at all?
- o Which of the activities on my time log could be done by someone else just as well, if not better?

o Ask others: “What do I do that wastes your time without contributing to your effectiveness?”

Then, remove the time-wasters if possible. Time-wasters include:

- o Recurrent “crises” due to lack of system or foresight
- o Excessive interaction instead of real work, due to overstaffing
- o Too many meetings due to mal-organization
- o Malfunction due to incomplete or ineffective information

Consolidate Time

Estimate how much discretionary time you really have, then set aside continuous and uninterrupted blocks of time, with deadlines to complete your activities within the allocated time.

2. FOCUS ON YOUR CONTRIBUTIONS

Constantly ask, “*what can I contribute?*” and take responsibility not just for your own results, but that of the organization’s – this shifts your focus away from your narrow pockets of specialized knowledge or expertise to the wider relationships, organizational purpose and the “unused potential” in your job.

When we focus on how our work contributes to others and the whole, it facilitates meaningful communications, the right human relations, and personal growth:

- Once we *take responsibility for our contributions*, we can demand that of our subordinates too. When a subordinate starts to think through his potential contributions, it creates a meaningful platform for two-way (rather than downward) communication. Recognizing what you can’t do and delegating with an emphasis on contribution makes others effective too.
- In the same token, *communication sideways* starts to open up, and real teamwork becomes possible.
- When we focus on contributions, we naturally identify areas for *personal self-development*. When we set high standards, ambitious goals, and aspirations for ourselves to produce impactful work, we also stimulate others to develop themselves.

Meetings, reports and presentations are essential part of an executive's work. To conduct effective meetings, it is critical to establish and state from the outset the specific objectives and contributions of the meeting.

3. MAKE STRENGTH PRODUCTIVE

Do not focus on problems and limitations; focus on opportunities, strengths and what you can do. The goal of organization is to use the strength of every person as a "building block for joint performance." To achieve best results, use the strengths of everyone, including your superiors, peers, sub-ordinates, associates, and your own. Set up the work such that someone's strength is used fully and his weakness is irrelevant.

4. FIRST THINGS FIRST

There will never be enough time to do everything. When we concentrate our (and our organization's) time, effort and resources, we complete each task faster, and hence can tackle more and greater diversity of tasks.

5. MAKE EFFECTIVE DECISIONS

Executives have the responsibility to make decisions that have significant impact on the organization and performance. To be effective, we need to go beyond problem solving; we need to concentrate on important, strategic decisions and be prepared to make considered or even controversial decisions.

So there you are, the 5 key practices of effective executives:

- Manage your time
- Focus on results and contribution to the organization
- Build on strengths (self, others and situation), rather with weaknesses
- Set priorities and concentrate on the few major areas that will deliver outstanding results.
- Make effective decisions

Guidelines for Submission

1. The manuscripts should be in MS-Word 2007 format in English language.
2. It must be double spaced, with 1 inch margins at the top, bottom, and both sides. Justified text in font of "Times New Roman", size 12.
3. Manuscript pages should be in order ,starting with Cover Page followed by Abstract and main text. Cover page of the paper should provide full name (first, middle, surname) and full address of the institute affiliated to, correspondence address along with email address of the Author(s).
4. The Author(s)'s name or affiliations should not appear anywhere else in the body of the manuscript for peer blind review process.
5. All manuscripts must include abstract, followed by relevant keywords, in maximum 250 words, which should adequately describe the work and its significance. Abstract should only include text.
6. The manuscripts should not exceed 4000-5000 words including abstract, keywords full text references.
7. Figures and tables should be numbered consecutively with the source indicated at the bottom. Figure must be in high resolution with descriptive heading.
8. All tables, charts, graphs, diagrams should be black and white.
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