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“Quest” Journal of Management Research is a bi-annual publication of Chetana's Ramprasad Khandelwal Institute of Management and Research to disseminate knowledge and information in the area of finance, marketing, human resources, operations, general management practices, business development etc.

The Journal intends to focus on theoretical, applied and interdisciplinary research in business and management studies. It provides a forum for debate and deliberations for academicians, industrialist and practitioners in the field of business and management.

The Views expressed in the articles and other material published in the journal do not reflect the opinions of the Institute.

From Editorial Desk.....

The impact of coronavirus pandemic on India has been largely disruptive in terms of economic activity as well as loss of human lives. With a few exceptions, all sectors have been adversely affected. In response to this negative impact on company financial results, a need was felt for new practices in accounting and investment policies of regular banking companies, NBFC & FSC. The COVID-19 pandemic has exacerbated the woes of Non-Banking Financial Companies (NBFCs). The decline in non-bank credit growth, which started in the second half of fiscal, continued through fiscal 2020, accentuated first by economic slowdown and then - more vigorously - by the pandemic.

Higher transaction costs and uncertainty due to this event transformed India's Food Supply Chains (FSC), putting food security at risk as 92% of food consumption in India is purchased predominantly from the private sector. Government faces the challenge of marshalling resources between mitigating the impending food crisis and containing the contagion as the risk of socio-political tensions looms large.

On the other hand, the pandemic has led to a positive impact in some sectors like E-commerce, Automobile, Health care etc in India. The former alongside digital marketing has gained importance as well and are here to stay for a long time. The future is clear, the need will remain but the interface for service delivery will have to change.

Another pervasive trend emerging during this juncture is telecommuting across all sectors and companies. Majority of the working community realized the importance of progressive technologies and their applications. As a result, there has been an increase in the demand for advancement in knowledge of information technologies and more people are enrolling for online courses of contemporary IT trends like Data Analytics, Coursera etc.

Business dashboard tools in the future are likely to incorporate machine learning and AI so they bubble up points of interest and identify patterns in raw data that even the most well-equipped data scientist will not be able to find manually. Sentiment analysis allows businesses to quickly understand the overall opinions of their customers. Standard question answering systems following pre-defined rules along with AI-powered chatbots and virtual assistants are able to learn from interactions with customers and generate effective solutions to client needs. NLP thus has multiple applications in current era and can be incorporated in management education.

This issue of "Quest" Research Journal in Management covers the research articles on impact of COVID19 on various industry sectors like, Non-Banking Financial Companies, Food Supply Chains & Business Dashboard with AI, Natural Language processing. Etc.

We thank all the Authors for their valuable contribution!!

— Dr. Kavita Khadse

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Corona Virus And A Story of Capital Market

* Prof. Suhas S. Gharat

Abstract

Capital Market around the world runs economies. The economy is more developed where the capital market is developed. The EMs (Emerging Markets) are the latest buzz in the capital market and many foreign investors are attracted toward the capital market of Ems

The Corona Pandemic has all of sudden brought all the capital markets by almost 25% to 30% because of uncertainties. This has eroded wealth of millions of dollars across the world.

This article tries to bring in opinion of the writer about the future of capital market because of crash on account of corona virus pandemic.

Keywords: *Pandemic, Capital Market, Crisis, Indices*

INTRODUCTION

Corona Virus pandemic which has brought almost quarter of the world to lock down position today, started in Wuhan City in China in around end of 2019. Since January, 2020, it spread across the world. The most affected countries today are China, Italy, Spain, Iran, France, Germany and USA. It has started showing its impact in other countries also including India. It has resulted in halting of almost all economic activities around the world. It has impacted world indices as never before and brought down wealth of the investors to unprecedented level. Till today world over 24,095 people have died and 5,33,015 have tested positive for corona virus infection.

The market across the world, including Japan's Nikkei, Hong Kong's Han Seng, Australian Market, South Korean Market, US Market and European Markets all crashed by about 25% to 30%, including some of the individual script falling to a record 30% to 40% low. Indian markets were also not exceptional to this.

The market has seen such kind of huge corrections in 1992 (Harshad Mehta Scam), 1997 (Asian Financial Crisis), 2000 (Dot com bubble) and 2008 (Global Financial Crisis). In 2008, NIFTY find its bottom at 12 -12x trailing P/E. Today we are at 20x P/E which means we are better off today as compared to 2008 crisis. Further in 2008, trailing P/BV came down to 2.2 from 6 within one year.

* Prof. Suhas Gharat, Faculty, Chetana's R. K. Institute of Management & Research, (CRKIMR), Mumbai
Email: suhas.gharat@crkimr.in

Now we are at 2.3 trailing P/BV within one year from 3 trailing P/BV which is not as sharp as compared to 2008 crisis. Based on this, NIFTY is 15-18% above the bottom in 2008.

The market Cap to GDP ratio in 2008 was 45.60%. Now it is 50%. FII outflow in YTD 2020 till today is higher than FY 2019 and 80% of FY 2018. The positive news in all these is that after Asian Financial Crisis, the post correction returns were 103%. After Dot Com Bubble, the post correction returns were 405% and after Global Financial Crisis post correction returns were 387%. Looking at this trend, we may expect a correction in the market which may give handsome return to the patient investors.

As of now, the market is under pressure because of situation in Europe and US where every day increasing cases of infected cases are reported. Because of on-going sell off pressure worldwide, some stocks are available at much lower level. However there is no clarity whether the market has reached bottom and hence it is not advisable to go all out in the market. A caution has to be taken while investing. The investing only for long term is suggested. It is better to hold high cash position and only deploy the money if you are long term investor and that too in the fundamentally strong companies.

Along with deep in stock market, the Mutual Funds have also been negatively impacted. Gold has also lost its shine and oil prices are also at a low. Because all the investment avenues have taken a hit, a dynamic allocation of assets over the different classes is suggested. Thus no one should keep all its eggs in one basket. This will result in minimisation of risk in the various asset classes and will average out the returns.

If you look at the sectors, in 1992 and 2008 banks and commodities were leading the show, in 2000 and 2015, IT, Pharma and FMCG were running the show. The crash in the market require churning out of portfolio, by shifting under performing sectors to performing sectors. E.g. Aviation sector, Hotel industry and tourism industry would now be underperforming. A right sector need to be chosen at right time to minimise the risk in the market and improve the return.

Depending on individual risk appetite, the investor should take calculated risk in the market and should keep on investing for long term, as it is always experienced that the dip in market is always rewarded with handsome returns over the period of about two to three years, post dip. The investor should not get panic because of market crash and should look at the big picture rather than looking at short term gains or losses.

In the falling market, do not to stock to reach to your buying price which do not have strong fundamentals. This will lead to huge losses. Do not overleverage. You need to refer to news and research reports which says about changes in fundamentals. Accordingly the decisions need to be taken in respect of stock to be hold or to be disposed off. For instance, if you have invested in aviation sector, it is time to sell of those stocks as airlines are going through one of their worst performance. The holding of these stocks may lead to huge losses in days to come.

Investment strategies in these kind of falling market is quite complicated. You need to hold on to cash to have liquidity and take an opportunity of buying good quality stocks for long term. In these kind of market safety, quality and opportunity approach is best approach. This means that safety is priority,

good quality stock comes next and taking opportunity of deep in the prices of scrip comes last. It is always been observed in the past that once the market starts improving, high quality companies are the first who starts recovering and give handsome returns in the long run. Thus investing in good quality companies in a staggered manner is a good policy in this kind of market. A lot of opportunity also prevails for the first time investors to enter the market, as many good quality company stocks are available at cheaper rate which are expected to give handsome return in the long run.

SIP is best way of investing in this kind of market. Buying good quality stock from market through SIP or through MF schemes which invests in blue chip companies or large cap companies is best way to take benefit of this kind of market. Investing in penny stock and small and mid cap in this kind of market may be suicidal.

Looking into the current global situation the sectors which are vulnerable and to be avoided are Aviation, Hotel, Tours and Travels (because of low demand), Automobile, Building Material and Construction, Engineering (because of low demand), Banks and NBFCs (because of higher NPAs). Textiles, IT, Auto ancillaries etc. The investment in these sectors should be avoided as far as possible as these sectors are worst hit because of Corona Virus pandemic and will take longer period of time to recover. In fact, some of these companies may go bankrupt in the period of about three to six months, specially airlines, hotels and tours and travel companies.

The few sectors which are going to perform better once the market improves include Pharma companies, speciality chemical companies, Consumer staple, Life insurance, FMCG and few multi

national companies with high returns and dividend paying record. Companies such as Nestle, Asian Paint, HUL, ITC are good bet in this bear market.

Few companies which are good bet to buy in this market are Reliance industries, IRCTC, Asian Paints, HUL, Nestle, ITC, Bajaj Finance, Bajaj Finserv, HDFC Bank, HDFC AMC, HDFC, HDFC Life Insurance.

Stay calm, don't be panic, donot take high risk, invest in fundamentally strong companies, Invest step by step through SIP, invest for long term, do not invest in small cap and mid cap companies. These tips will result in good return in long term.

CONCLUSION

Even though the markets have crashed because of lockdown and pandemic, there is light at the tunnel. The history has proved that whenever the markets have crashed substantially, after that it has bounced back rapidly. Even though this is the first time, the market has crashed because of pandemic, hopefully once the pandemic is over, the market will bounce back. In fact this low market is an opportunity to multiply the wealth by entering the market now and exiting the market once it bounce back

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A Case Study of the Practices followed by Enrich Salons and Academy as part of the Beauty and Grooming Industry during the COVID 19 Pandemic

* **Dr. Athar Qureshi**

** **Dr. Jayashree Bhakay**

*** **Sachin Kamat**

Abstract

This case study is an attempt to document the impact of COVID 19 pandemic on the beauty and grooming industry, especially the salon segment. It is also an effort to understand how Enrich Salon and Academy, one of the leading service provider in the segment geared up and responded to the COVID 19 crisis. The case study is based on the secondary data and information available from various published sources and the internet. The study highlights strategies and activities used by the company to mitigate the effects of the pandemic and bounce back in the unlocking phase. Most importantly the role of the Leadership in mitigating the crisis and ensuring the continuation of services. The case study also focuses through the example of Enrich on the agility that is needed in a business to survive and come back from the adverse environmental conditions that can come its way. The study will open up avenues for more research into the fields of management strategies, marketing strategies, consumer behaviour and digital marketing.

Keywords: *Grooming Industry, Crisis Management, Leadership, Consumer Engagement, Employee Engagement.*

INTRODUCTION

Beauty treatment and grooming has been an integral part of the human evolution story. Ever since humans formed clans, tribes, communities and began socializing, beauty and grooming played an important role in the human life. Initially to identify with a particular group or tribe and later in the more modern evolved world as a personal attribute.

Presenting yourself as the best, looking good to be accepted socially was considered as a status symbol. Various civilizations, such as the Egyptian, Romans, Greek, Chinese, Indian and Middle Eastern World mastered the art of beauty and grooming. Knowledge and art of beauty and grooming impacted the European nations while they engaged in their colonial pursuits or trade in the regions these civilizations once existed. The characterization

* Dr. Athar Qureshi, Assistant Professor, Chetana's Institute of Management & Research (CIMR), Mumbai.
Email: athar.qureshi@cimr.in

** Dr. Jayashree Bhakay, Director, Chetana's R. K. Institute of Management & Research (CRKIMR), Mumbai.
Email: director@crkimr.in

*** Mr. Sachin Kamat, Director, Enrich Salon, Email: reach4sachin@gmail.com

of a beautiful person was a combination of inner beauty including various psychological factors and the outer beauty (physical attractiveness). Standards of beauty have evolved as per the evolution of mankind and the change in cultural values. The customer preferences and needs for beauty and grooming rules supreme. The customer need has progressed from 'looking good' to 'feeling good'. The feeling good is mostly derived from the health, hygiene and safety standards of the beauty and grooming services and their offerings. The COVID pandemic of 2019 and the subsequent lockdown in early 2020; enacted to slow the spread of the corona virus has impacted the economic growth across all industries. The preventive measures announced by the World Health Organization (WHO) include social distancing, use of mask (for avoiding droplet spread) and use of alcohol based sanitizer to clean hands (for hygiene). The magnitude of the pandemic demanded a complete revamping of the way the industries function and the way they provide services. The beauty and grooming industry, especially the salon segment is one such industry that requires to function in a close proximity with the customer. All this had to change, keeping in mind the quality of the service and the additional health and hygiene concerns. After a careful assessment of the situation and the changing ground realities, Enrich Salon and Academy decided to engage with the customer through a well-designed consumer research. The idea was to understand the concerns and needs of the customer when they decide to come back to utilize the services at the salon, once the lockdown eases. The lockdown period was utilized by the company to positively engage with the human resource; to train them and build their capacity and skills. The period was also utilized to keep the customer connect to the brand. Reaching out through problem solving audio and video calls, DIY videos, product promotions etc.

The approach to provide the services in the new format had to be practical and safe. Use of Social Media for consumer education, awareness and marketing was one of the unique initiatives by the company. Expansion from service delivery and adding retail product business was also introduced. Initiatives for customer engagement through competitions, offers and discounts, reward points and using social causes were rolled out.

THE MARKET AND THE INDUSTRY

Size: Reports suggest that the global beauty and wellness industry is showing a CAGR of 15% in the last five years. The industry in India has reported a CAGR of 18.6%. The global estimate for the industry is estimated to be around USD 1.4 trillion by 2022. The beauty and wellness market in India was valued at INR 901.07 billion in 2018, and is forecast to reach INR 2,463.49 billion by 2024.

Classification & Segments: The beauty and wellness market as per the NIC classification of Government of India comprises of salon & beauty centres, fitness & slimming, alternative therapy, rejuvenation and products & counter sales. Classification according to FICCI and EY comprises of nutraceuticals, salon, spa, aesthetic dermatology, fitness & slimming and alternative therapy. The salon and spa business accounts for 31% share of the entire beauty and wellness market in the country. The Indian salon market can be sub-divided broadly into three segments. The unorganized segment comprises of barbers and smaller parlours or home based beauty parlours. The organized segment is the chain of salons and parlours, often on a franchise model run by brands such as L'Oréal, Enrich Salon, Jawed Habib, Shehnaz Hussain etc.. The final segment is the e-commerce platform or app based models such as UrbanClap, House Joy,

AtHomeDiva etc..

Growth Drivers & Trends: The key growth drivers identified for the industry include the rising middle class population, rising disposable income, urbanization, young population base, changing consumer psyche towards beauty and wellness, advance technology, growth of e-commerce, and the increase in awareness amongst men for beauty and grooming. The key trends in the industry are; the increase in venture capital and private equity funding, franchising as a scale-up model, multi-brand strategy adopted by players and increasing investment in consumer education and retention.

Employment: The industry offers employment and is one of the foremost in employment generator in India. An estimated 3.4 million people are employed in various segments of the beauty and wellness industry. Another estimate suggests the industry (organized and un-organized sector combined) offers employment for close to 7 million people.

Impact of COVID 19 Pandemic: The beauty and wellness industry like many other industries has been impacted by the COVID 19 Pandemic. The lockdown imposed to curtail the spread of the virus and the staggered reopening process has led to restructuring and redefining of the beauty and wellness industry. Professional and personal life has been altered. Work from home, loss of income, unemployment and reduction in social gatherings has led to a sharp decline in the use of the services from the industry. Safety, health and hygiene are factors that are playing on the consumers mind and has led to a slow pickup even after things are normalizing. The customers are wary and apprehensive about the safety and hygiene standards in the offerings of the beauty and wellness industry. Spending has become discretionary and norms of

socialization have changed and this has impacted the consumer behaviour. There is emergence of a new normal amongst the customers of the beauty and wellness industry. The customer has new demands, new values and has new priorities. The customer is a conscious spender, desires a simple living (minimalistic) and is focused on health. Agility is the new mantra for the beauty and wellness industry. The speed of disruption caused by the pandemic has brought focus on flexibility, innovation and use of technology. Though the industry as a whole was greatly impacted by the pandemic, it was seen that there was a considerable traction towards online purchases in some of the segments of the industry. Amazon, Flipkart, Paytm Mall and Snapdeal reported an increase in sales and delivery of non-essential items such as trimmers and grooming devices. The industry and industry players have recognized the importance of e-commerce and digital platforms (especially social media platforms) during the pandemic. The retail stores and pharmacies kept some of segments of the beauty and wellness industry alive during the pandemic. The industry will ensure its survival with means to connect the practitioners with the customers. The drivers for change will be health, regulations, economy and society. All these will be enabled through technology as the binding force.

About Enrich Salon & Academy: Enrich is the largest chain of company owned and operated hair and beauty salons in India. The story behind brand 'Enrich' has been described as 'accidental entrepreneurship' and a blend of people from diverse backgrounds coming together and formalizing the business concept. Since its inception in 1997 the brand is spread across 06 cities in India with 83 unisex salons and more than 94 lakhs customers served. The brand is available and provides 300+ grooming and beauty services in Mumbai,

Ahmedabad, Pune, Bengaluru, Vadodara, and Surat. Around 100+ services are delivered through the home service vertical especially for women customers in Mumbai, Ahmedabad, Pune and Surat. The company engages in sales of various beauty products in the body care, hair care, skin care and nail care categories.

Philosophy & Values: The brand believes in values such as; co-operation, empathy, fairness, honesty, integrity, nurture, ownership, relationship, and respect. Special focus is given to these values especially while recruiting the front line staff. These talented and well-trained technicians become the face of the company and represent the brand. At Enrich there is a fine amalgamation of technology with a Human Touch, representing the modern and advanced side and the traditional aspects of the grooming industry. It promises the customer a service experience with security, privacy, quality and hygiene. Focus on engaging the customer through the offers and rewards is a great marketing initiative of the company. Brand 'Enrich' has the tagline *'love begins with us'* emphasizing on the love and care as features of their service delivery to their customers. The company has been awarded the IRF Trusted Mark as the seal of excellence in customer service as an assurance of retailers adhering to the Trusted Standards.

Development Activities: Enrich Academy offers learning avenue for professionals in the sector to develop their skills in hair, beauty, make-up and salon management. The academy has accreditations from Skill India, CIBTAC, ARTH, CIDESCO and L'Oréal.

Social Media: Enrich has good social media presence and utilizes these platforms for various digital marketing campaigns. The LinkedIn account

of Enrich Salon has 11,305 followers. The Face Book page of Enrich Salon is liked by 86,862 people and followed by 1,88,295 people. The YouTube page for the company has 9.96k subscribers with more than 31,65,772 views.

COVID 19 PANDEMIC RESPONSE AT ENRICH SALON AND ACADEMY

Role of Leadership: The efforts to brace and gear up in response to the COVID 19 pandemic at Enrich Salons and Academy were strategized and grouped as (1) focus on online business (2) focus on products along with services (3) customer engagement and offering choices and (4) use of technology. The basis on which all the efforts needed to be carried out required a scientific backing. A customer research survey was designed and rolled out to access the needs and apprehensions of the customer. The company was successful in collecting data of around lakhs of respondents to the customer survey. The survey led to designing of the new strategies and approach to deliver services. The roll out of these strategies was undertaken in two phases; the lockdown phase and the post-lockdown phase. The three month complete shutdown was utilized by the company to take cognizance of the situation and plan. The first was to identify what would be the future like and what changes needs to be made in the way the business is run and the services are delivered. Social media and digital platforms played an important part in the same. The senior management was involved in the larger process of bringing the industry together and participating into various online industry discussions, webinars and public forums.

Customer Outreach & Engagement: The company reached out to its customers through various platforms giving them updates on the

business with posts and creatives such as; ‘Taking initiative begins with you’ and hashtags like #jantacurfew, #staysafe, #letsfight. The professionals were made to undergo various trainings, designed with a view to cater to the new situation because of the pandemic. The company reached out to the customers and the public at large with #NewTomorrow which was relayed on 104.8 Ishq FM. The radio talk was aimed at providing insights to the audience about the safety and hygiene preparations undertaken by the company. Another initiative #MetoWe was introduced by the company which provided the customers with much needed guidance on beauty and wellness from various experts. Promotion and sale of beauty products was another initiative that was rolled out by the company through its staff during the lockdown. Products of brands such as, Cheryl’s, Olaplex, Naturica, De Fabulous, Thalgo, L’Oréal, Kertase, Decleor (Paris) and human+kind are being sold by the company. New SOPs were chalked out for the unlock process. The unlocking was initiated in the Bangalore salons in May 2020 followed by Ahmadabad and Surat. The company ensured all safety and hygiene measures were in place, (#weareback). Customer experiences through videos played an important role in building up the momentum of spreading confidence and motivating people to use the services. Customer engagement with the brand is an essential part and was continued with various contests by the company (Friendship Day Contest #FrienrichDay). The company offered various offers and discounts on services to attract the customers. The Greenrich Rewards competition was a unique way of engaging the customers not just with the business but also creating awareness about the environment. Customers were motivated to donate old clothes and other things for recycling and reusing. They were given reward points for their efforts (#GreenrichRewards). Around 48,000

customers participated in the competition and gathered reward points.

Employee Engagement: Confidence building of the employees was important during these testing times. There were no layoffs at Enrich Salon but some salary cuts. The company provided the staff with medical assistance under their ‘mera doctor’ initiative.

Technology: The Company has rolled out the ‘Enrich Salon App’. The Enrich Salon App has 4.1 star rating on Google Play (with 2816 reviews) and more than 50000 installs. The App provides the customers the flexibility to choose services and service providing professionals at their own convenience. The app also is a medium for the customers to purchase the choice of products at their convenience and ease. The organization today has a mix of online and offline technology as part of the employees review and monitoring process. Enrich Salons and Academy had started conducting monthly online pulse surveys and moved away from the traditional quarterly surveys. The company has not just digitalized the customer interface but also their internal processes. The internal App of the company has aided timely and quick monitoring and frequent reviews. The App also covers various HR elements and offers a 24x7 one to one counselling platform for the employees.

CONCLUSION

The COVID 19 pandemic has been a gamechanger for many industries and businesses. The pandemic has thrown a challenge to mankind and made us realize the need for agility in the way we do our business. Change and change management are more important concepts than ever. The approach to service delivery is no more either offline or online

but will be a hybrid mix of both offline and online. Businesses will have to also ensure the importance of various stakeholders, the external (customers) and the internal (employees). Businesses have to evolve and adapt to the changing needs, changing values and changing priorities of the customer. Use of technology and social media have been increasing and there are best practices in the public domain that have ensured the successful use and implementation of the same. E-commerce and digital marketing have gained importance and are here to stay for a long time. The future is clear, the need will remain but the interface for service delivery will have to change. The drivers for change in the beauty and wellness industry, especially with the salons will be; health (including hygiene and safety), regulations, economy and society. Technology will act as the binding force for any business to move forward in the new age, especially post COVID 19 pandemic.

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To Study Role and Applications of Natural Language Processing in Business and Education

* **Dr Kavita Khadse**

** **Gauri Agarwal**

Abstract

Natural Language Processing, also shortened to NLP, helps machines process and understand the human language in any given context so that they automatically can carry out repetitive tasks such as machine translation, summarization, ticket classification, and more. Natural Language Processing, or NLP for short, is broadly defined as the automatic manipulation of natural language, like speech and text, by software. The study of natural language processing has been around for more than 50 years and grew out of the field of linguistics with the rise of computers. This paper finds out role and applications of NLP in business with selected sectors and in education. Natural language processing has many exciting applications. Natural language processing help businesses process huge amounts of unstructured data, like customer support tickets, social media posts, survey responses, and more. Not only are they used to gain insights to support decision-making, but also to automate time-consuming tasks.

Keywords: *Natural Language Processing, Unstructured Data, Decision Making*

RESEARCH METHODOLOGY

This paper is completely based on published resources. It reveals the and address the research questions for understanding Role and applications of Natural language processing for Business and Education.

Research Questions

1. What is Natural Language processing?
2. What is Role of NLP in business?
3. What are applications of NLP in selected sectors?

4. What are applications of NLP in education?

Introduction to Natural Language Processing:

Mankind has reached its peak of evolution and discovery. The consumer today looks for luxury and sophistication in the product and how it could benefit him or her in their daily life. To sustain and stay at the top of the market and give absolute comfort to the consumers, business organisations are using different strategies and technologies. Natural Language Processing or NLP is one such technology penetrating deeply and widely in the market, irrespective of the industry and domains. It is

* Dr. Kavita Khadse, Faculty, Chetana's R. K. Institute of Management & Research, (CRKIMR), Mumbai
Email: kavita.khadse@crkimr.in

** Ms. Gauri Agarwal, Student, Chetana's R. K. Institute of Management & Research, (CRKIMR), Mumbai
Email: gauri.agrawal@crkimr.in

extensively applied in businesses today and it is the buzzword in every engineer's life. In short, NLP is everywhere.

In simple words, NLP or Natural Language Processing, also known as computational linguistics, is a blend of language, machine learning & artificial intelligence (AI). It builds a technology which allows us to interact with machines as in normal human to human conversation. 'Hey Siri' on your iPhone or 'Ok Google' on your Android mobile are the products of Natural Language Processing.

A few years ago, we used to type keywords into Google search to get effective results. Today, you have the comfort of vocally seeking your help with this technology assistant. Natural language refers to the way we, humans, communicate with each other. Namely, speech and are surrounded by text. Think about how much text you see each day: Signs, Menus, Email, SMS, Web Pages, and so much more... The list is endless. Now think about speech. We may speak to each other, as a species, more than we write. It may even be easier to learn to speak than to write. Voice and text are how we communicate with each other. Given the importance of this type of data, we must have methods to understand and reason about natural language, just like we do for other types of data.

Applications of Natural Language Processing for Businesses are:

1. Sentiment Analysis
2. Chatbots
3. Customer Service
4. Managing the Advertisement Funnel
5. Market Intelligence
6. Text Classification
7. Text Extraction
8. Machine Translation
9. Text Summarization
10. Market Intelligence
11. Auto-Correct
12. Intent Classification
13. Urgency Detection
14. Speech Recognition

1. Sentiment Analysis

Mostly used on the web & social media monitoring, Natural Language Processing is a great tool to comprehend and analyse the responses to the business messages published on social media platforms. It helps to analyse the attitude and emotional state of the writer (person commenting/engaging with posts). This application is also known as opinion mining. It is implemented through a combination of Natural Language Processing and statistics by assigning values to the text (positive, negative or neutral) and in turn making efforts to identify the underlying mood of the context (happy, sad, angry, annoyed, etc.)

SENTIMENT ANALYSIS



Discovering people opinions, emotions and feelings about a product or service

This application of NLP helps business organisations gain insights on consumers and do a competitive comparison and make necessary adjustments in business strategies, whenever required. Such data is also useful in designing a better customer experience and enhancing the product. Furthermore, sentiment analysis or emotion exploration is a great way to know about brand perception.

2. Chatbots

We hear a lot about Chatbots these days, chatbots are the solution for consumer frustration regarding customer care call assistance. They provide modern-day virtual assistance for simple problems of the customer and offload low-priority, high turn-over tasks which require no skill. Intelligent Chatbots are going to offer personalised assistance to the customer in the near future.

A lot of Industry analysts predict that Chatbots are an emergent trend which will offer real-time solutions for simple customer service problems. They are unquestionably gaining a lot of trust and popularity from the consumer as well as engineers. They are useful in providing standard solutions to common problems. Chatbots help save time, human efforts, cost and provide efficient solutions (and keep improving from learning) from time to time.

3. Customer Service

Ensuring customer loyalty by keeping them content and happy is the supreme challenge and responsibility of every business organisation. NLP has aided in multiple functions of customer service and served as an excellent tool to gain insight into audience tastes, preferences and perceptions. Speech separation where the AI will identify each voice to the corresponding speaker and answer each of the callers separately. An excellent text to speech sys-

tems could even aid the blind. For example, a call recording of the customer can give insight into whether the customer is happy or sad, what are their needs and future requirements.

NLP could aid in translating the caller's speech into a text message which could be easily analysed by the engineer. To sum up, this would be a great way to get to know the pulse of your audience.

4. Managing the Advertisement Funnel

What does your consumer need? Where is your consumer looking for his or her needs? Natural Language Processing is a great source for intelligent targeting and placement of advertisements in the right place at the right time and for the right audience. Reaching out to the right patron of your product is the ultimate goal for any business. NLP matches the right keywords in the text and helps to hit the right customers. Keyword matching is the simple task of NLP yet highly remunerative for businesses.

5. Market Intelligence

Business markets are influenced and impacted by market knowledge and information exchange between various organisations, stakeholders, governments and regulatory bodies. It is vital to stay up to date with industry trends and changing standards. NLP is a useful technology to track and monitor the market intelligence reports for and extract the necessary information for businesses to build new strategies. Widely used in financial marketing, NLP gives exhaustive insights into employment changes and status of the market, tender delays, and closings, or extracting information from large repositories.

6. Text Classification

Text classification, a text analysis task that also

includes sentiment analysis, involves automatically understanding, processing, and categorizing unstructured text.

Let's say you want to analyse hundreds of open-ended responses to your recent NPS survey. Doing it manually would take you a lot of time and end up being too expensive. But what if you could train a natural language processing model to automatically tag your data in just seconds, using predefined categories and applying your own criteria?

7. Text Extraction

Text extraction, or information extraction, automatically detects specific information in a text, such as names, companies, places, and more. This is also known as named entity recognition. You can also extract keywords within a text, as well as predefined features such as product serial numbers and models.

Applications of text extraction include *sifting through incoming support tickets and identifying specific data, like company names, order numbers, and email addresses* without needing to open and read every ticket.

You might also want to use text extraction for data entry. You could pull out the information you need and set up a trigger to automatically enter this information in your database.

Keyword extraction, on the other hand, gives you an overview of the content of a text, as this free natural language processing model shows. Combined with sentiment analysis, keyword extraction can add an extra layer of insight, by telling you which words customers used most often to express negativity toward your product or service.

8. Machine Translation

Machine translation (MT) is one of the first applications of natural language processing. Even though Facebook's translations have been declared superhuman, machine translation still faces the challenge of understanding context.

However, if you've been an avid user of Google Translate over the years, you'll know that it has come a long way since its inception, mainly thanks to huge advances in the field of neural networks and the increased availability of large amounts of data.

Automated translation is particularly useful in business because it facilitates communication, allow companies to reach broader audiences, and understand foreign documentation in a fast and cost-effective way.

9. Text Summarization

Automatic summarization is pretty self-explanatory. It summarizes text, by extracting the most important information. Its main goal is to simplify the process of going through vast amounts of data, such as scientific papers, news content, or legal documentation.

There are two ways of using natural language processing to summarize data: *extraction-based summarization* which extracts key phrases and creates a summary, without adding any extra information and *abstraction-based summarization*, which creates new phrases paraphrasing the original source. This second approach is more common and performs better.

10. Auto-Correct

Natural Language Processing plays a vital role in

grammar checking software and auto-correct functions. Tools like Grammarly, for example, use NLP to help you improve your writing, by detecting grammar, spelling, or sentence structure errors.

11. Intent Classification

Intent classification consists of identifying the goal or purpose that underlies a text. Apart from chatbots, intent detection can drive benefits in sales and customer support areas.

By analysing customer interactions like emails, chats, or social media posts, you can spot customers that are ready to purchase. The faster you can detect and classify those leads, the more chances you have of turning them into customers. The email classifier, and sort responses into categories like Interested, Not Interested, and Unsubscribe can be used.

Finally, looking for customer intent in customer support tickets or social media posts can warn you of customers at risk of churn, allowing you to take action with a strategy to win them back.

12. Urgency Detection

NLP techniques can also help you detect urgency in text. You can train an urgency detection model using your own criteria, so it can recognize certain words and expressions that denote gravity or discontent. This can help you prioritize the most important requests and make sure they don't get buried under a pile of unresolved tickets.

Urgency detection helps you improve response times and efficiency, leading to a positive impact on customer satisfaction.

13. Speech Recognition

Speech recognition technology uses natural lan-

guage processing to transform spoken language into a machine-readable format.

Speech recognition systems are an essential part of virtual assistants, like Siri, Alexa, and Google Assistant, for example. However, there are more and more use cases of speech recognition in business. For example, adding speech-to-text capabilities to business software, companies are able to automatically transcribe calls, send emails, and even translate.

These are some of the few applications of Natural Language Processing which will be witnessed by business organisations in the time to come. There are other applications as well, such as reputation monitoring, neural machine translation, hiring tools and management, regulatory compliance, data visualisation, biometrics, robotics, process automation etc. NLP is the key to the quest for general artificial intelligence since language is a key indicator of intelligence in our society.

NLP APPLICATIONS IN EDUCATION

What comes naturally to humans, however, is exceedingly difficult for computers with the amount of unstructured data, lack of formal rules, and absence of real-world context or intent. That's why machine learning and artificial intelligence (AI) are gaining attention and momentum, with greater human dependency on computing systems to communicate and perform tasks. And as AI gets more sophisticated, so will Natural Language Processing (NLP). While the terms AI and NLP might conjure images of futuristic robots, there are already basic examples of NLP at work in our daily lives. Here are a few prominent examples.

1. Email filters

Email filters are one of the most basic and initial applications of NLP online. It started out with spam filters, uncovering certain words or phrases that signal a spam message. But filtering has upgraded, just like early adaptations of NLP.

One of the more prevalent, newer applications of NLP is found in Gmail's email classification. The system recognizes if emails belong in one of three categories (primary, social, or promotions) based on their contents. For all Gmail users, this keeps your inbox to a manageable size with important, relevant emails you wish to review and respond to quickly.

2. Smart assistants

Smart assistants like Apple's Siri and Amazon's Alexa recognize patterns in speech thanks to voice recognition, then infer meaning and provide a useful response. We've become used to the fact that we can say "Hey Siri," ask a question, and she understands what we said and responds with relevant answers based on context. And we're getting used to seeing Siri or Alexa pop up throughout our home and daily life as we have conversations with them through items like the thermostat, light switches, car, and more.

We now expect assistants like Alexa and Siri to understand contextual clues as they improve our lives and make certain activities easier like ordering items, and even appreciate when they respond humorously or answer questions about themselves. Our interactions will grow more personal as these assistants get to know more about us. As a New York Times article "Why We May Soon Be Living in Alexa's World," explained: "Something bigger is afoot. Alexa has the best shot of becoming the third great consumer computing platform of this decade."

3. Search results

Search engines use NLP to surface relevant results based on similar search behaviors or user intent so the average person finds what they need without being a search-term wizard.

For example, Google not only predicts what popular searches may apply to your query as you start typing, but it looks at the whole picture and recognizes what you're trying to say rather than the exact search words. Someone could put a flight number in Google and get the flight status, type a ticker symbol and receive stock information, or a calculator might come up when inputting a math equation. These are some variations you may see when completing a search as NLP in search associates the ambiguous query to a relative entity and provides useful results.

4. Predictive text

Things like autocorrect, autocomplete, and predictive text are so commonplace on our smartphones that we take them for granted. Autocomplete and predictive text are similar to search engines in that they predict things to say based on what you type, finishing the word or suggesting a relevant one. And autocorrect will sometimes even change words so that the overall message makes more sense.

They also learn from you. Predictive text will customize itself to your personal language quirks the longer you use it. This makes for fun experiments where individuals will share entire sentences made up entirely of predictive text on their phones. The results are surprisingly personal and enlightening; they've even been highlighted by several media outlets.

5. Language translation

One of the tell-tale signs of cheating on your

Spanish homework is that grammatically, it's a mess. Many languages don't allow for straight translation and have different orders for sentence structure, which translation services used to overlook. But, they've come a long way.

With NLP, online translators can translate languages more accurately and present grammatically-correct results. This is infinitely helpful when trying to communicate with someone in another language. Not only that, but when translating from another language to your own, tools now recognize the language based on inputted text and translate it.

6. Digital phone calls

We all hear “this call may be recorded for training purposes,” but rarely do we wonder what that entails. Turns out, these recordings may be used for training purposes, if a customer is aggrieved, but most of the time, they go into the database for an NLP system to learn from and improve in the future. Automated systems direct customer calls to a service representative or online chatbots, which respond to customer requests with helpful information. This is a NLP practice that many companies, including large telecommunications providers have put to use.

NLP also enables computer-generated language close to the voice of a human. Phone calls to schedule appointments like an oil change or haircut can be automated.

Natural language capabilities are being integrated into data analysis workflows as more BI vendors offer a natural language interface to data visualizations. One example is smarter visual encodings, offering up the best visualization for the right task based on the semantics of the data. This opens up more opportunities for people to explore their data using natural language statements or question frag-

ments made up of several keywords that can be interpreted and assigned a meaning.

Applying language to investigate data not only enhances the level of accessibility, but lowers the barrier to analytics across organizations, beyond the expected community of analysts and software developers.

7. Text analytics

Text analytics converts unstructured text data into meaningful data for analysis using different linguistic, statistical, and machine learning techniques. While sentiment analysis sounds daunting to brands—especially if they have a large customer base—a tool using NLP will typically scour customer interactions, such as social media comments or reviews, or even brand name mentions to see what's being said. Analysis of these interactions can help brands determine how well a marketing campaign is doing or monitor trending customer issues before they decide how to respond or enhance service for a better customer experience.

Additional ways that NLP helps with text analytics are keyword extraction and finding structure or patterns in unstructured text data.

APPLICATIONS OF NLP IN SELECTED BUSINESS SECTORS

1. Role of Natural Language Processing in Healthcare

Healthcare is the domain where accuracy and efficiency both are required because it is directly related to the health of the human kind, so the margin of error is approximately near to zero. Natural Language Processing addressed the issues of healthcare with some of its application and use cases.

Raising the bar of provider interactions with Patients and EHR

The main concern and priority in nowadays the healthcare system is to provide better and 24/7 EHR experience. It is referred to ensure unparalleled attention which also gets influenced by the demand of completing the documentation work, results in the dissatisfaction of the customer toward a clinic or hospital. This problem is on the way of becoming an epidemic for healthcare. But it can be prevented with the use of NLP which can be used mainly in three ways.

- o Intelligent Voice Support Systems
- o Predictive Analytics
- o Prescriptive Analytics

For Example – In Pennsylvania, Well Span Health started using voice-based tools for dictating the patient-provider interactions which reduced the frustration of EHR.

Raising the bar of patient health literacy

NLP can also be used to reduce the communication and interaction gap between Healthcare technologies (such as patient portals which contain health records of a patient) and patients. Health care domain already started to adopt the technology in various ways, but the patient still finds it hard to take that. NLP can be a tool for them. Suppose a system attached with a Healthcare portal with which a patient can interact with his/her native language.

This will result in three advantages.

- o It will become easy for every patient to understand his/her health status.
- o It reduces the chances of Human error in the system.
- o It will give a comfortable space to doctors too.

Increasing the dimension of high quality of care.

This point can be considered as the extension of the second point mentioned above. Healthcare reports generally contain parameters which require proper attention. Sometimes human error cause causality which can be eliminated using the machine (or computer devices, in simple words) which demand the use of Natural Language Processing. A study proved (done in 2018) the use of NLP can provide significant relief in the case of calculating the measure of inpatient care and monitoring the clinical guidelines.

Identification of the patients which require Improved Care Coordination

Identification of the patients here refers to the proper identification of the diseases present in any human. In this task NLP integrated with Machine learning have shown great potential. Automated Detection of Cancer, Detection of the root causes related to any substance disorder are some of the examples. This process can be done by extracting the information from old existed data set using NLP and using this information for training Machine Learning and Deep Learning models.

For Example – At Massachusetts General Hospital, the researcher used applied NLP techniques to identify the main reasons associated with the social determinants of health.

2. Natural Language Processing Applications in Finance

Credit Scoring Model/Method

Credit scoring is a risk estimation method (estimate risk while providing the loan to any party) in which risk of giving loan and credit is calculated by the help of the credit score against the credit histories of the potential borrowers. Natural Lan-

guage Processing (integrated with AI) related to credit scoring more often than not are predictive analytics solutions. Natural Language Processing is also used by some companies to mine the social media of the customers. The data extracted from social media is then used to likely weighs certain online behaviors.

For Example, A Singapore-based Company named as Lendo EFL (with 115 employees) developed software called Lendo Score which use machine learning and NLP to assess and calculate an individual's creditworthiness.

Document Search Engine

Natural Language Processing also increased the level of the Information extraction from structured and unstructured data which resulted in a big plus in the field of Documentation Processes.

For example, A private firm named as Nuance Communications based in Massachusetts developed software known as Nuance Document Finance Solution, which is used to aid financial services companies in automatizing the documentation process.

Fraud Detection in Banking

The world of finance is very vulnerable to fraud and this world solely based on the text as every entry and record is maintained in the form of text. Natural Language Processing with the help of Machine Learning is used to detect fraud and misinterpreted information. Natural Language Processing generally used to extract information and process information which is further used by Machine learning model to train themselves to expose the fraud.

3. Natural Language Processing in Defence and National Security

USA's Defence Research and Analysis wing DARPA (Defence Advanced Research Projects Agency) developed a program DEFT (Deep Exploration and Filtering of Text) in which Natural Language Processing is used to extract pertinent information from unstructured data. This information is further used to analytics procedures to draw some insights from the data. Moreover, NLP based models also used by the Institute for Strategic Dialogue in the United Kingdom to observe and trace the signs of radicalization and extremism.

4. Natural Language Processing in Recruitment

Natural Language Processing can be used to perform the text analytics for searching the appropriate applications from the data, and it also can be used for selecting the best applications from the data available. Natural Language Processing can be used on different phases and with a different medium. Some of the primary use cases which can be used in Recruitment are Information Extraction, Social Media Analytics, Fraud Detection, and Voice Support systems.

CONCLUSION

The system behind the NLP concept is statistical in nature. For this concept to move from Natural Language Processing (NLP) to Natural Language Understanding (NLU) where the consumer can get to see and experience a human emotional connects with the machines is the future prospect to work towards. Over the last decade, the information technology industry has taken its leap of faith and dug deep into the various aspects of the Natural Lan-

guage Processing. Business organisations have found, tested and executed most favourable applications of NLP to advance the progress of Business Intelligence. Yet, the technology needs lots of data and processes in place to understand, analyse and respond to the needs of the human mind.

There are vast applications of NLP in the digital world and this list will grow as businesses and industries embrace and see its value. While a human touch is important for more intricate communications issues, NLP will improve our lives by managing and automating smaller tasks first and then complex ones with technology innovation

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Attractive Growth Opportunities in the Natural Language Processing in Healthcare and Life Sciences Market



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Studying the NBFC Landscape in India

* Tejal Rokade

** Prof. Aftab Shaikh

*** Prof. Suhas S. Gharat

Abstract

The country's financial services sector comprises of the capital markets, the insurance sector, Banking Sector and the non-banking financial companies (NBFCs). This research paper deals with the NBFC sector in India, which was the part of my summer internship for two months.

There were days when money-lenders charged the borrower with exorbitant interest rates and dictated terms. Unlicensed moneylenders used to live in rural area without any oversight, resulting in inefficiencies in pricing. Chit fund companies (state-regulated) and Nidhi companies (regulated by the Ministry of Commerce) gradually came up. The RBI-regulated non-banking financial firms (NBFCs) had occupied this room for the last decade or so. NBFCs largely depend on market based funds. As of March 2018, 11,402 NBFCs were listed with the RBI, 156 of which had been taking deposit (NBFCs- D). Acceptance of NBFCs (NBFCs ND-SI) was 249 systemically significant non-deposits. NBFC business aggregate balance sheet value as of March 2018 was Rs 22.1 trillion (about 15 percent of the balance sheet size of the banking system).

A comprehensive view of this paper will explain what NBFCs are, their classification, the major players in NBFC space, the significance of NBFCs. The major findings of this report are as follows: analysis from interactions with various NBFCs across India, major lenders in this sector and significance of NBFC sector in our economic development. This research paper also discusses the impact of Covid crisis on NBFC sector.

Keywords: NBFCs, Loans, Fintech, Lending Companies, Finance

INTRODUCTION

- Non-bank financial companies (NBFCs) have a significant part to play in fostering inclusive economic development by providing low-cost financing to informal, unorganized and smaller micro, small and medium-sized enterprises (MSMEs) and unbanked customers.
- Not only does the NBFC sector finance the financially disadvantaged parts of society, it also

* Ms. Tejal Rokade, Student, Chetana's R. K. Institute of Management & Research, (CRKIMR), Mumbai
Email: tejal.rokade@crkimr.in

** Prof. Aftab Shaikh, Faculty, Chetana's R. K. Institute of Management & Research, (CRKIMR), Mumbai
Email: aftab.shaikh@crkimr.in

*** Prof. Suhas Gharat, Faculty, Chetana's R. K. Institute of Management & Research, (CRKIMR), Mumbai
Email: suhas.gharat@crkimr.in

ensures smooth capital movement in the distribution chain for consumer-oriented segments such as cars, consumer-sustainable, staples and other important sectors.

- The sector has also largely contributed to job creation and wealth development by making credit accessible to the rural market.
- A Non-Banking Financial Company (NBFC) is an entity registered under the Companies Act of 1956 or Companies Act 2013 that engages in the business of loans & advances, acquisition of the bonds/shares/ debentures/securities stocks issued by Government or local authority or other marketable securities of a like nature, hire-purchase, leasing, insurance, or chit business, etc
- However, it doesn't comprise of any entity whose primary business is that of agriculture activities, industrial activities, purchase or sale of any goods (other than securities) or providing any services and sale/purchase/construction of immovable property.
- A non-banking institution which is an institution and has primary business of receiving deposits under any scheme or arrangement in one lump sum or in installments or in any other way, is also a non-banking financial company (Residuary NBFC).
- As per Section 45-IA of the RBI Act, 1934, no NBFC can commence or carry on business of a non-banking financial institution unless it obtains a certificate of registration from the RBI and owns an Net Owned Funds of ¹ 25 lakhs (¹ 2 crore since April 1999).
- However, as per the powers given to the Bank, to preclude the dual regulation, some categories of NBFCs that are regulated by other regulators are exempted from the need of registration with RBI.

- Some of them include Merchant Banking companies/ Venture Capital Fund/Stock broking companies registered with SEBI, Insurance Company having a valid Registration Certificate which is issued by IRDA, Nidhi companies as notified as per the Section 620A of the Companies Act, 1956.

Though NBFCs perform tasks that are almost same to that of banks, there are some differences

- Banking services are provided by NBFC to the customers without having a Bank license
- An NBFC don't accept the Demand Deposits and it do not issue Cheques drawn on itself
- It is not needed to maintain the Reserve Ratios (CRR, SLR etc.)
- An NBFC does not belong to the payment and settlement system
- Unlike banks, the Deposit insurance facility of the Deposit Insurance and Credit Guarantee Corporation is not available for NBFC depositors
- An NBFC cannot involve in the principal business of Agricultural, Industrial Activity, Construction of Immovable Property, Sale-Purchase
- Up to 100 % of Foreign Investment is allowed

CLASSIFICATION OF NBFCs

Different types of NBFCs were approached for partnering during the project. I came to know about various types of NBFCs. They were as below –

- Categorization of NBFCs can be done based on their liability structures, the types of activities they handle and their systemic importance.
- NBFCs are classified into two categories in terms of liability structure – deposit-taking NBFCs or NBFCs-D that accept and hold public deposits and non-deposit taking NBFCs or

NBFCs-ND, which don't accept public deposits.






- The NBFCs-ND holding an asset size of 5 billion or more are categorized as non-deposit taking systemically important NBFCs (NBFCs-ND-SI).
- In order to issue registration certificates, NBFCs were classified as Type I and Type II entities.

With addition of new categories over time, the types of NBFCs are –






1. Asset Finance Company (AFC)

2. Loan Company (LC)
3. Investment Company (IC)
4. Core Investment Company (CIC)
5. Factoring – NBFC
6. Infrastructure Debt Fund Non-Banking Financial Company (IDF – NBFC)
7. Infrastructure Finance Company (IFC)
8. Non-Banking Financial Company-Micro Finance Institutions (NBFC-MFIs)
9. Non-Operative Financial Holding Company (NOFHC)
10. Mortgage Guarantee Companies (MGC)

MAJOR PLAYERS IN NBFC SPACE

Sr. No.	Company	Description
1.	Power Finance Corporation Limited 	<u>Headquarters:</u> New Delhi Revenue: ₹ 33,362.9 crores Services: Aid the organizations involved in Power generation, power transmission and distribution
2.	Shriram Transport Finance Company Limited 	<u>Headquarters:</u> Chennai Revenue: ₹759,526 million Products: Offer funds for Heavy Duty Truck vehicles, Light Duty Truck vehicles, Passenger Vehicles, Construction Vehicles,
3.	Bajaj Finance Limited 	<u>Headquarters:</u> Pune <u>Revenue:</u> US\$715 million Products: Offer various loans like Gold loans, housing loans, personal loans, entrepreneur and business loans
4.	Mahindra & Mahindra Financial Services Limited 	<u>Headquarters:</u> Mumbai <u>Revenue:</u> ₹11,996.46 crore Products: Offer services of vehicle advances, gold advances, home credits, working capital advances, corporate advances
5.	Muthoot Finance Ltd 	<u>Headquarters:</u> Kochi <u>Revenue:</u> ₹ 4947 Crores Products: Loans in exchange for gold ornaments, foreign exchange services, wealth management services, money transfers

FINTECH COMPANIES IN INDIA IN THE LENDING SPACE

Sr. No.	Company	Description	Features
1.	Money Tap 	Founded: 2016 Based in: Bangalore USP: India's first app-based credit line	<ul style="list-style-type: none"> • Chat to Apply • Instant Approval and Transfer in Minutes • No Usage, No Interest! • Flexible EMIs
2.	Capital Float 	Founded: 2013 Based in: Bangalore USP: India's leading Personal Finance Management App	<ul style="list-style-type: none"> • No requirement of collateral • Services to businesses less than 3-5 years old • Easy paperless online application process • Funds disbursed within 3 working days
3.	InstaKash 	Founded: 2015 Based in: Delhi USP: Business loans and lines of credit to small businesses	<ul style="list-style-type: none"> • Really simple and fast application process • 2% interest a month on loans disbursed • Processing and approval as hassle free
4.	Shubh Loans 	Founded: 2016 Based in: Bangalore USP: Simple Loans for Everyone	<ul style="list-style-type: none"> • Personal loans starting from Rs. 25,000 and up to Rs. 5 lakhs • Flexible tenure • Quick disbursal – within 2 working days
5.	LendingKart 	Founded: 2014 Based in: Ahmedabad USP: Customized business loans for small and medium businesses in India	<ul style="list-style-type: none"> • Requires Few Documents • Collateral Free Business Loans up to ₹ 2 Crore • Receive your loan within 3 days • Extended Loan Tenure

LITERATURE REVIEW

- 1) In 2010, Jafor Ali Akhan wrote on “Non-Banking Financial Companies (NBFCs) in India”. This book discusses the financial framework of NBFCs in India. It describes about the financial intermediaries inclusive of the commercial banks, the regional rural banks, cooperative banks and the Non-Banking Financial firms in India. It explains the businesses, classification of the NBFCs in India. It also covers about the recent reforms regarding the Indian NBFCs.
- 2) In 2014, R. Sowndharya and Dr. R. Shanmugham conducted a research on “Analysis of Financial Performance of Non-Banking Financial Companies in India”. This study analyses the performance, efficiency and turnover

aspects of the selected NBFCs across the years from 2007 to 2012. This study evaluates the financial performance of the non-banking firms.

- 3) In 2016, Dr. A.P Hosmani Professor Department of Commerce Gulbarga University conducted a research on “Impact of NBFCs in Indian economy growth”. This research discusses the significance of the non-banking institutions in the economy growth of India. It also covers the success and failure factors for the growth of financial system of India.
- 4) In 2019, Suneelkumar Research Scholar Department of Commerce Gulbarga University and Dr. A.P. Hosmani Professor Department of Commerce Gulbarga University conducted a research on “Financial performance of non-banking financial companies (NBFCs) in India”. This research discusses the financial structure of the NBFCs. It also involves the financial structure of the NBFCs.

OBJECTIVES OF THE PROJECT

Objectives of the project are to perform a detailed research on NBFCs that can be potential customers for the company- Loan Sifarish.

- To perform a secondary research on the NBFCs across the geography in India
- To evaluate the NBFCs based on the quantitative and qualitative factors
- To shortlist the NBFCs that can be potential clients for partnering with organization (Loan Sifarish)

RESEARCH METHODOLOGY

Calendar Year 2020 started on bad note of COVID pandemic which started in China by early September

2019 and by March 2020 it spread throughout the globe and shut down all the activities including all business, non business, financial and non financial activities.

The pandemic hit the business and financial sector in two ways – the entire cash flow during the lockdown period dried up and business also came to standstill. This unprecedented pandemic situation resulted in non repayment of loans (because of moratorium announced by RBI) and stoppage of business because of lockdown and stoppage of all activities almost for three months.

Because of lockdown, the internship was carried on by way of WFH (work from Home). Thanks to technology because of which lots of data can be collected even without attending the office or even without face to face meeting with anybody.

The methodology we used to analyse the NBFCs –

- 1) Check how good the promoter is
 - Professionalism of the promoters
 - Well- qualified and experienced professionals
 - Readiness to divest capital
 - Good treasury team
 - Capacity to run the business
- 2) Leveraging done by the promoters
 - Leverage allowed as per RBI norms is 1:7
 - From where does the NBFC raise funds and their rates
 - Frequency at which the debts are raised
- 3) Geography of NBFC in India
 - Spread and reach of the NBFC
 - Number of branches of the NBFC
 - Scale of operations

- 4) Operational expenses of company
 - Infrastructure Debt Fund (NBFC-IDF)
 - NBFC- Non-Operative Financial Holding firm (NOFHC)
 - Loan Company
- 5) Lender Base of the NBFC
 - Major lenders who have given credit to the NBFC
- 6) Loan profiles of the NBFC
 - Asset Finance Company
 - Investment Company
 - Systemically Important Core Investment Company (CIC-ND-SI)
- 7) Asset quality
 - Various Credit policies, the effective risk management controls and internal audit systems
 - GNPA and NNPA

DATA ANALYSIS

DATA OF THE INTERACTIONS DONE WITH THE PROMOTERS

Sr. No.	Activity	Count
1.	Total number of companies approached	1643
2.	No. of firms with no response and could not connect	508
3.	No. of firms whose contact details were not found	961
4.	No. of firms not interested currently due to lockdown	136
5.	People who heard me out fully and were interested to discuss further	42
6.	No. of Mandates signed	4

I had approached the NBFCs across India to enquire about their fund requirements for lending. These firms belonged to the cities of Bangalore, Bhubaneswar, Chandigarh, Chennai, Delhi, Kolkata and Mumbai.

NBFCs with paid up capital in the range of ₹ 0 cr to ₹ 6 cr. were approached. some AFCs (Asset Financing companies) were also approached.

Analysis from interactions is –

- Most of the firms could not be reached due to lockdown, as the offices were closed.
- Many of the NBFC firms were not interested in acquiring new funds due to pandemic episode.
- NBFCs and HFCs had shifted their focus to streamlining the existing loan book instead of accelerating the growth.
- Many of the firms asked to contact post lockdown, in expectance of things to fall in place.
- Data collected for 1643 NBFCs can be used in future when the things settled down and can help the company (Loansifarish) to build its business through these NBFCs which are potential customers of the Company.
- It was observed that the firms in which we could easily connect to the promoters were having positive response.
- Few of the firms were reluctant to hear about the performance of Loan Sifarish and just wanted to know the rates at which we could arrange funds for them.
- We did not reach out to firms who had been

making loss for last few years.

IMPACT OF COVID -19 ON NBFCs

- The COVID-19 crisis has sparked uncertainty and risk over growth, funding, collections, and asset quality.
- Recently, the governor of the RBI Mr. Shaktikanta Das directed the banks to get prepared for facing the issues owing to the rise of coronavirus pandemic, as the consequences are definitely going to influence every sector of the economy.
- Markets dwindling, the stocks which were once the most preferred have lost close to approximately about 30% to 40% of value.
- A significant drop in transactions, repayment of loan, etc. at countrywide level has hugely impacted the revenue stream of all NBFCs.
- Lesser collections by the NBFCs are affecting their daily functions and profitability.
- Businesses impacted due to COVID-19 may take time for loan repayment and would further need financial aid to weather the storm once the pandemic is over.
- MSMEs, a key pillar of the economy of India will now fight to support the business and this will affect the NBFCs asset quality needs.
- Huge work stress on NBFC employees to complete all the pending piled up work once the pandemic is stable.
- The RBI has provided certain waivers to the borrowers which include moratorium to repay principal and interest with a relief on their classification as a non-performing asset or a re-structured asset.
- Business deals may be postponed or cancelled, or they may occur in significantly lesser volumes than initial predictions due to COVID-19 crisis.

CONCLUSIONS

Both Banks and Non-Bank Financial Companies are the substantial contributors of a sound and secure financial system. Banks generally control the financial system in most countries because the companies, retail and the public sector all depend on the banking structure for a variety of financial products for meeting their financial requirements. Nevertheless, NBFC's have also achieved appreciable recognition in both the developed and emerging countries by providing incremental and replacement financial services.

To summarize, the NBFCs are doing a crucial part in satisfying the financial wants of the small sized and medium sized enterprises as well as in the growth of our economy. On the contrary, the NBFC policies are also giving investment security for the investors.

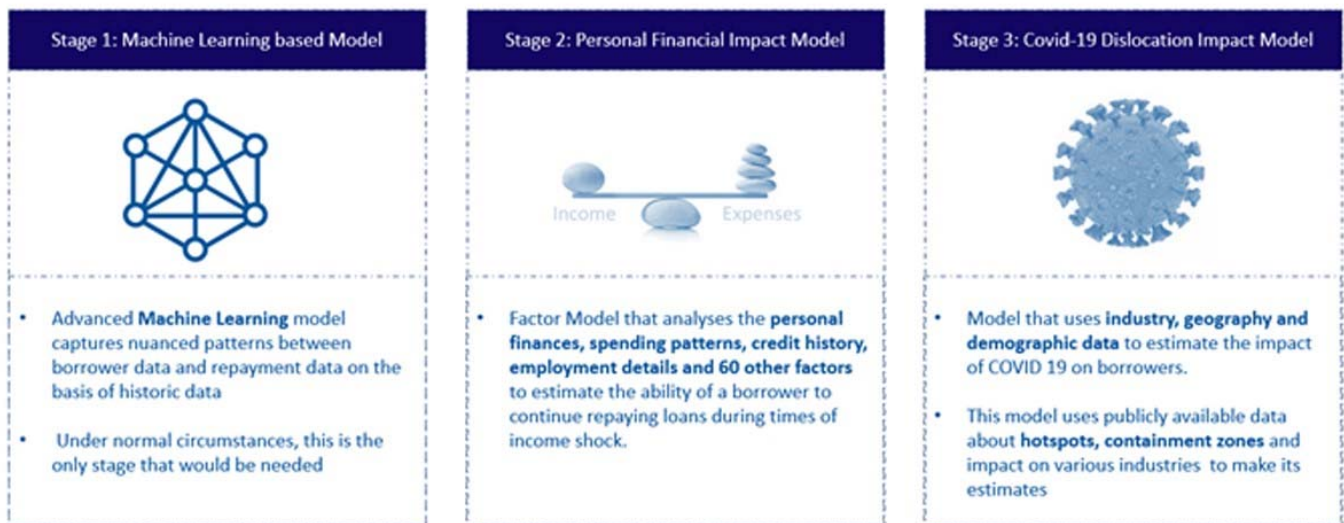
NBFCs have been doing a very crucial role in the Indian financial system. They have emerged as better substitutes to the traditional banks to meet the financial requirements of different sectors. NBFCs mainly lend to the commercial sector. Though in the recent years, there has been some decline in asset quality of NBFCs, it is better than that of banks. NBFCs have become engine of development. They have now become a crucial part of the Indian financial system, growing competition and diversification in the financial sector. They have been accepted as complementary of banking services at competitive prices.

NBFC sector which is efficient acts as a systemic risk relief and contributes to the aim of a stable financial economy.

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An example of a 3 Stage Credit Risk Model



Ref.: <https://economictimes.indiatimes.com/small-biz/policy-trends/pass-the-coronavirus-test-how-banks-and-nbfc-can-survive-and-then-thrive-in-the-post-covid-19-world/articleshow/76190269.cms?from=mdr>

Equity Research of Automobile Sector

* Anurag Sharma
** Prof. Meghana Patil

Abstract

This project Title “Equity Research of automobile sector” in which P/E ratio analysis of different Large and Mid-cap automobile companies has been done. EPS growth analysis has been done to select growth pick by analyzing the ratios.

Four automobile company has been selected for further ratio analysis. The four companies were Heromotoco, Bajaj Auto, Ashok Leyland and force motors has been selected. Ratio analysis includes analysis of PBDIT margin, Inventory turnover ratio, ROE, ROCE, Return in asset (%) and Current ratio as those ratios are important to know about financial condition and sales of the company. After the ratio analysis the about companies are ranked according to it. Then technical analysis of selected stock has been done and according to the last pattern observed we have given the ‘Buy’, ‘Sell’ or ‘Hold’ call on the respective stocks Asset allocation has been done the company received least rank allocated maximum fund and so on. According to it fund fact sheet has been made named as Automobile sector fund Total AUM (Asset under Management) was 10 Cr. As on 19th June 2020 and the NAV (Net asset value) has been calculated which was 10.00 units then daily the NAV has been updated according to change in share price of the selected company. AUM as on 30th September, 2020 was ₹ 123,104,433 and NAV was 12.31 units.

Keywords: *Equity Research, Automobile Sector, P/E Ratio, EPS Growth, Technical Analysis, Asset Under Management, Net Asset Value*

INTRODUCTION

Equity research professionals are accountable for producing analysis, suggestions, and reports on investment prospects that investment banks, institutions, or their clients may be attracted in. The Equity Research Division is a class of analysts and

associates at an investment banking (sell side), an institution (buy side), or an independent organization. The main objective of equity research is to make available investors with comprehensive financial analysis and suggestions on whether to ‘buy’, ‘hold’, or ‘sell’ a specific investment. Banks frequently use equity research as a way of “sustain-

* Anurag Sharma, Student, Chetana’s R.K. Institute of Management & Research, (CRKIMR), Mumbai
Email: anurag.sharma@crkimr.in

** Prof. Meghana Patil, Faculty, Chetana’s R.K. Institute of Management & Research, (CRKIMR), Mumbai
Email: meghana.patil@crkimr.in

ing” their investment banking and sales & trading clients, by providing well-timed, superior information and analysis.

Fundamental analysis and technical analysis can co-exist in peace as well as complement each other. Since all the investors in the stock market want to make the highest profits possible, they just cannot afford to ignore both fundamental and technical analysis.

FUNDAMENTAL ANALYSIS

Fundamental Analysis is the procedure of finding the intrinsic value of a share. It is the study of a company’s fundamentals with the aim of determining its exact worth. The process is based on examining the information that is ‘fundamental’ to the company. Fundamental analysis focuses on forming a portrait of a company, finding the intrinsic or fundamental value of its shares and buying or selling the stock based on that information.

The investments made on the basis of fundamental analysis involve less risk if the time horizon of the investment is long. The share should be purchased if it is being traded in the market below its intrinsic value, it should be short if it is traded in the market at a price above its intrinsic value. For example the intrinsic value of a share is Rs.150, the fundamental analyst suggests buying it if it is being traded in the market below Rs.150; sale is recommended if it is traded above Rs.150.

Fundamental analysis consist of three types of analysis:-

- (i) Economic Analysis
- (ii) Industry Analysis
- (iii) Company Analysis

Fundamental analysis implemented by the investors or their investment advisors. It is complex for the ordinary investors to perform the analysis. Hence, usually it is carried by the professionals who are experts in this filed. There are two investment philosophies followed by the experts:

- (i) Top down philosophy
- (ii) Bottom up philosophy.

1. Top down philosophy follows the following investment process

- First study the macro-factors i.e. the economy state; invest in the economy that is strong, healthy and growing
- Then, study the industry; invest in the industry which is anticipate to outperform other industries
- Finally, consider the company; invest in the company which is anticipated to be best in the industry.

2. Bottom up philosophy follows the following investment process

- Gives maximum weight to the ‘company’ i.e. a bottom-up investor study the financial health, products, supply and demand, and other characteristics of a company’s performance over a given period of time.
- Using this approach the portfolio manager pay less interest to the economy as a whole, or to the potential of the industry a company is in.

TECHNICAL ANALYSIS

Technical analysis is a method, used to predict the possible future price change of the security – such as a stock or currency pair – build on market data. The theory following the validity of technical analysis is the concept that the collective actions – buy-

ing and selling – of all the participants in the market accurately replicate all related information pertaining to a traded security, and therefore, persistently assign a fair market value to the security. Technical Analysis is the expecting of future monetary value movements dependent on an examination of past price fluctuations. Like weather forecasting, technical analysis does not result in total anticipations about the future. Rather, technical analysis can enable investors and traders to imagine what is “likely” to take place to price over time. Technical Analysis employs extensive range of charts that show price over time.

Technical Analysis is suitable to stocks, derivatives, commodities, currency or any tradable instrument where the price is influenced by the market forces i.e. demand and supply of product. Price here implies any mix of the open, high, low, or close for a given security over a certain time period. The time allotment can be set up on intraday (1-minute, 5-minutes, 10-minutes, 15-minutes, 30-minutes or hourly), every day, week by week or month to month data and last a couple of hours or several years. Also, some technical analysts incorporate volume or open interest numbers with their analysis of price movement.

OBJECTIVE OF THE STUDY

1. The main objective of this study is to analyze the automobile sector of India by doing equity research of all Large and mid-cap automobile companies listed in Stock exchange
2. To study and analyze the key ratios and trend in the respective stocks
3. To analyze the financial position of companies
4. To give a ‘Buy’, ‘Hold’ or ‘Sell’ call on the selected companies stock by doing technical Analysis.

LITERATURE REVIEW

Muthumoni A (2008) performed a study on the performance appraisal of Indian Automobile Industry. This paper was on analysis of the growth of automobile industry after liberalization, its production trend, sales trend, profitability analysis, financial performance, financial structure and assessment of financial health, Economic Value Added (EVA) and Market Value Added (MVA) study of the industry during 1995-96 to 2005-06. She picked 12 companies out of 28 companies operating in the industry. She collected and analyzed the data from CMIE prowess database through various descriptive statistics, Multiple Regression Analysis and ANOVA. She inferred that overall explanatory power of regression shown well and dependent variable Return on sales compute about 94 per cent.

Sarumathi I (2010) studied the financial performance of Hero Honda Motors and TVS Motors in Two Wheeler Automobile industry. She analyzed the trends in leverages, Liquidity and its impact on profitability. She employed ratio analysis, CV, trend analysis, developed model and Multiple Regression analysis for liquidity, leverages, Return on Total Assets and Return on Equity. She obtained that capital investment in inventory of TVS Motors is more than that of Hero Honda Motors. She finds that the profitability was computed by liquidity and there is large chunk of investment in current assets in both TVS Motors and Hero Honda.

Velu Suresh Kumar (2011) performed a study on “Indian Automotive Industry: Performance Analysis”. He analyzed the global vehicle production from 2000 to 2009 and evolution and also collected data and analyzed about the structure of Indian Automobile Industry. He has analyzed the trend of Automobile production during his study period from

2000-01 to 2009-10. His research inferred that the Indian Automobile industry's contribution is very low comparing to global level.

Swati Dhaval Modi (2012) in his research on "The Efficacy and Adequacy of Working Capital in Automobile Industry in India", attempts to analyze the adequacy and efficacy of working capital in the Indian automobile sector for five years by studying the annual reports of the companies for the financial years 2004 to 2008. The researcher has indiscriminately selected the companies, like Tata Motors, Hero Honda, TVS, Maruti Suzuki and Bajaj Auto Ltd. The ratio analysis, coefficient of correlation and percentage method were used to study the data found. Statistics like ANOVA and correlation matrix were used to examine the inter-relationship between the variables. The main observation is that about all the selected companies are working with negative working capital and implementing an aggressive approach towards working capital man-

agement, except for

Maruti Suzuki and TVS who were observed to be conservative in their approach achieving a right balance between liquidity and profitability aspect.

RESEARCH METHODOLOGY

- In Our Study we focused on Fundamental analysis of the company
- In our study we have also done technical analysis of stock which are selected from fundamental analysis
- As because of covid-19 there is lot of volatility in the stock market therefore our more focus to Invest in stock was on fundamental analysis result rather than technical analysis.
- For proper study of sector we have construct Index of all Large Cap automobile companies
- All the data are collected from secondary sources.

Research Type	Analytical Research
Source of Data	Secondary
Sample Unit	Investing in automobile sector
Sample Technique	Asset allocation to form an automobile sector fund
Analysis Tool used	Fundamental Analysis and Technical analysis

LIMITATIONS

- Because of Covid-19 Pandemic we were not able to collect the primary data for our studies therefore our complete study is based on secondary data.
- As this situation brought high volatility in the stock market therefore our technical analysis is based on long term technical chart i.e. of 5 years which may or may not be providing accurate result
- Because of uncertainty created by the pandemic

there is a chance that the stock selected on the basis of our study may not perform accordingly in short term but will definitely give results in long-run

DATA COLLECTION AND ANALYSIS

P/E ratio tell us about how much investor is willing to pay to earn every single rupee of profit P/E ratio of all large and mid-cap companies is calculated which is (share price/Net earnings of the respective company)

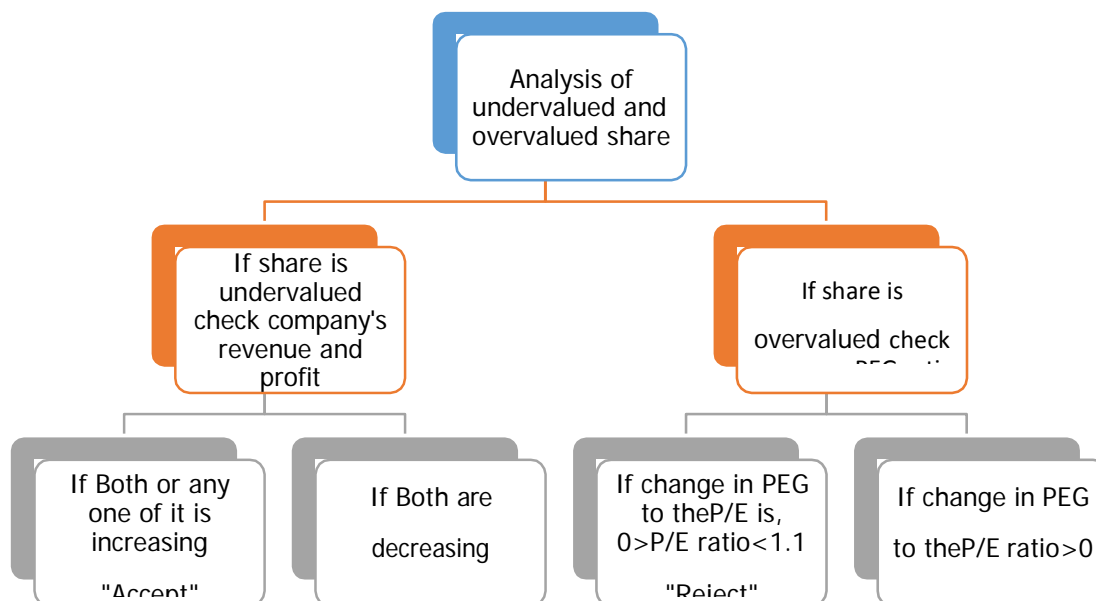
EQUITY RESEARCH OF AUTOMOBILE SECTOR

Sr. No.	Name of company	P/E Ratio
1.	Eicher motors	24.06
2.	HERO MOTOCROP	10.29
3.	BAJAJ AUTO	14.9
4.	Force Motors	13.88
5.	Ashok Leyland	16.77
6.	Maruti Suzuki	29.74
7.	TVS motors	29.59
8.	M&M	48.17
9.	Escorts	28.69
Industry P/E		24.01

Now, for selecting the undervalued stock. The analysis of different companies has to be done by comparing industry P/E ratio with respective company P/E ratio as follows:-

- 1) Comparing company P/E to industry P/E
- 2) If $P/E(\text{company}) > P/E(\text{Industry})$, Company stock is undervalued
- 3) Therefore, selection of that particular stock should be as it is a value pick stock
- 4) If $P/E(\text{company}) < P/E(\text{Industry})$, company stock is overvalued.
- 5) Therefore, PEG ratio analysis should be done.

Name of Company	Value	P/E Ratio
Eicher motors	Overvalued	24.06
HEROMOTOCROP	Undervalued	10.29
BAJAJ AUTO	Undervalued	14.9
Force Motors	Undervalued	13.88
Ashok Leyland	Undervalued	16.77
Maruti Suzuki	Overvalued	29.74
TVS motors	Overvalued	29.59
M&M	Overvalued	48.17
Escorts	Overvalued	28.69
Industry P/E		24.01



Name of Company		P/E Ratio	Increase or Decrease in Revenue	Increase or Decrease in Profit	Results (Value pick)
Heromotoco	Undervalued	10.29	-13.77%	7.34%	Accepted
Bajaj Auto	Undervalued	14.9	-0.77%	9.09%	Accepted
Ashok Leyland	Undervalued	16.77	9.84%	15.45%	Accepted
Force motors	Undervalued	13.88	6.95%	0.16%	Accepted

Name of Company		P/E ratio	EPS-2020	EPS-2019	EPS Growth	Result (Growth pick)
Maruti Suzuki	Overvalued	29.74	187.06	248.3	- 24.664%	Rejected
M&M	Overvalued	48.17	11.16	40.13	- 72.190%	Rejected
TVS Motors	Overvalued	29.59	12.47	14.11	- 11.623%	Rejected
Eicher Motors	Overvalued	24.06	697.5	753.37	- 7.416%	Rejected
Escorts	Overvalued	28.69	39.61	40.48	- 2.149%	Rejected

Ratio Analysis

Ratio analysis is the most important step as it tell us about the financial condition of the companies.

Following are the important ratios which should be consider while doing fundamental analysis of automobile sector.

- 1) **Inventory Turnover ratio:-** The inventory turnover ratio is a key evaluation metric explicitly applied within the auto industry to auto dealerships. It is generally considered a warning signal for auto sales if auto dealerships begin carrying substantially more than about 60 days' worth of inventory on their lots.

- 2) **Return on equity:-** The ROE is an important financial ratio for analyzing almost any company, and it is usually considered an important metric for evaluating companies in the auto industry.
- 3) **Return in capital employed:-** The Return on Capital employed signifies the profitability of the automobile company taking into consideration the total capital it employs.
- 4) **Current Ratio:-** The current ratio is a liquidity ratio that calculates whether a firm has sufficient resources to meet its short-term obligations. It is the ratio of current asset to current liability.
- 5) **Return on asset:-** Return on Assets (ROA) is an tells us how well a company using its assets, by determining how profitable a company is with respect to its total assets.
- 6) **Asset turnover ratio:-** It calculates the efficiency of a company's assets to create revenue.
- 7) **PBDIT Margin:-** Calculation of a company's operating profit as a percentage of its revenue

Name of Company	Rank(PBDIT Margin)	Rank(Inventory turnover ratio)	Rank(ROE)	Rank(ROCE)	Rank(Current Ratio)	Rank(Return on asset)	Rank(Asset Turnover ratio)	TOTAL
HERO MOTOCROP	2	2	1	3	1	2	2	13
BAJAJ AUTO	1	1	2	1	3	1	4	13
Force Motors	4	4	4	4	4	4	3	27
Ashok Leyland	3	3	3	2	2	3	1	17
Name of Company	Rank* weightage	Rank* weightage	Rank* weightage	Rank* weightage	Rank* weightage	Rank* weightage	Rank* weightage	TOTAL
HERO MOTOCROP	0.2	0.425	0.2125	0.375	0.1	0.2	0.3	1.8125
BAJAJ AUTO	0.1	0.2125	0.425	0.125	0.3	0.1	0.6	1.8625
Force Motors	0.4	0.85	0.85	0.5	0.4	0.4	0.45	3.85
Ashok Leyland	0.3	0.6375	0.6375	0.25	0.2	0.3	0.15	2.475

Asset Allocation

- 1) Asset allocation is the process in which we divide asset which investor want to invest in financial market.
- 2) We have allocated the asset according to the rank
- 3) Least overall rank will gain highest allocation of asset
- 4) Total AUM (Asset under management) was Rs.10,00,00,000.
- 5) After allocating the fund NAV(Net asset value) is calculated which is
- 6) $NAV = \text{asset under management (AUM)}/\text{No. of Units}$
- 7) Net asset value tell us how much funds has change or perform after the allocation is done
- 8) No. of units is considered as 1,00,00,000 to get NAV=10.
- 9) Allocation of asset has done in the above selected companies as show below:-

Name of Company	Overall rank	Asset allocation (%)	Price	Quantity	Asset Allocation
HERO MOTOCROP	1	35.0%	2355.85	14856	₹ 34,998,508
BAJAJ AUTO	2	35.0%	2674.35	13087	₹ 34,999,218
Ashok Leyland	3	20.0%	54.35	367986	₹ 20,000,039
Force Motors	4	10.0%	938.85	10652	₹ 10,000,630
Cash in Hand					₹ 1,605
Total					₹ 100,000,000

- As No. of shares has been fixed and the allocated amount will change according to change in share price
- Now from 22nd June 2020 we have started to update NAV daily according to fluctuation in share price.
- To check if the fund is performing according to expectation or not we have to set a benchmark.
- For benchmark, we have constructed index of large cap auto sector fund.

Benchmark Index

Benchmark index of automobile sector consist of all large cap companies of respective sector and for fund mid- cap companies are also included. Companies which are included in index are TATA Motors, Maruti Suzuki, Eicher motors, Hero MotoCorp, M&M, and Bajaj Auto. And in mid cap companies are Ashok Leyland and Force motors.

It is made to check if fund which have been made on basis of fundamental and technical analysis is performing better than the rest of the automobile large cap companies.

TATA Motors

Tata Motors (TTMT) was one of the worst impacted Indian auto makers due to its high debt and

JLR's main markets of China coming to a standstill. However, with its Chinese operation returning to normalcy and other global markets showing resumption of operations sooner provide partial relief. Its valuation contracted significantly expecting jump in global debt, while progress in global markets lowers the risk of debt accumulating. Restart of Chinese market would lower the amount of deterioration. JLR's management indicated stronger control on spending and lower capex for JLR than earlier guidance due to uncertainty led by ongoing COVID-19 crises, which would settle cash flow issue in the near-term. Moreover, the UK Government has assured support to company to maintain employment during this situation. Cost-saving initiatives and cash flow improvement would help TTMT in improving its financials although gradually, which would keep its net automotive debt under control. Besides, TTMT's strong products, likely association in domestic PV business and more focus on profitable CV business would steadily restructure entire India business.

Maruti Suzuki

Being the market leader in Indian PV segment, Maruti Suzuki (MSIL) would promoted from tending strong PV recovery by FY21E-end. Being cash rich with >Rs300bn cash and cash equivalent at

this juncture certainly helps MSIL to handle the COVID-led disruptions and backed entire value chain system. We expect sizable effect on dealerships and small vendors due to nationwide lockdown, which may drive several small players and dealers out of the system over a period of time. Sustainability would be the key issue, which raise confidence on MSIL, while its past track record indicate that the Company would take care of stability for entire value system associated with it. Strong product portfolio, extensive dealer network in rural area and strong brand equity for entry level cars for the first time buyers promise well. MSIL has introduced full range of BS-VI products at affordable pricing points in FY20. it is expected that rural economy to witness better traction from 3QFY21 onwards, as it remained least impacted from COVID-led disruption and healthy Rabi crop output, which would lead to decent cash flow in the hands of farmers As MSIL's BS-VI products are priced competitively with better technology, it has a freedom for price hike. BS-VI products would help MSIL to add more market share in FY21E.

Hero MotoCorp

Being key rural player within domestic 2W segment, Hero MotoCorp (HMCL) is expected to be profited from rural revival post COVID. Wide-spread dealers network in remote rural markets coupled with strong brand equity would start paying off soon. As social distancing being a new normal would have huge impact in rural transportation due to overcrowded public transport system, the rural consumers would choose buying a two-wheeler instead.

Bajaj Auto

Its key export markets (Africa & Middle-East),

which account for ~50% exports volume, are under immense pressure due to lower crude prices. Its urban-centric products would witness slow recovery in the event of likely demand revival in rural markets. High-margin 3Ws would see revival with a lag effect of 1-2 quarters due to commercial usage.

M&M

M&M tractor business would strongly outperform than other segments, as it is linked to most essential item of agriculture output. Healthy prospects can be seen with the expected demand revival in rural India, as >70% of its product portfolio is rural-centric, which is relatively less crushed by COVID-19 and also there is Sharp correction in stock price – Compelling valuation at 3.9x FY22E and 3.5x FY23E EV/EBIDTA.

Ashok Leyland

Post complete washout in FY21E, M&HCV industry is expected to stage a strong bounce back in FY22E & FY23E Being cyclical industry with higher operating leverage sensitivity, volume recovery would change into 415% EPS CAGR over FY21-FY23E. Cyclical recovery and higher earning CAGR will result in multiple re-rating and valuation increase heading to greater than 100% upside from the current valuation

Technical Analysis of Selected Stock

Technical analysis of selected stock which are Heromotoco, Bajaj Auto, Ashok Leyland and Force Motors by fundamental Analysis.

For Technical analysis we have analysis patterns in long term i.e. 5years time period.

(i) Hero MotoCorp



- Above Shown is the 5-years chart of Hero MotoCorp in which we can see different patterns first is symmetrical triangle in years 2017-2019
- Stock was in downtrend from 2018 to June 2020.
- Stock broke its downtrend in June now it is in uptrend.
- Last pattern which was observed is Rounding Bottom.
- Recent trend is uptrend as on 18th Sept 2020 therefore, Final call on the stock will be to 'BUY'.

(ii) Bajaj Auto



- Above Shown is the 5-years chart of Bajaj Auto in which we can see different patterns first is Rounding Bottom in year 2016
- Stock was in uptrend.
- Last pattern which was observed is Bump and Run Reversal.
- As shown in the chart stock has change its trend from uptrend to sideways therefore, we will give 'HOLD' call.

(iii) Ashok Leyland



- Above Shown is the 5-years chart of Ashok Leyland in which we can see different patterns first is Symmetrical Triangle in year 2016
- Stock had shown Head & Shoulder and Downtrend between 2019 to June-2020.
- Last pattern which was observed is Symmetrical Triangle.
- As it has broken upper side of the triangle we can give a 'BUY' call.

(iv) Force Motors



EQUITY RESEARCH OF AUTOMOBILE SECTOR

- Above Shown is the 2-years chart of Force Motors in which we can see different patterns first is Rounding Bottom in year Dec-2019
- Stock is in Downtrend from feb-2020.
- Last pattern which was observed is Cup with Handle.
- As we can see, stock is in Downtrend Therefore, we will give 'Sell' Call.

DATE: 19/05/2020					
Stock name	LTP	% Change	Benchmark Index	Market Cap	Weightage
TATA Motors	81.8	1.425914445	0.978577429	25267.80	6.87%
Maruti Suzuki	4805.3	1.786716657	7.022812629	145232.33	39.51%
Eicher Motors	12966.2	-0.169384518	-0.16552399	35413.41	9.64%
Heromotoco	2073.5	0.142474222	0.162318685	41415.92	11.27%
Bajaj Auto	2509.3	1.285596077	2.538876921	72610.86	19.76%
M&M	382.9	1.511134677	1.952074645	47601.84	12.95%
Total			12.48913632 1012.48913632		

AUM as on 19th June 2020 was 10cr.by updating it daily according to the share price movement. AUM as on 30th September 2020 was ₹ 123,104,433 as shown in the table below:-

Name of company	Price	Quantity	Asset Allocation
Hero MotoCorp	3147.30	14856	₹ 46,756,289
Bajaj Auto	2881.10	13087	₹ 37,704,956
Ashok Leyland	74.40	367986	₹ 27,378,158
Force Motors	1057.4	10652	₹ 11,263,425
Cash in Hand			₹ 1,605
TOTAL			₹ 123,104,433

DATE :30/09/2020					
Stock name	LTP	% Change	Benchmark Index	Market Cap	Weightage
TATA Motors	133.3	1.425914445	1.992	41176.0146	6.87%
Maruti Suzuki	6743.45	1.786716657	0.060	203809.743	39.51%
Eicher Motors	22028	-0.169384518	0.366	60163.0930	9.64%
Heromotocorp	3147.3	0.8709	-1.5831	62863.918	11.27%
Bajaj Auto	2881.10	-0.56600	-1.3603	83369.52	19.76%
M&M	607.9	-0.8634	-1.8887	75573.670	12.95%
Total			-2.48913632 1510.4891363		

CONCLUSIONS

From fundamental analysis of all large and mid-cap automobile stock I have selected 4 stock for technical analysis that are Heromotoco, Bajaj Auto, Ashok Leyland and Force motors.

Further in technical analysis, Pattern analysis of long term (5-Years Chart) of respective company has been done.

- i. Technical Analysis and Call on the selected stock are as follows: - For Heromotoco, last pattern was **Rounding Bottom** and from that point stock is in uptrend therefore '**BUY**' call for it.
- ii. For Bajaj Auto, Last pattern was **Bump and Run Reversal** and stock has change its trend from uptrend to sideways. Therefore we will give '**HOLD**' call.
- iii. For Ashok Leyland, last pattern was **Symmetrical Triangle** and it has broken upper side of triangle therefore, we will give '**BUY**' call.
- iv. For Force Motors, last pattern was **Cup with Handle** and it has change its trend from downtrend to uptrend therefore, we will give '**BUY**' call

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Formation of Service Blue Print

* Prof. Suhas S. Gharat

** Aditya Pawar

Abstract

This report is based on the Title “Formation of service blueprint” of firm. Ekjute Rural Urban Food Supply Chain is a student driven organization completely handled by students. My job was to make service blueprint. We segregated three parts of the organization into producer’s cooperative society, consumer cooperative society, software handling society. Producer’s cooperative society includes farmers, self-help group, and logistics department. Consumer cooperative society includes people from consumer side such as people who can take orders from consumers, who can deliver items to consumers, who can accept cash on delivery payments. Software handling society includes students who can help in setting up the software, updating items, customer care services. Thorough research on each particular element was done. The first ones on the list were the farmers. Due consideration was given to the problems faced by the farmers, primarily occurring because of the presence of the middlemen such as APMC, taxation policies, government subsidies, loans, organic way of farming etc. followed by research on self-help group. An attempt was made to study the subsidies, loans, formation of Mahila Bachat Gat, their problems etc. Later on, we gathered detailed information about the logistics department, E-Way bill, and delivery charges. Eventually After ensuring everything is in place, we created the service blueprint. During the time, sir helped us at every step. He was supervising as well as giving us briefs about the concepts that we did not understand. My project will be a guideline to every element of this organization.

Keywords: Service Blueprint, Farmers, Self Help Group, Logistics.

INTRODUCTION OF ORGANIZATION

The Ekjute Rural-Urban Food Supply Chain is worked under UBA (Unnat Bharat Abhiyan) – a government initiative which is run by Mr. Vijay P Bhatkar. It is associated with RGIT (Rajiv Gandhi Institute of Technology). The idea of the Ekjute

Rural-Urban Food Supply Chain coined in 2015. Ekjute Rural-Urban Food Supply Chain is a social and community platform. It will be managed by students with the help of industry expertise. The Ekjute Rural-Urban Food Supply Chain is People’s driven ecommerce platform integrating the existing infrastructure and consumers which ensure the

* Prof. Suhas Gharat, Faculty, Chetana’s R.K. Institute of Management & Research, (CRKIMR), Mumbai
Email: suhas.gharat@crkimr.in

** Aditya Pawar, Student, Chetana’s R.K. Institute of Management & Research, (CRKIMR), Mumbai
Email: aditya.pawar@crkimr.in

connection with:-

1. The Rural vendors will be small or medium Agro producers, across the Maharashtra and border states,
2. Women Self Help group (SHG) in respective region will ensure the Standardize packing and quality supply for those products.
3. The entire week's orders from urban consumers will be forwarded to the Women Self Help group (SHG). The Ekjute supply chain will deliver the assorted orders on weekends only, so the cost of delivery reduced, less traffic in cities more over the consumer will be at home to collect the orders.
4. Our associates (the college students or Ekjute friends) in the respective Society will propagate the products and act as customer care point.

Maharashtra's most important channel from rural producers to urban consumers is the conventional channel that passes through wholesale agricultural markets such as Mumbai's APMC markets and traditional urban retail, but the money received by small and medium sellers by selling their Agro products through this channel is less. Therefore Ekjut Rural Urban Food supply chain is an initiative to bypass this channels so that small & medium rural vendors across Maharashtra & borders of the state can earn more money i.e. beyond MSP also Women SHG's are involved in this initiative to form savings for themselves by ensuring standardize packing and quality supply of agro products in their respective regions through this the urban consumer will receive fresh and good quality food products at their door steps in affordable prices. This is an attempt to create a transparency between rural vendors and urban consumers across all over

Maharashtra state. Ekjut Rural Urban Food supply chain is the community platform which connects or integrate the existing entities or infrastructure provided by Govt, Farmers, knowledge institution like academics, students platform like Unnat Bharat Abhiyan, Transporters, Urban consumers, NGO, Self-help groups etc.

OBJECTIVES OF THE PROJECT

The objective of the organization was to create service blueprint. The blueprint should include information about the stakeholders of the organization such as farmers, self-help group and logistics department. The important objective was to exclude APMC market from the blueprint. The project also includes the schemes for self-help group, taxation policy of farmers, E way bill.

LITERATURE REVIEW

The project was studied as a need for the company to enter into the market and start its proceedings. This project will be a guideline for the future entrepreneurs who want to start a business in rural urban food supply chain. Literature on E-Way bill and Government schemes of self-help group was available from their websites, scheme guidelines.

RESEARCH METHODOLOGY

The survey was conducted with the help of structured questionnaire which was generated by my team & me. The distribution of the form was done randomly to various people by the teammates in their respective society and in their personal groups. The online survey has helped to understand the answer for various questions, but the main question was regarding the adaptation of the new system over traditional system. It showed a path to

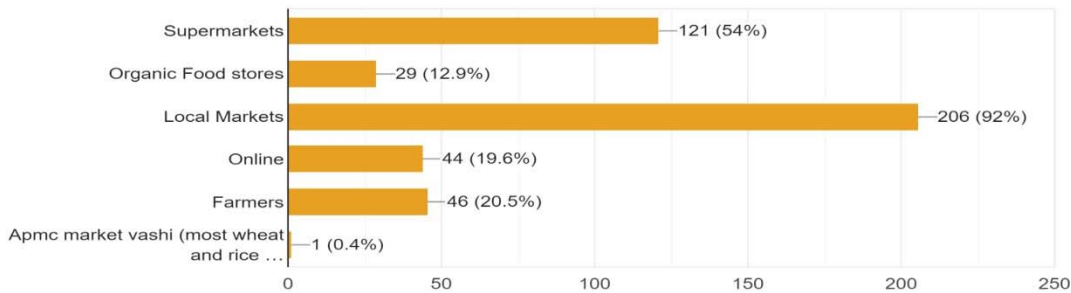
FORMATION OF SERVICE BLUE PRINT

create the Service blue print for Ekjut Food Supply Chain. We got some responses from the survey and they are as follows:

One of the responses showed that if the Ekjut Food Supply starts its operation the majority of the people will prefer the system over the traditional system. Another important response shows that weekend is

convenient delivery day for the consumers. One response shows that Rs 100-500 is the maximum spending of the consumers on the agriculture products. Another one shows that purchase frequency of the Agro food products by the consumers is weekly twice. One reply illustrates that cash on delivery is the preferential mode of payment for consumers.

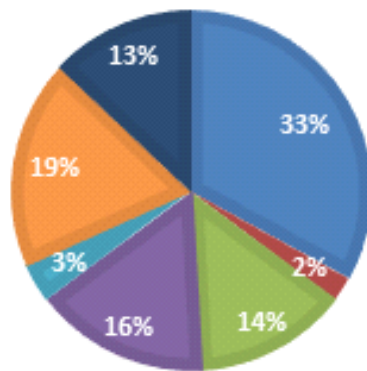
The places where I buy food grains, groceries, Vegetables and fruits are (You can tick multiple checkbox)
224 responses



This response shows the number of persons who prefer to buy Agro products from an online platform. From the below response chart, we got the information about the online platforms which consumers mostly prefer (224 responses)

IF YOU BUY ONLINE, WHICH PLATFORM DO YOU PREFER ?

■ Big Basket
 ■ Amazon
 ■ Nature basket
 ■ Grofers
 ■ Dmart
 ■ N/A
 ■ Others



Nature of Research	Exploratory Research	Descriptive Research
Data Collection Source	Secondary data	Primary data
Data Collection Method	Question & Answer	Qualitative
Specific Information Area	Online paper and Blogs	Online survey (Google Form)
Data Collection Technique	-	Observation and Survey
Instrument of Enquiry	-	Structure Questionnaire
Sampling Design	-	Target Audience: Students, Employees, Retired- personals, home makers, etc. Sample Size: 224 Sampling Method: Simple Random Sampling
Sources	Literature Review	-

ANALYSIS AND FINDINGS

FARMERS

India has classified and tracked its economy and GDP in three sectors: agriculture, industry, and services. Agriculture includes crops, horticulture, milk and animal husbandry, aquaculture, fishing, sericulture, aviculture, forestry, and related activities. Although Maharashtra is a highly industrialized state of India, agriculture continues to be the main occupation in the state. In recent years Maharashtra has become the largest producer of Onions (63%), Banana (75%), Mandarin oranges (75%), Tomatoes (42%), Pomegranates, Alphonso Mangoes (90%) and seedless grapes (78%). Agriculture is the Maharashtra state's mainstay. The state of Maharashtra is geographically divided into two regions; the coastal plains of Konkan, which comprise paddy fields and coconut gardens, and the great river basins created by rivers flowing out of the Western Ghats (Sahyadri). The principal food crops of Maharashtra are mangoes, grapes, bananas, oranges, wheat, rice, jowar, bajra, and pulses. The cash crops include groundnut, cotton, sugarcane, turmeric, and tobacco. The total irrigated area used for crop production is 33, 500 square kilometers; this makes it just 18 per cent of the Gross Cultivated Area. 'Dry Land

Farming Technology' is firstly adopted by the Maharashtra state with the mission to help its farmers.

PROBLEMS OF FARMERS

- Middlemen and exploitation.
- Most farmers are small and economically feasible and illiterate.
- Government programs, schemes and loans does not reach to the farmers.
- High indebtedness and exorbitant interest rates
- Uncertainty in rainfall pattern.
- Soil characteristics

SELF HELP GROUP

SHGs are the small and economically homogenous affinity groups of rural poor; they are voluntarily coming together for achieving the following:-

- To regularly save small amount of money.
- To contribute a common fund by mutually agreeing to it.
- To meet their emergency needs.
- To resolve issues and solve conflicts through collective leadership mutual discussion.
- To provide collateral free loan with terms decided by the group at the market driven rates.

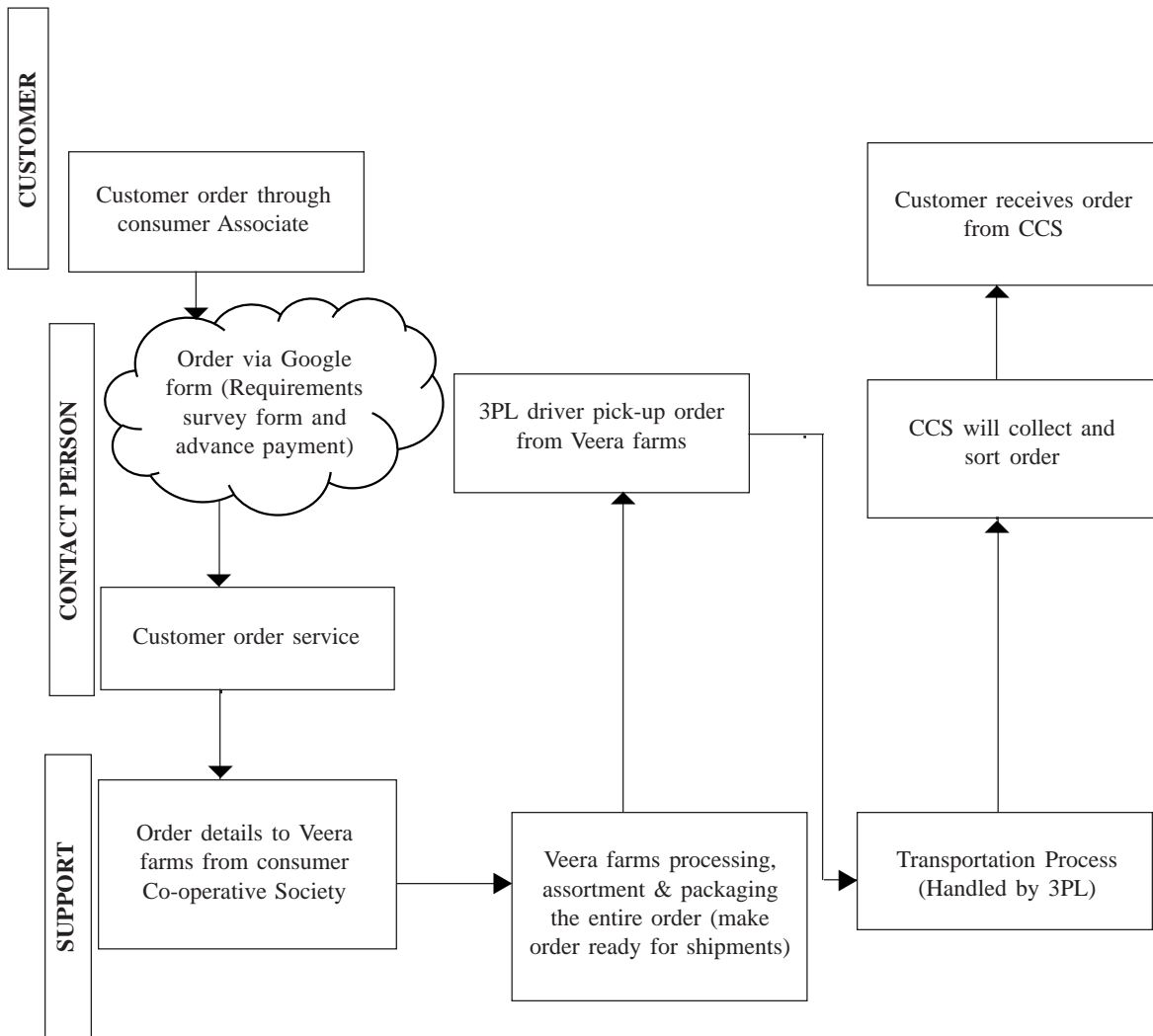
SELF-HELP BANK LINKAGE PROGRAM

In partnership with other stakeholders, NABARD developed this strategy to enable the banking system to transcend the confines of an existing savings and credit delivery mechanism. SHG-Bank Linkage Program’s main motive is delivering financial services to the poor in India and facilitate the realms of building financial capabilities and self-confidence in the rural poor, through internal savings and lending from own funds of the SHGs.

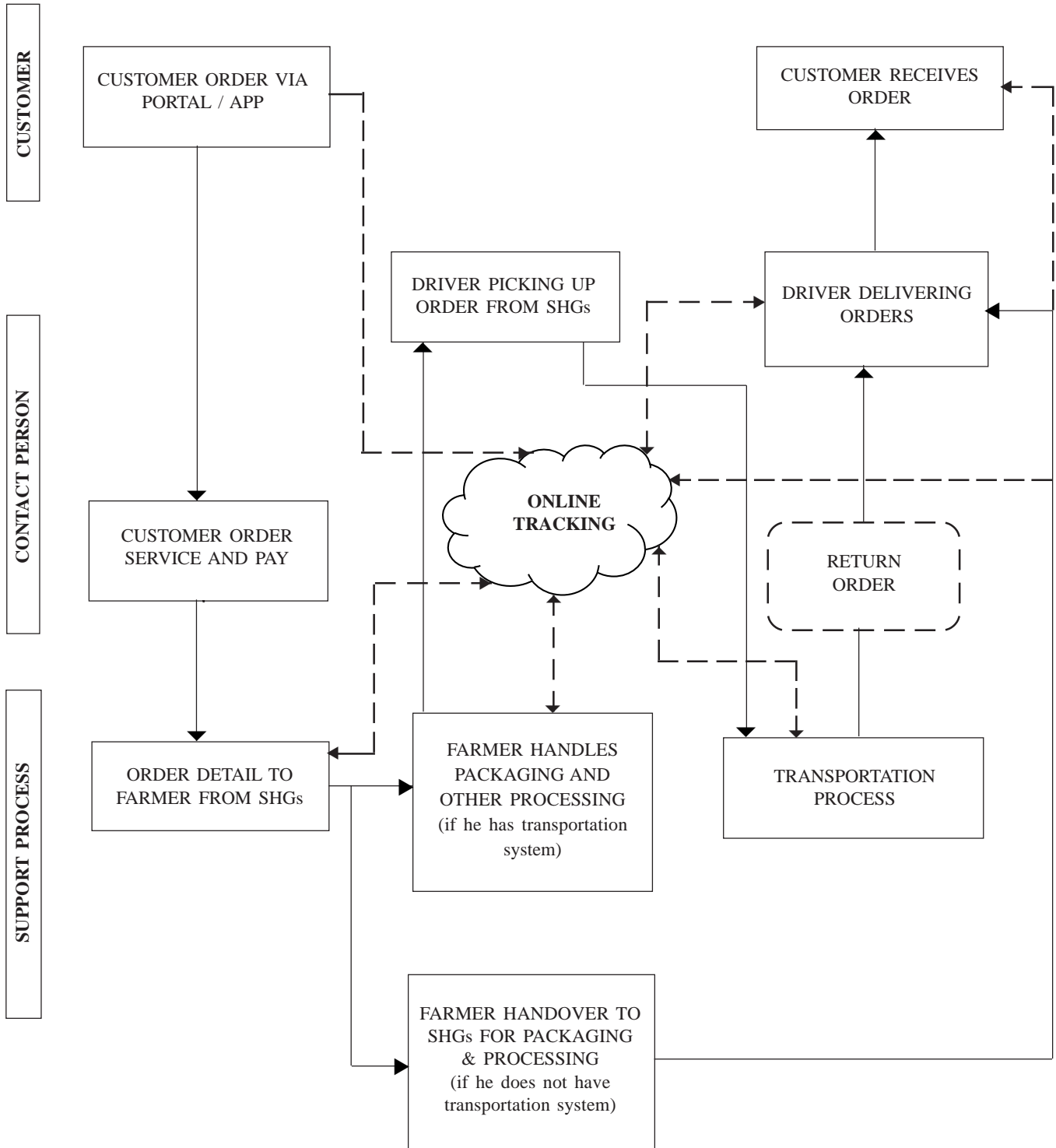
Important aspects of this program-

- Voluntary savings
- Purpose of bank loan
- overdraft for SHGs
- Improving Risk Mitigation Systems
- Training and Capacity Building
- Refinance support to banks for financing SHGs

TRANSFORMATION PROCESS (WITH VEERA FARMS)



TRANSFORMATION PROCESS: (AFTER COVID-19 PANDEMIC)



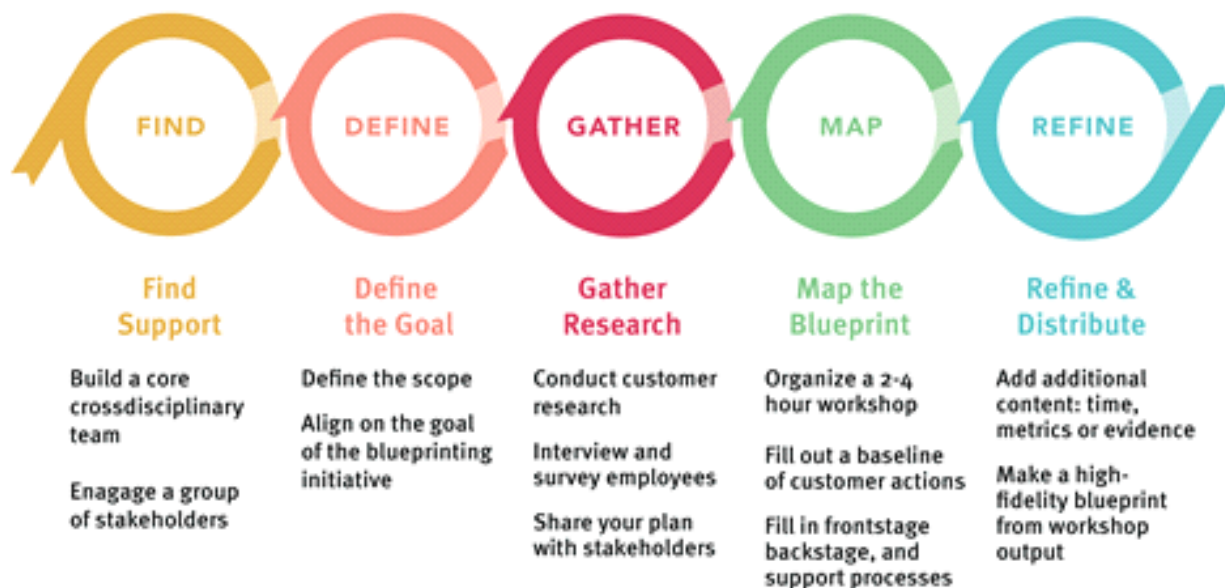
CONCLUSIONS

Ekjute internship has given a great opportunity for me to grow and develop. This has inspired me to surmount obstacles and grow my career. I have learned extremely about the business planning, supply chain industry, government laws regarding APMC and SHGs, Taxation policy of farmers, the importance of farmers, self help group, and SHG bank linkage program and data collection through survey as well. Using these lessons, I was able to build a business blue print for the organization of a Rural-Urban food supply chain. Not only did the internship improve my critical thinking and analytical skills but it also developed my professional skills and ability to work in multicultural environment.

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5 STEPS TO SERVICE BLUEPRINTING



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A Study on Importance of Consumer Behaviour in Designing Marketing Campaigns for HDFC Life

* Akash Das

** Prof. Ruchika Garhwal

Abstract

In today's world of business where competition is so cut throat that companies are looking to cut on all kinds of unnecessary expense in order to maximize profits. In such kind of a situation the last thing any organization would want is to spend on ineffective advertisements which confuse the consumers and doesn't get the message across them. That could eventually result in decline in sales as well. Hence in order to design effective marketing campaigns for HDFC Life we needed to have a very deep understanding of how important is consumer behaviour and what kind of role it plays in crafting and designing marketing campaigns.

As per the old phrase used in business which says "customer is king" emphasizing their importance for the existence of any business. Hence as brands before communicating with them we need put ourselves in their shoes and think accordingly what effect any campaign would have over them and then frame our advertisements. When we will constantly think like consumers, we would exactly know what they actually need and want and that would be evident in our marketing communication.

Keywords: *Consumer Behaviour, Target Segment, Marketing Campaigns, Brand Trust.*

INTRODUCTION

The task of this internship was to create and design effective marketing campaigns for HDFC Life. In order to make that happen, firstly some concepts related to marketing communication were learnt. Topics like target group, unique selling point and consumer behaviour were redefined keeping advertisement design in mind.

HDFC Life Insurance Co Ltd is based into life insurance business having a product portfolio ranging from term insurance, health insurance; unit linked insurance plans and investment schemes with guaranteed returns.

Defining marketing communication in the world of advertising and how is it a bit different from the textbook when it came to application. Identifying the basic elements of an advertisement, them being:

* Akash Das, Student, Chetana's R.K. Institute of Management & Research, (CRKIMR), Mumbai
Email: akash.das@crkimr.in

** Prof. Ruchika Garhwal, Faculty, Chetana's R.K. Institute of Management & Research, (CRKIMR), Mumbai
Email: ruchika.garhwal@crkimr.in

- Hero/USP: The unique selling point of the product or service shown in the ad (For eg: ready to eat breakfast in 3 minutes in case of MTR ready to eat)
- Target segment: The particular group of consumers that are being sent the message. (In the above case it was working professionals, people staying in hostels etc)
- Consumer behaviour: The reaction of the target group when they are exposed to this piece of information (In the above case, working professionals who generally don't find the time to make their breakfast and eat before work would want to have something before they leave for work, and this product solves their problem)

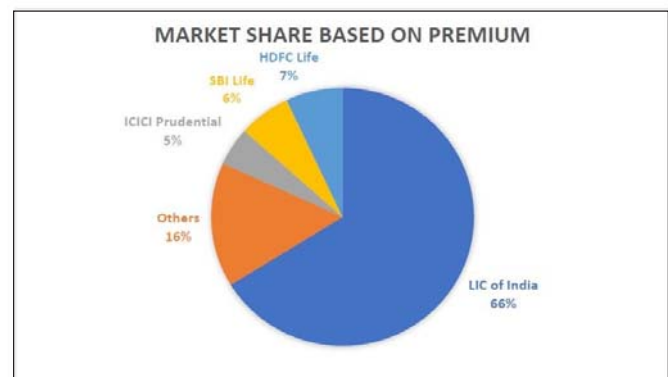
We came to know how companies go about their segmentation and targeting in order to accurately form and define target groups through the Facebooks Ads Demographics and segmentation which categorizes consumers on the basis of three distinct entities: demographics, interests and subtle behaviours. Once the definition of target group was made clear, the next step was to study sample pre-existing ads and identify the consumer segment targeted, USP of the product showcased and the consumer behaviour towards the USP depicted in the advertisement. After this, we redesigned some existing ads by suggesting a possible target segment and predicting their behaviour to the same USP which allowed us to come up with new storylines. We conducted a primary research activity where in a questionnaire was prepared in order to understand consumer behaviour and perception towards insurance sector. The main questions were formulated on the basis of why people prefer to buy insurance (importance of insurance) and what are their expectations from insurance companies. The choices or

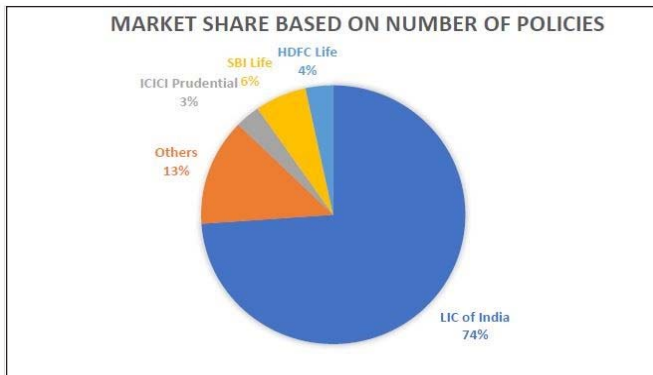
the options provided to the questions were rated in a 5-point likert scale format. The variables were decided after in-depth secondary research of various features of insurance and discussions within colleague interns. 186 responses were recorded from the designated target group for the questionnaire and the results were used to create marketing campaigns for HDFC Life.

INTRODUCTION TO SECTOR

The Indian Insurance Sector can be split into two categories – Life Insurance and General Insurance. All types of insurances are governed by the IRDAI (Insurance Regulatory and Development Authority of India).

This sector in India consists of total 57 companies which comprises 24 life insurance companies and 33 general insurance companies with seven of them being public sector companies and remaining belonging to private sector. Life insurance companies offer coverage to the life of the individuals, whereas general insurance companies offer coverage with our day-to-day living like travel, health, our car and bikes, and home insurance and industrial equipment's' as well.





The growth of Indian life insurance will be driven by demographic factors such as increasing middle class, young insurable population and rising knowledge of the need for security and pension planning.

Research Objective

To understand the importance of consumer behaviour towards specific USP of a brand while designing marketing campaigns.

Literature review

Review of existing literature.

1. Article: Consumer behaviour in advertising

Author : Prachi Juneja

All the background theory put to use has been adopted from practical uses of textbook definitions and this article was put to use to frame the report. This article clearly mentions the importance of how consumer behaviour shapes the thinking of a marketer while they brainstorm ideas for creating advertising campaigns.

As advertisements are marketing communications directed straight to the consumers, marketers need to be very cautious with whatever they present in their ads, as that creates a positioning in the consumers' minds for a long time. Consumers

associate and categorize each brand with certain values, hence all the taglines and messages are imprinted in their thoughts and accordingly they buy the products.

(Juneja, Management Study Guide)

2. Advertisement: Fevi Kwik

It is shown that an adult girl opens the door for an old woman who collects garbage from everyone's house and she sees her old shoes and some old accessories that the old woman is happily wearing. The girl is left astonished as to where did she find all these to which her mother said that she gave them to her. The old accessories were fixed with the help of Fevi Kwik. The girl surprised after hearing this drops her phone as well to which the old woman laughs a bit. The USP in this case is "don't throw but fix with fevi kwik" or "feko nahi jodo" in Hindi.

Consumer Behaviour: The consumers have always felt that fevi kwik has been a quick fix agent through out their lives be it anything as small as their shoes getting torn or their bags getting ripped, fevi kwik has evolved from their tagline "chutki me chipkaye" to "feko nai jodo" encouraging consumers to repair the existing rather than buying new.

(Fevi Kwik, 2020)

Research Methodology:

Research Design: The research design used for the study of consumer behaviour towards insurance sector was exploratory

Nature of Research: Qualitative research

Data Collection Technique: In Depth Interviews and Survey

Data Collection Tool: Questionnaire

Data Collection Source: Primary and secondary data sources used for research purposes

Primary research

The objective of this research was to understand the consumer perception towards insurance sector. This means what do people generally think when they hear about insurance and what their expectations from it are.

Survey: A questionnaire was prepared and a survey was conducted which targeted more than 150 respondents from the decided target group. The respondents were interviewed over a phone call and their responses were filled in a Google form.

Authenticity: After careful discussion with colleague interns and internship mentor, we finalized on the target group of respondents which basically comprised of:

- People who had an Household income: top 25-50% of ZIP codes
- Educated at least till high school

In order to keep the data collected as authentic as possible, the responses were collected over phone call so that the data doesn't get corrupted through whatsapp forwards.

Secondary research

In order to conduct the survey and frame an appropriate questionnaire, a good amount of secondary research was done as the questions should not sound vague in any sense and the data collected can be used effectively.

The questions of the questionnaire were as follows:

1. Age:
2. Name:
3. Email Id:
4. Contact number:
5. Why would you prefer to buy an insurance policy?

The background theory behind the above question and the choices given to the respondents came from the features of an insurance policy and what value does it add to a consumer's life.

This question had 12 aspects which the respondents had to rate through a likert scale.

A 5-point likert scale was used to collect bipolar data which could be negative or positive. The scale ranged from:

“Strongly agree”, “Agree”, “Neutral”, “Disagree” and “Strongly disagree”

The 12 aspects or variables the respondents had to rate were formulated from secondary research and discussion with peer interns on findings. The variables which were kept on the questionnaire were as follows:

I. Long term goals:

This aspect looks at the aspect of consumers having an eye on the future with life insurance plans which could be term plans or plans which provide guaranteed returns but in the long run not short term.

II. A legacy to leave behind:

Life's uncertainty always pesters the mind of the bread earner of any household. Consumers tend to purchase insurance plans of heavy maturity amounts so that when they are not around, their loved ones and family can inherit their legacy.

III. Guaranteed returns:

Insurance plans generally provide financial help

in case of an emergency or death of the earning member of the family but there are some plans which provide guaranteed returns on maturity. This also motivates many consumers to invest their money in insurance schemes.

IV. Settling debts:

In an uncertain situation of a demise of an earning member in the family, if there were unsettled loans and debts, matured insurance claims can help in settling debts.

V. Investment Choice:

For people who keep investing their money in different options like stocks, mutual fund, fixed deposits etc. This just acts as another investment option and it applies to the analogy of “not keeping all of your eggs in one single basket.”

VI. Grants Loans:

Banks also grants loans on the basis of your previously purchased defaults they will get their money back.

VII. Financial Stability & security:

This aspect associates itself with the financial independence and stability any consumer has after purchasing insurance schemes or for that matter invested their money in trusted investment.

VIII. Tax Benefits:

According to section 80C, consumers can claim a deduction of up to Rs. 1.5 lakh out of their taxable income if they would have invested their money in insurance policies, PPF,

mediclaim or paid their child’s tuition fees.

IX. Transfer of risk:

When a consumer purchases insurance for eg: if a person purchases a health insurance the risk of his medical expenditures gets transferred from him to the insurer during the event of some medical emergency.

X. Economic Protection:

Wise investment choices of an individual always reflects in a person’s CIBIL score which actually keeps track of how well placed is he/she economically.

XI. Reduces stress during difficult times:

In times of uncertainties or sudden calamity, insurance provides a lot of relief as the financial assistance provided by claims could not have been well in advance in any case. Hence insurance reduces stress during difficult times.

XII. Protecting your business and assets:

While there are general insurance schemes for insuring assets and business entities as well. But at times term plan claims also help in clearing up for loan leftover amount in case of a loss facing time for a businessman.

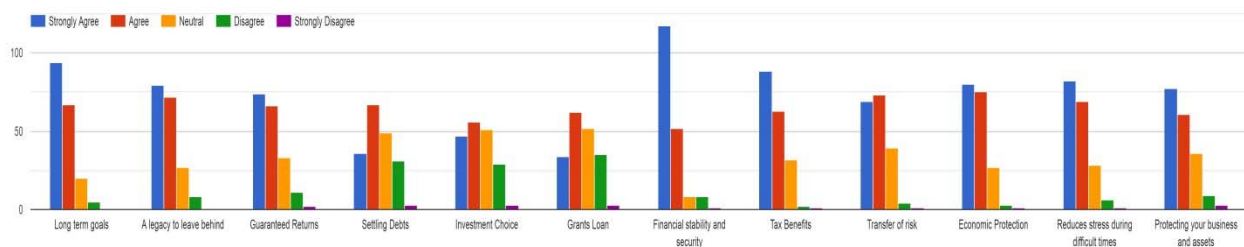
Questions Responses **186**

Why would you prefer an insurance policy? *

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagr...
Long term goals	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A legacy to leav...	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Guaranteed Ret...	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Settling Debts	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Investment Cho...	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Grants Loan	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Financial stabili...	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Tax Benefits	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Transfer of risk	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Economic Prote...	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Reduces stress ...	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Protecting your ...	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

186 responses belonging from the earlier defined target group were collected through the questionnaire.

Why would you prefer an insurance policy?



6. What are your expectations from an insurance company?

The premise of this question lies in the advent of a customer buying an insurance for themselves or in the name of their loved ones, will be having certain amount of expectations from the insurer in terms of service. Just like the earlier case, the 12 aspects and variables were also arrived upon after secondary research and discussion with peer interns and internship mentor. And these variables also had a 5 point likert scale rating system like earlier. For better perspective we imagined ourselves as the customers of insurance schemes and further thought ourselves through the below variables.

I. Fast processing & claim settlement:

Consumers after buying an insurance scheme want it to be processed as fast as possible and during times of need the claims to be settled as quickly as possible.

II. Expert advice & counseling:

Many at times, customers want to buy insurance plans but are unaware or not sure which one to go for. In those time expert advice and counseling is required.

III. Personalized schemes:

Every customer likes some aspects of their purchases to have a certain custom feature or personalized touch, insurance schemes are no different product in that sense. Consumers love to have some unique features or customization only provided to them

IV. Brand trust & reliability:

Customers also while choosing or buying insurance plans consider whether the brand is well trusted or how reliable. If they reliable

and trustworthy, then only their claims would be settled smoothly.

V. Hasslefree documentation process:

Customers these days don't have the time or don't want to face any kinds of difficulties getting themselves registered for insurance schemes so they expect the documentation process to be very hassle-free.

VI. Cheaper premiums giving optimum coverage:

Customers expect the most out of very little, they would compare all the plans and would want a plan for themselves that works optimum on a very low premium.

VII. Comfortable grace period:

Customers many a times don't have the financial state to pay premiums on time, so in case they default in one or two occasions they would want to have a comfortable grace period.

VIII. Customer centric approach:

Whenever customers approach agents they would expect the company to take actions which are centered around them. Keeping the customers at priority.

IX. Situational upgradation:

Every company needs to innovate with time, there will be times when some products work in some time and some don't. As times keep changing the company offerings also have to update according to the current situation. Innovation is also expected from insurance company. For eg: In these covid times, policybazaar.com has boosted its business by providing support to their employees to work from home and they

have contributed more to their sales and achieved growth.

X. Guaranteed returns: Customers expect insurance plans to give them guaranteed returns because as their money is being invested into the schemes they wouldn't it just get wasted or not being of any use. Return on investment is a fundamental expectation from any customer.

XI. Multiple premium payment options: Nowadays customers while making payments have

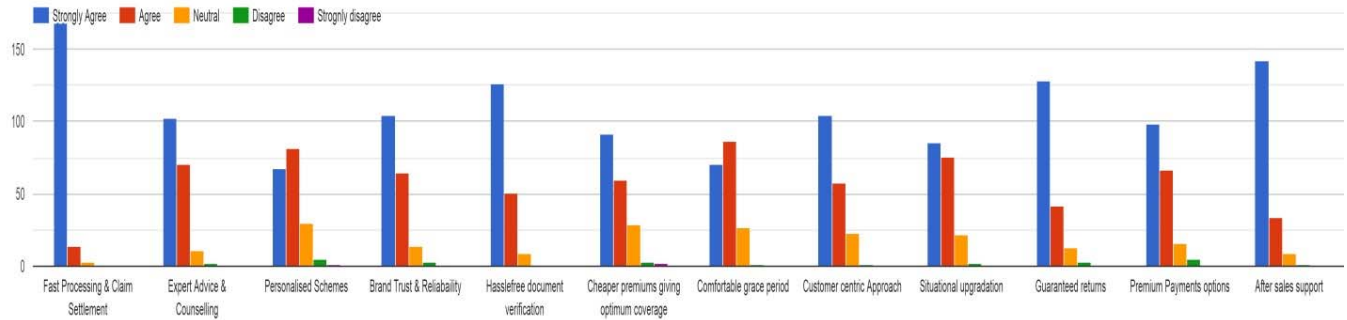
lots of choices right from the mode of payment being cash, cheque, online transfer, NEFT etc to payment via EMIs or lumpsum payments. In such a time, if an insurance company loses out on these expectations they might lose a lot of customers.

XII. After sales support: Consumers expect a good and reliable after sales support as insurance being a service, companies and agents need to take good care of their customers on a regular basis.

		Questions		Responses		186
What are your expectations from an Insurance company? *						
	Strongly Agree	Agree	Neutral	Disagree	Strognly disagr...	
Fast Processin...	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Expert Advice &...	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Personalised S...	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Brand Trust & R...	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Hasslefree doc...	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Cheaper premiu...	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Comfortable gr...	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Customer centri...	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Situational upgr...	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Guaranteed ret...	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Premium Paym...	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Online claims	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	

Some more data was also further obtained from the analysis of the primary research for HDFC Life.

What are your expectations from an Insurance company?



responses collected for the above question.
(Caleen Alexanderson)

Significance of Primary Research Activity

From the above survey, we got the responses to our questions which made the interns of HDFC Life aware about what kind of perception do potential customers have in their mind when they think about life insurance. This will form a basis of consumer behaviour towards insurance sector as a whole. From the derived consumer behaviour more marketing campaigns can be designed and

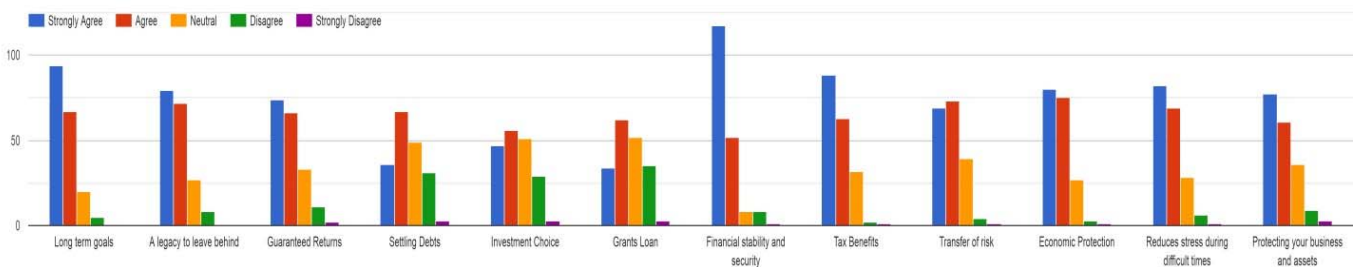
most liked features when it comes to insurance plans which will help us frame our unique selling points (USP) for advertisements.

Analysis of primary research for HDFC Life

The responses of the questionnaire conducted to understand the consumer perception towards insurance will be analysed in this chapter and the results obtained would be put to use to further design marketing campaigns for HDFC Life

186 responses belonging from the earlier defined target group from previous chapter were collected.

Why would you prefer an insurance policy?



Given above is the summarized chart from the questionnaire for the question “why would you prefer an insurance policy?”

The blue bar graph corresponds to strongly agree, red to agree, yellow to neutral, green to disagree and purple to strongly disagree.

From the above bar chart we can see that consumers value the following top three aspects the most while preferring an insurance policy as they strongly agree with those aspects the most:

- Financial stability & security
- Long term goals
- Tax benefits

The above aspects and variables will be used as USPs/Heroes for designing marketing campaigns & advertisements for HDFC Life. Further keeping these USPs constant and changing the target group, we will formulate corresponding consumer behaviour and design advertisement and campaign storylines.

Advertisements on Derived USPs for HDFC Life Importance of Insurance (IOI Campaigns)

1. USP: Financial stability & security

Target segment: Parents with adult kids

Consumer behaviour towards USP: Parents have a protective nature towards their family so they look for financial security and stability for their whole life.

Storyline: A retired person is relaxing at home when he gets a call from his grandson asking how he was. He starts telling about how he's enjoying his after retirement life. Also advises him to plan his retirement life with HDFC Life insurance plans so that he too relax and enjoy his retirement life.

2. USP: Long term goals

Target segment: Relationship: married, in a relationship

Consumer behaviour towards USP: Couples tend to invest in schemes with guaranteed returns in order to achieve their long term goals they had planned earlier.

Storyline: A young couple has been planning to go on a world tour for some years now, but due to Covid-19 they are forced to cancel their plans for this year. Wife gets really sad about their tour getting hampered due to the pandemic but her husband reassures her that whenever this pandemic ends they will surely go on their world tour to achieve their long term goal as they have planned their financials for their future really well through HDFC life.

3. USP: Tax Benefits

Target segment: Working professionals

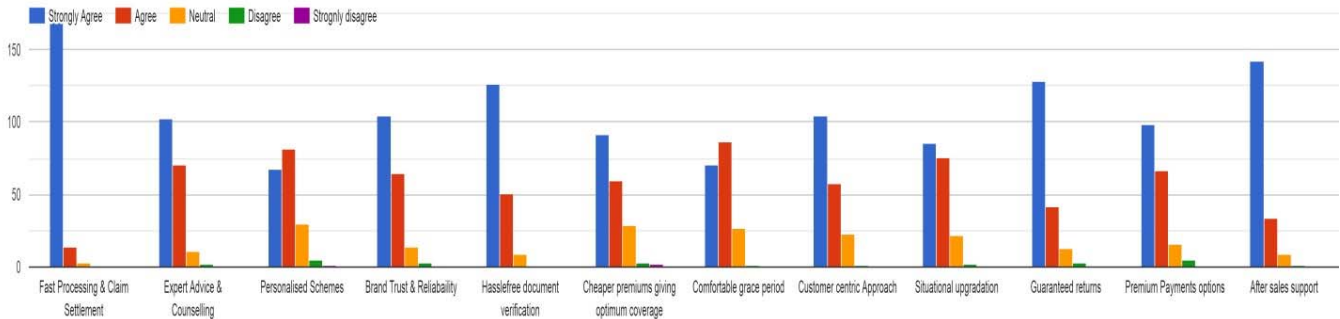
Consumer behaviour towards USP: Working professionals look at insurance as an option for saving tax. As insurance offers various tax benefits, it helps working professionals to save money.

Storyline: Two colleagues are discussing about how much money they saved on taxes this financial year. During which one of them exclaims that his taxes are eating up too much of his income to which the other colleague advises him to invest in life insurance plans by HDFC as investments made in insurance schemes up to Rs. 1.5lakhs is exempted in income tax filing.

Here’s how the analysis helped in designing marketing campaigns exclusively for HDFC Life.

Some more data was also further obtained from the analysis of the primary research for HDFC Life.

What are your expectations from an Insurance company?



From the above chart, we can see that consumers highly expect faster claim settlement and processing from insurance companies. We also designed marketing campaigns for the said USP with different target segments.

Advertisements on derived USP (Expectation campaigns)

USP: faster processing and claim settlement

Target Segment: Parents with small kids, teenage kids

Consumer behaviour towards USP: It is not easy for parents to manage both work and family situations like claim settlement is such a thing that they do not like to wait for, therefore we it should be as fast as possible.

Storyline: Father performs daily tasks throughout the day starting with dropping his daughter to school, going to work and shopping groceries for family after work. At the end of the day, when he

sits tired at home his wife asks whether he had initiated the claim settlement process or not. To which he replies that he forgot to do the same. His wife gets worried due to this but he assures her that the claim settlement will be processed really fast with HDFC life

This is how the data of primary research was analysed and put to use for designing effective marketing campaigns for HDFC Life.

CONCLUSION

From the entire project and internship, we learnt how much consumer behaviour affects the thinking of a marketer. Here are the final conclusions that can be drawn from the project:

- Before designing any marketing campaign, the marketer needs to get the fundamental theoretical entities clearly defined. In order to make that happen whatever tools are required are supposed to be used judiciously.

- In our project before we started designing advertisements for HDFC Life we learnt the basic concepts of marketing management them being target group, USP/Hero and consumer behaviour.
- We learnt how these elements are inter-linked with each other in campaign design.
- For identifying target segments, Facebook Ads segmentation was used.
- For identifying and framing USPs/Hero for marketing campaigns we used primary research to know why people buy insurance policies and what do they expect from insurance companies.
- Finally the consumer behaviour or perception, keeping ourselves in shoes of consumer and imagining what kind of impact the campaign will create inside the minds of the consumer. So that proper storylines can be framed and campaigns can be designed accordingly.



Ref.: <https://www.google.com/>

search?q=marketing+hDFC+life+&tbm=isch&ved=2ahUKEwIj097E247vAhVwhUsFHRqDBUoQ2-cCegQIABAA&oq=marketing+hDFC+life+&gs_lcp=CgNpbWcQAzoECAAQzoCCAA6BggAEAcQHjoICAAQBxAFEb46CAgAEAgQBxAeUPN6WJ6jAWCBqwFoAHAAeACAAa8BiAH6DJIBBDaUMTGyAQcGAAQgAQtd3Mtd2I6LWItZ8ABAQ&sclient=img&ei=Bas8YOO8KvCKrtoPmoaW0AQ&bih=657&biw=1366&rlz=1C1GCEA_enIN919IN919#imgrc=C0eJ-qqJH3Y2QM

Using Data Analytics to Map Channel Partners to Corresponding Clients Yielding Intel on Future Forward Sales Opportunities

* **Shraddha Dhumale**

** **Prof. Suhas S. Gharat**

Abstract

Calendar Year 2020 came with a shocking news of Corona Virus Pandemic which nobody had thought of. The pandemic which started in China spread like a wild fire through entire world and by March 2020, entire world went under “Lockdown” and brought all essential as well as commercial activities to standstill. Even the corporates shuts their offices across the world and almost for three months all business activities were non- existent.

For MBA students like us, even summer internship was by of WFH (Work from Home). Thanks to technology which came to our help and we could complete our Summer Internship through WFH with the help of technology.

The sales team of an Asset Management company approaches various corporates on the basis of grapevine news fetched from various sources. The team along with the Book Running Lead Manager team advises these corporates with the various procedures to be carried out for the execution of the deals. However, during the process, it may happen that the news is fetched first by other counterparts and the company may lose its opportunity to execute the deal. In such cases, it is required to be constantly updated with the current news for a fund or corporate. The Book Running Lead Manager (BRLM) is required to constantly keep a track of the funds and corporates and the deals carried out by them. So, an engaging dashboard is created where the funds are mapped to the law firms on the basis of deals carried out by them. The dashboard gives the details of the number of deals, type of deals, law firms associated with the transaction, etc. for funding or corporate. There may also be different law firms for the same fund. It is also possible that a particular corporate may engage in different deals with the help of different law firms for different sector (Corporate M&A, Investment Funds, Capital Markets, Foreign Funds). Once the data is mapped, analysing the data and creation of intelligence from the data is done. Further, fetching the latest news items for a particular entity of search to determine the future deals that may be carried out by the entity is done. On the basis of these news items, the BRLM will advise their sales team to approach these funds or corporates and pitch them for the execution of deal in the most effective way.

Keywords: Fund, Channel Partners, BRLM, Grapevine

* Ms. Shraddha Dhumale, Student, Chetana's R.K. Institute of Management & Research, (CRKIMR), Mumbai.
Email: shraddha.dhumale@crkimr.in

** Prof. Suhas Gharat, Faculty, Chetana's R.K. Institute of Management & Research, (CRKIMR), Mumbai.
Email: suhas.gharat@crkimr.in

I. INTRODUCTION

In today's scenario, a plenty of financial deals happen across Indian markets in listed and unlisted space. These deals are carried out with the intentions of expansion of the companies. Channel Partners play an important role in them, especially the law firms.

The corporate lawyers offer legal and compliances related advice to businesses on all and different aspects of buying and selling the entire business or its assets. Businesses require guidance when complying with the procedures with the company law for international transactions, compliance with foreign laws, and raising the funds. The law firms ensure whether the transactions made by the corporations are legal. Corporations become aware of their legal duties and rights with the help of the lawyers.

These lawyers draft the necessary documents related to the clients and the corporates for which they render service. They also review the agreements and make the changes in the agreement. The legal experts specializing in corporate finance may also restrict the agreements or add conditions and exceptions as required. For negotiating the deal between the parties and on behalf of the corporations, the corporate Lawyers pursue work with a lawful objective and are impartial while handling the legal documents. The corporate lawyers are partners in Corporate Lawyer's Firms and associate themselves with all kinds of legal services to the corporate entities.

The law firms advice the businesses in deals belonging to various practice areas such as Capital Markets, Corporate M&A, Banking and Finance,

Insurance, Investment Funds, Real Estate and construction, Shipping, Aviation, Foreign Firms, etc. Different law firms specialize in different practice areas.

II. LITERATURE REVIEW

Data analytics plays an important role in data management on the basis of demand and forecasting. With the help of statistical programming language, R, it is easy to apply demand forecasting methods with reducing errors. Data analytics can be used in effective decision making process which helps in inventory management and workload planning of human resources. The logic and the techniques applied to data analytics can be utilized in the current project also to determine the law firms based on the corporate law firm mapping. [1] Big data analytics expands the opportunities for developing a valid, reliable and consistent analytics model. This optimizes the search criteria. The study was carried out to determine the different combinations of factors that achieve enhanced visibility and organic traffic on cultural heritage organizations websites in a most effective way. Using this model, we can apply the techniques to our project to determine the law firms for the corporates in the most effective way. [2]

Today, Artificial Intelligence plays a very important role in development and growth of the organization. It has a strong influence on areas such as risk detection, measurement and management, availing customer support, etc. This study helps us to identify various areas in our project where artificial intelligence can be applied. Use of artificial intelligence eases the job of the user as the system automatically learns from the previous inputs. More the data, better the results. [3]

III. OBJECTIVES

- To create an interactive dashboard that is dynamic and user-friendly from sales inroads perspective.
- To capture data from defined websites such as legal500.com and legallyindia.com for funding investments in various categories such as Corporate M&A, Capital Markets, Investment Funds and Foreign Firms
- To create deal intelligence from the data captured using the dashboard and classifying the partners into various categories such as Hall of Fame, Leading Individual, Next Generation Partners, Rising Stars and others.
- To capture news intelligence for a particular entity (e.g. funds or law firms) in discussion to help the sales team to pitch their inputs to the corporates in a most effective way

IV. RESEARCH METHODOLOGY

The main idea of the paper is to create a dashboard which collects information from defined websites. The data was collected from defined websites such as legal500.com and legallyindia.com. The idea is spanned across five major areas, namely, Corporate M&A, Investment Funds, Capital Markets, Private Equity and Foreign Firms.

As explained, the law firms assist the corporates in execution of various deals, A particular fund may carry out numerous deals with other funds or corporates. Also, different law firms will be involved in different type of deals carried out by the companies. So, a dashboard allows to fetch consolidated details of the funds, the law firm involved and the type of deal carried out. A clear mapping between the corporates and the law firm will help identify the different variety of deals

carried out by the corporates and the law firms. This will help the BRLMs to identify the different deals carried out by the corporates.

The execution is carried out in three phases:

Phase 1:

This phase includes creating a dashboard in excel. The funds such as Carlyle, Blackstone, etc. and corporates such as Reliance, Tata, etc. are mapped to the law firms such as AZB Partners, Khaitan & Co., etc. on the basis of type of deal carried out (such as corporate M&A, capital market, investment funds, foreign firms).

Funds such as Carlyle, Blackstone, etc. carry out various deals with other corporates such as buying or selling stake in one or the other companies. Similarly, corporates such as Reliance, Tata, Piramal, etc. carry out investment deals with various other corporations. For example, Reliance Industries carried out deals with various corporates such as Facebook, TPG, KKR, Mubadala, L Catterton, etc. from April 2020 to July 2020. In some cases, there may also be issue of an IPO by a company. Legal firms are required to play a major role in all such deals.

The details of the deals and the law firms were fetched from the defined websites and mapped to the respective fund or corporate. The details consist of the deal carried out, various corporates involved in the deal (e.g. Reliance Industries, TPG, Blackstone, Accel Partners, etc.), law firms involved in the execution of the deal (e.g. AZB & Partners, Khaitan & Co. etc.), the lawyers(partners) who were involved in the execution of the deal, the type of the firms(such as Domestic or Foreign), practice area for the deal (e.g. M&A, Private Equity, Investment Funds, Foreign Firms, Capital Markets,

etc.), value of the deal, execution date and so on.

For a particular law firm, various lawyers are specialized in various areas. These areas were identified. On the basis of these specialties, these lawyers were tagged as Hall of Fame, Leading Individuals, Next Generation Partners and others. The Hall of Fame highlights the individuals who have received constant appraisal or praise from their clients for their continued excellence. The different partners are mapped to the respective deals for a particular law firm. It is

possible that only a few lawyers of a law firm are involved in a particular deal while others are involved in other deals. As a result, the mapping gives the data of the lawyers which have executed such type of deals in the past.

With the help of the dashboard, the manager is able to analyse the different type of deals carried out by a corporate. So, in future, if the corporate is going for any such type of deal, then the BRLM can suggest appropriate law firm to it.

The image shows a web-based form titled "Law Firm - Client System". The form is set against a light yellow background. It contains five text input fields arranged vertically, each with a label to its left. The labels are: "Select the Source", "Select the client name", "Select the law firm", "Select the firm type", and "Select the area of practice". The "Select the client name" field contains the text "Reliance". Below these fields is a prominent orange button with the text "Get Records" in white.

Figure 1: Historic Data Dashboard

The images show the details of the historic data dashboard created in phase 1. It fetches the data where funds are mapped to the respective law firm on the basis of type of deal. The filtering of data can be on the basis of any combination of client, law firm, firm type and practice area

Phase 2:

The data captured in the phase 1 was a historic data. Using this dashboard, the BRLM can identify the different deals carried out by a corporate or law firm in the past. However, the next challenge was

to determine the upcoming deals by the corporates in the near future and assist the sales team to take corrective actions on them.

This phase involved capturing of latest news for the particular entity of search. E.g. searching news related to Piramal Group. This news was fetched from various websites such as www.vccircle.com, www.business-standard.com, www.legallyindia.com, www.livemint.com, etc. Various news links related to the entity of search were fetched. On the basis of the news links available, the manager can

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Category	Tier	Client	Lawyers	Law Firm	Firm Type	Practice Area	Deal Details	URL for Deal	Deal Value (\$m)	Date
Legal500	1	Reliance Industries Limited	Zia Mody, Ashwath Rau; Sai Krishna Bharathan; Pallabi Ghosal	AZB & Partners	Domestic	Investment Funds				
LegallyIndia	1	Reliance Industries Limited		Cyril Amarchand Mangaldas	Domestic	Private Equity / VC	\$3.66bn Brookfield buy into RIL towers draws into largest PE investment ever	https://www.legallyindia.com/q10757	3660	Jul-19
Legal500	1	Reliance Industries Limited	Cyril Shroff; Reeba Chacko; Nivedita Rao; Akila Agrawal	Cyril Amarchand Mangaldas	Domestic	Corporate and M&A	acquisition of controlling stake of 51.03% in Hathway Cable and Datacom Limited.			
LegallyIndia	1	Reliance Industries		Cyril Amarchand	Domestic	Private Equity / VC	Floats sale to d	https://www.legallyindia.com/q11134	20	Dec-19

Figure 2: Historic Data Fetch

determine what type of deal is going to be carried out by the corporate in the near future. These news links give the information of the deals that are carried out by the entity or expected to be carried out in the near future. Grapevine news gives the news of the corporates from word of mouth sources which may or may not be true. These news items allow the BRLMs to take immediate actions before their competitors and pitch their plans to the corporates. The validity of these news items can also be determined by the sales team. E.g. If there is a news that a certain company ABC Ltd. is going to come up with an IPO then the sales team can immediately contact the company and pitch them for the execution of the deal. As a result, the BRLM gets an opportunity to execute the deal for the corporate before its competitors.

The search was further expanded to keyword search where news items related to a particular keyword are fetched (e.g. buy, IPO, sell, stake, invest, etc.). This narrows the search for a particular entity. It also gives the news of the new entrants in the market. E.g. unlisted companies' news. Even for a given corporate, there are many news links available for different types of deals carried out. E.g. A

corporate may execute various buy and sell deals with other corporates. If the BRLM wants to search only the 'buy' deals, then keyword search can be applied.

This phase consists of three steps:

1) Step 1

- The lead manager will fetch the news items for a particular fund or corporate. The data will be populated for past 1 day/week for the fund. (From the date entered to the current date)
- The manager will decide on the filter criteria (keyword e.g. private equity) to filter the news items
- The filtered news links will be displayed to the manager

2) Step 2

- On the basis of news links, the manager will go to the respective links (as the number of links for a particular client for a keyword will not be more than 10 for a day or week)
- It is also possible that some of the news items fetched are not relevant to the subject

of search but are fetched as they contain the respective keywords.

- As a result, the lead manager needs to go through the news articles fetched in the URLs.
- On reading the news article, the manager will determine the type of the deal (e.g. private equity, M&A, etc.), list down the law firms or other corporates involved in the deal.

3) Step 3

The BRLMs can pitch the funds or corporates about the different law firms based on the following criteria:

- a) The BRLM has a good relation with the law firm
 - § In such a case, data analysis on the basis of previous BRLM data can be found out
 - § The data will contain the list of all the deals facilitated by the BRLM with different law firms for the practice area (e.g. M&A, Private equity, investment funds, capital markets, etc.)
- b) The law firm has already worked before with the client
 - § This can be determined with the use of data analysis of the historic data (Refer Phase 1)
 - § The manager will fetch all the deals carried out by the law firm with the corporate from the excel
 - § The manager can also fetch all the law firms who have carried out deals for the corporate from the excel
 - § On the basis of the information fetched, the BRLM can identify the similar deal

carried out by the law firm with the client, the partners involved in the execution of deal, deal value, etc.

- c) The client is a new client with no prior experience
 - § In such a case, with the use of historic data, an analysis can be found out on the basis of type of deal (e.g. M&A)
 - § Since, there is no previous data available for the corporate, relative analysis technique is used to determine the law firm applicable for the deal.
 - § Analysis of similar deals by various law firms is done using the data available in Phase 1.
 - § So, the manager will fetch all the deals for a particular practice area and suggest the best law firm applicable for the deal depending on the clients' market capitalisation and fundraise

Algorithm

- 1) If date entered is blank, go to End
- 2) If both client and law firm names are selected, go to End
- 3) Set the selection criteria (client or law firm)
- 4) Count the number of keywords selected and assign them to an array
- 5) If none of client or law firm is selected and keyword is blank or no of keywords is more than 3, go to End.
- 6) Call the webpages from the macro
- 7) If the webpage contains the news link of the selection criteria and is if the news item is published after the date entered, then capture the link

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- 8) Out of all the links captured, filter only those links which contain the keywords (if any keyword was selected in step 1d).
- 9) Arrange the fetched links in descending order of dates.
- 10) Remove duplicate links if any
- 11) End

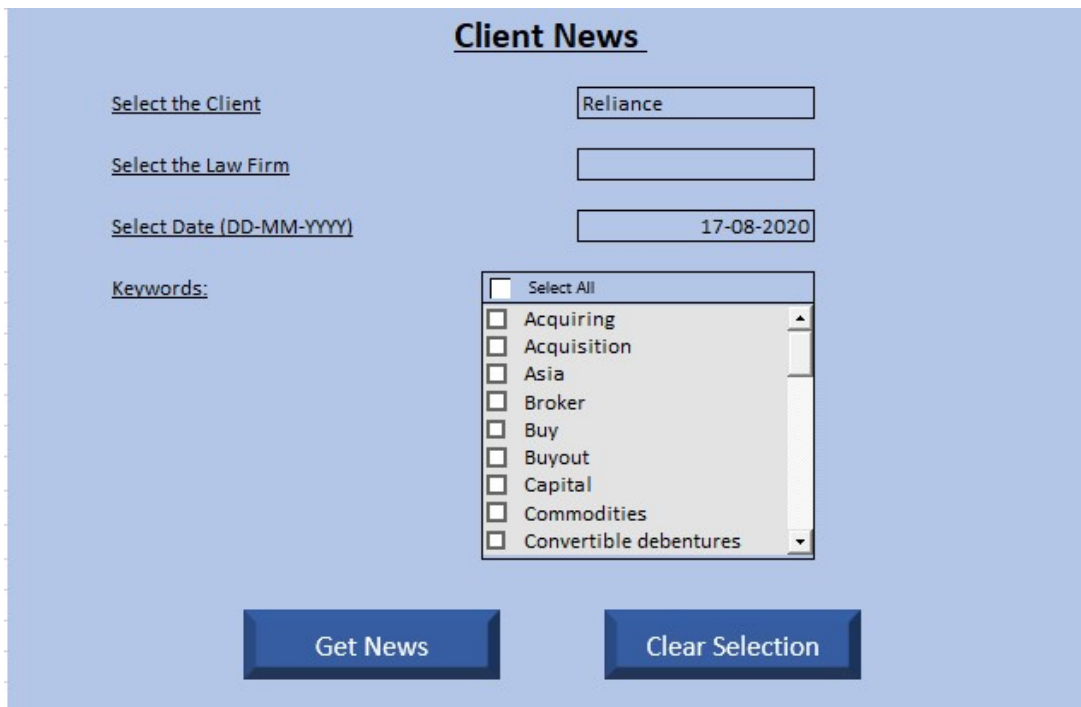


Figure 3: News Dashboard (as on 19-08-2020)

19-08-2020	https://www.vccircle.com/reliance-retail-acquires-majority-stake-in-e-pharmacy-netmeds/			
19-08-2020	https://www.vccircle.com/sensex-nifty-settle-higher-banks-reliance-support-gains			
19-08-2020	https://www.business-standard.com/article/companies/consolidation-in-the-e-pharmacy-space-and-the-reliance-industries-game-plan-120081900559_1.html			
19-08-2020	https://www.business-standard.com/article/companies/telecom-dept-raise-objections-to-reliance-communications-resolution-plan-120081900927_1.html			
19-08-2020	https://www.business-standard.com/article/companies/reliance-retail-acquires-majority-stake-in-netmeds-for-rs-620-crore-120081900007_1.html			
19-08-2020	https://www.business-standard.com/article/news-cm/we-need-to-reduce-imports-and-boost-manufacturing-to-achieve-the-objective-of-self-reliance-nitin-gadkari-120081900309_1.html			
19-08-2020	https://www.livemint.com/mutual-fund/mf-news/reliance-industries-remains-mutual-funds-top-holding-in-july-11597801214341.html			
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18-08-2020	https://www.business-standard.com/article/markets/25-equity-plans-make-less-than-5-allocation-to-reliance-industries-120081800083_1.html			
18-08-2020	https://www.business-standard.com/article/companies/sc-asks-govt-to-clarify-why-reliance-jio-shouldn-t-pay-rcom-s-agr-dues-120081701454_1.html			
18-08-2020	https://www.livemint.com/companies/news/two-wheeler-makers-aim-for-self-reliance-by-march-11597717227354.html			
17-08-2020	https://www.livemint.com/companies/news/amazon-reliance-set-to-clash-on-e-pharmacies-11597628125442.html			
17-08-2020	https://www.livemint.com/companies/news/reliance-industries-may-buy-urban-ladder-milkbasket-report-11597639602306.html			
17-08-2020	https://www.livemint.com/industry/telecom/reliance-jio-may-deny-liability-for-rcom-s-dues-11597627186942.html			
17-08-2020	https://www.livemint.com/market/stock-market-news/markets-may-rise-following-global-peers-reliance-telcos-icici-bank-in-focus-11597633249188.html			
17-08-2020	https://www.livemint.com/market/mark-to-market/wfh-vaccine-technology-and-self-reliance-drive-market-sentiment-11597626048141.html			

Figure 4 : News Fetch Result (as on 19-08-2020)

These images display a dashboard to fetch the news links for a particular fund or corporate (client) or law firm. The searching can be done on the basis of keyword also

Phase 3:

The project was further extended to a web application for easy access to the data and faster processing. The web application has all the features available in the excel plus some additional features.

The web application consists of the corporate and law firm data stored in the database and is mapped to the respective deal and keyword. All the steps carried out in Phase 1 and Phase 2 can be implemented in the web application also. Using this web application, data retrieval is easy and analysing the data is possible in an easier way.

Initially, the web application allowed to fetch news items for a particular entity of search only (similar to the news fetch in excel (Refer Phase 2: Step 1)).

Furthermore, by using predictive analysis, changes were made in the algorithm to suggest the most used keywords for a corporate or a law firm. This will allow the manager to search relevant keywords which are generally used by the news firms. It will also improve the search carried out by the algorithm and fetch only relevant data. The algorithm will improve in itself with more data. This will reduce the time required to search the news and also reduce the complexity of search. Using this technique, the manager can identify what are the most type of deals carried out by a corporate or what are the areas to focus on.

The following images describe of the webpages of the web application developed in the third phase.

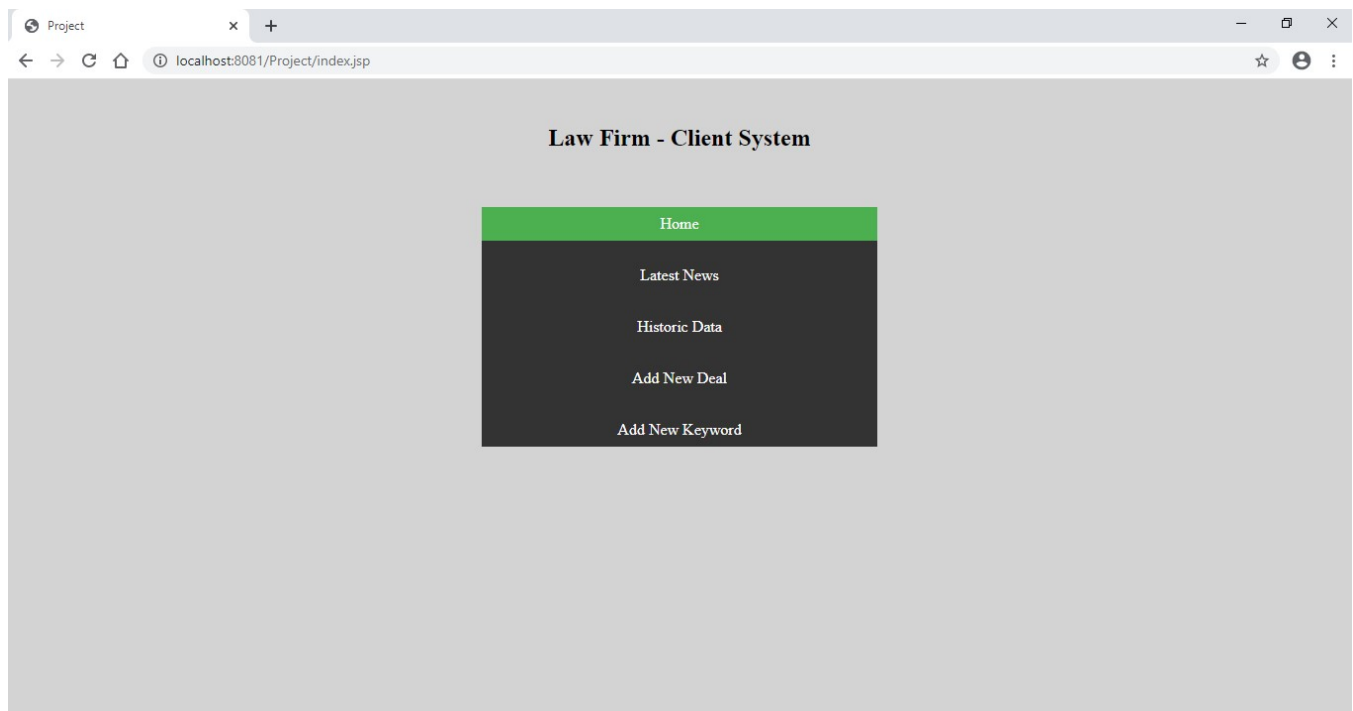


Figure 5: Home Page

USING DATA ANALYTICS TO MAP CHANNEL PARTNERS TO CORRESPONDING CLIENTS YIELDING INTEL ON FUTURE FORWARD SALES OPPORTUNITIES

This page will help the user to navigate to other pages

News Details

Home
Latest News
Historic Data
Add New Deal
Add New Keyword

Select a client name:	<input type="text"/>
Select a law firm:	<input type="text"/>
Date:	08-07-2020 <input type="text"/>
	<input type="checkbox"/> View Keywords
Additional Keywords:	<input type="text"/>
	<input type="button" value="Fetch News"/>

Most used Keywords for Reliance
buy ; capital ; equity ; india ; private-equity ; venture-capital ;

Fetch News

Date	URL	Details
06-Jul-2020	https://www.business-standard.com/article/markets/reliance-industries-m-cap-breaches-rs-11-5-trillion-mark-stock-up-2-120070600250_1.html	Reliance Industries' m-cap breaches Rs 12 trillion-mark, stock ...
06-Jul-2020	https://www.business-standard.com/article/companies/reliance-sterlite-techm-set-to-power-next-gen-5g-telecom-networks-120070601662_1.html	Reliance, Sterlite, TechM set to power next-gen 5G telecom ...
02-Jul-2020	https://www.vccircle.com/intel-chips-in-with-253-mn-for-reliance-s-jio-platforms/	Intel chips in with \$253 mn for Reliance's Jio Platforms
02-Jul-2020	https://www.business-standard.com/article/politics/self-subservience-not-self-reliance-cpi-m-on-private-players-in-railways-120070201367_1.html	Self-subservience, not self-reliance: CPI(M) on private players ...

Figure 6: News Details Page

Historic Data

Home
Latest News
Historic Data
Add New Deal
Add New Keyword

Select a client name:	<input type="text"/>
Select a law firm:	<input type="text"/>
Select a firm type:	<input type="text"/>
Select area of practice:	<input type="text"/>
Select Keyword:	<input type="text"/>
	<input type="button" value="Submit"/>

Fetch Data

Do you want to modify the data? Yes No

Client	Law Firm	Firm Type	Practice Area	Deal Details	URL	Deal Value(in \$M)
Accel Partners	J Sagar Associates	Domestic	Private Equity / VC	\$8m Simsim Series B fundra	https://www.legallyindia.com/q11384	8
Accel Partners	IndusLaw	Domestic	Private Equity / VC	\$8m Simsim Series B fundra	https://www.legallyindia.com/q11384	8
Accel Partners	Samvad Partners	Domestic	Private Equity / VC	Scooter renter Bounce does	https://www.legallyindia.com/q11153	98
Accel Partners	IndusLaw	Domestic	Private Equity / VC	Scooter renter Bounce does	https://www.legallyindia.com/q11153	98
Accel Partners	Shardul Amarchand Mangal	Domestic	Private Equity / VC	Scooter renter Bounce does	https://www.legallyindia.com/q11153	98
Accel Partners	J Sagar Associates	Domestic	Private Equity / VC	Scooter renter Bounce does	https://www.legallyindia.com/q11153	98
Accel Partners	IndusLaw	Domestic	Private Equity / VC	Gunds \$20m A round Infra.N	https://www.legallyindia.com/q11075	20

Figure 7: Historic Data Page

This page will be used to fetch current news for a particular client, law firm or on the basis of keyword. It displays the most used keywords for a particular client or law firm selected. The most used keywords will change with time and more data added to the database. The algorithm will correct itself to fetch

most used keywords with more data. In case a particular news is not fetched then it means that it does not contain any keyword from the list stored in the database. In such a case the user should add the keyword using add keyword page and then fetch the data. The page also provides searching news on the basis of keywords only (max 3). E.g. All the news for IPO can be fetched.

This page displays all the data stored the database where a client is mapped to a law firm for a deal. The searching can be on the basis of client, law firm, firm type, practice area or keyword. The hyperlinks navigate the user to the detailed information of the deal. The page also allows the user to modify the data stored in the database.

V. DATA ANALYSIS

The first step to determine the required results will be that the lead manager will fetch the news items for a particular fund or corporate and/or keywords. (Phase 2 or News Details Page of Phase 3). The

News Details Page will also suggest the most used keywords for the particular entity. It will determine the type of deals mostly carried out by the entity (e.g. M&A, buy, sell, stake, etc.).

Next, on the basis of news links, the manager will go to the respective links fetched in the URLs which are relevant to the search and determine the type of the deal (e.g. private equity, M&A, etc.), list down other corporates involved in the deal.

The BRLMs can pitch the clients about the different law firms based on analysis of previous data. This data is available from the dashboard created in Phase 1. The manager can fetch the previously carried out deals by those corporates and determine the law firms involved.

Consider the example of Reliance. The maximum number of deals carried out by Reliance is in the Corporate and M&A area. Out of all the companies in Reliance Group, Reliance Industries Ltd. Has carried out a maximum number of deals. This can be determined by the tabular description below.

Row Labels	Corporate and M&A	(blank)	Investment Funds	Private Equity / VC	Foreign Firms	Capital Markets	Grand Total
(blank)							
Reliance	1						1
Reliance Industries Limited	7		1	2	2	1	13
Reliance Strategic Business Ventures				1			1
Reliance Capital Limited	2						2
Reliance Group					1		1
Reliance Infrastructure Ltd.	1						1
Reliance Industrial Investment and Holdings	1						1
Reliance Jio Digital Services	1						1
Reliance General Insurance Company						1	1
Reliance Jio Infocomm Limited	1						1
Reliance Life Sciences					1		1
Reliance Power Limited					1		1
Reliance Communications (RCom)					1		1
Grand Total	1	13	1	3	6	2	26

Figure 8: Tabular mapping for client and no of law firms

If we consider from law firm point of view, Reliance had Khaitan & Co. as its channel partner in majority of deals, followed by Cyril Amarchand Mangaldas. Out of 13 Corporate and M&A deals by Reliance,

7 have been executed by Khaitan & Co. So Khaitan & Co. becomes a suitable option for Reliance in future M&A deals. Similarly, for future private equity deals of Reliance, Cyril Amarchand

Mangaldas can be selected. The table below describe the results.

Row Labels	Capital Markets	Corporate and M&A	Foreign Firms	Investment Funds	Private Equity / VC	(blank)	Grand Total
⊕	1						1
⊕ AZB & Partners			1		1		2
⊕ Cyril Amarchand Mangaldas			1			3	4
⊕ Fox Mandal			1				1
⊕ Herbert Smith Freehills LLP				1			1
⊕ J Sagar Associates			1				1
⊕ Khaitan & Co		2	7				9
⊕ King & Spalding LLP				1			1
⊕ L&L Partners			1				1
⊕ Linklaters LLP				1			1
⊕ Norton Rose Fulbright				1			1
⊕ Shearman & Sterling LLP				1			1
⊕ Slaughter and May			1				1
⊕ Stephenson Harwood				1			1
⊕ (blank)							
Grand Total	1	2	13	6	1	3	26

Figure 9: Tabular mapping for law firm and no of clients

VI. CHECKPOINTS

- A manual intervention is needed to read the news article and determine the type of deal and law firm requirement.
- Checking past law firm deals and acceptability of the firm to the client.
- Further, a verification check needs to be undertaken to determine the correctness of the news item fetched

VII. CONCLUSION

The dashboard system provides an easy to access data for the various deals involved. All the deals by a corporate or law firms are mapped suitably to determine the thorough details of the deal such as corporates involved, law firm involved, lawyers who executed the deal, practice area or type of the deal, value of the deal, date at which the deal was carried out and so on. It reduces the complexity faced to fetch the data from various sources and analysing them. The dashboard provides all at one place result for a particular deal. The tabular analysis also helps

the BRLMs to suggest the suitable law firms to the clients.

The dashboard saves time of the managers to access the information from different locations. It also provides a faster access to the grapevine news which can be used by BRLMs to manage their resources efficiently. The manager can get all the news related to the client or law firm at one place instead of searching news at different locations.

This data capturing adds value and efficiency to the tasks carried out by the sales team. The self-learning algorithm gives improved results for the keywords. Addition of more data will improve the efficiency of the system to suggest most used keywords.

VIII. TAKING FORWARD

Market capitalization can be added as a feature to analyse the deals more effectively. Using the market capitalization, the classification of the companies can be done into large-cap, mid-cap and small-cap

and a further analysis to suggest the law firm can be done.

Also, in the current paper only five practice areas namely, Corporate and M&A, Investment Funds, Capital Markets, Private Equity and Foreign Firms are used. So, the scope can be expanded to other practice areas such as Banking, Insurance, Aviation, Real Estate and so on. The corporates can also be mapped to a sector such as Automobile, Telecom, Oil and Gas etc. and analysis can be carried out considering the deals undertaken.

In case of news details, currently news is fetched from websites such as www.vccircle.com, www.businessstandatd.com, www.legallyindia.com. However, the scope can be broadened to other websites such as www.economicstimes.com, www.ventureintelligence.com, [www.financial express.com](http://www.financialexpress.com) and so on.

In future the scope of this papers can be extended to various areas such as hedge funds, emerging markets, etc. Use of artificial intelligence can future revamp the system to add more features to the system.

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7. <https://www.legal500.com/c/india/foreign-firms/>
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9. <https://www.legallyindia.com/db/firm/all>
10. <https://www.vccircle.com>
11. <https://search-proquest-com>

Artificial Intelligence Dashboards



Ref.: https://www.google.com/imgres?imgurl=https%3A%2F%2Fs3.amazonaws.com%2Fladder-blog%2F2017%2F08%2Fdashboard.jpeg&imgrefurl=https%3A%2F%2Fblog.ladder.io%2Fartificial-intelligence%2F&tbnid=SDXOYQAWSrzN_M&vet=12ahUKEwjb__C-xpjbAhXIHhIKHdOiApYQMygaegUIARDiAQ..i&docid=dCKr0m-lw9pyoM&w=800&h=600&q=artificial%20intelligence%20dashboards%20for%20business%20images&ved=2ahUKEwjb__C-xpjbAhXIHhIKHdOiApYQMygaegUIARDiAQ

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- 3) The cover page of the paper must contain (a) Title of the article (b) Name (s) of author (s) (c) e-mail and affiliation of author (s). (d) An abstract of the paper in 100-150 words, (e) provide the title of the paper but it should not give the name of the author.
- 4) The paper/article should not exceed 15 typed pages including graphs/ tables/ appendices. The tables and figures should appear in the document near/after where they are refereed in the text. The paper/article should start with an introduction and should end with the conclusion summarizing the findings of the paper.
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Chetana's

**Ramprasad Khandelwal
Institute of Management & Research**

Survey No. 341, Govt. Colony, Bandra (East), Mumbai - 400 051.

Tel.: (022)2651 3346 / 6643 | Email : info@crkimr.in | Website : www.crkimr.in
