

ECELL

AMITY UNIVERSITY
MUMBAI



AMITY
INNOVATION
INCUBATOR

MUMBAI

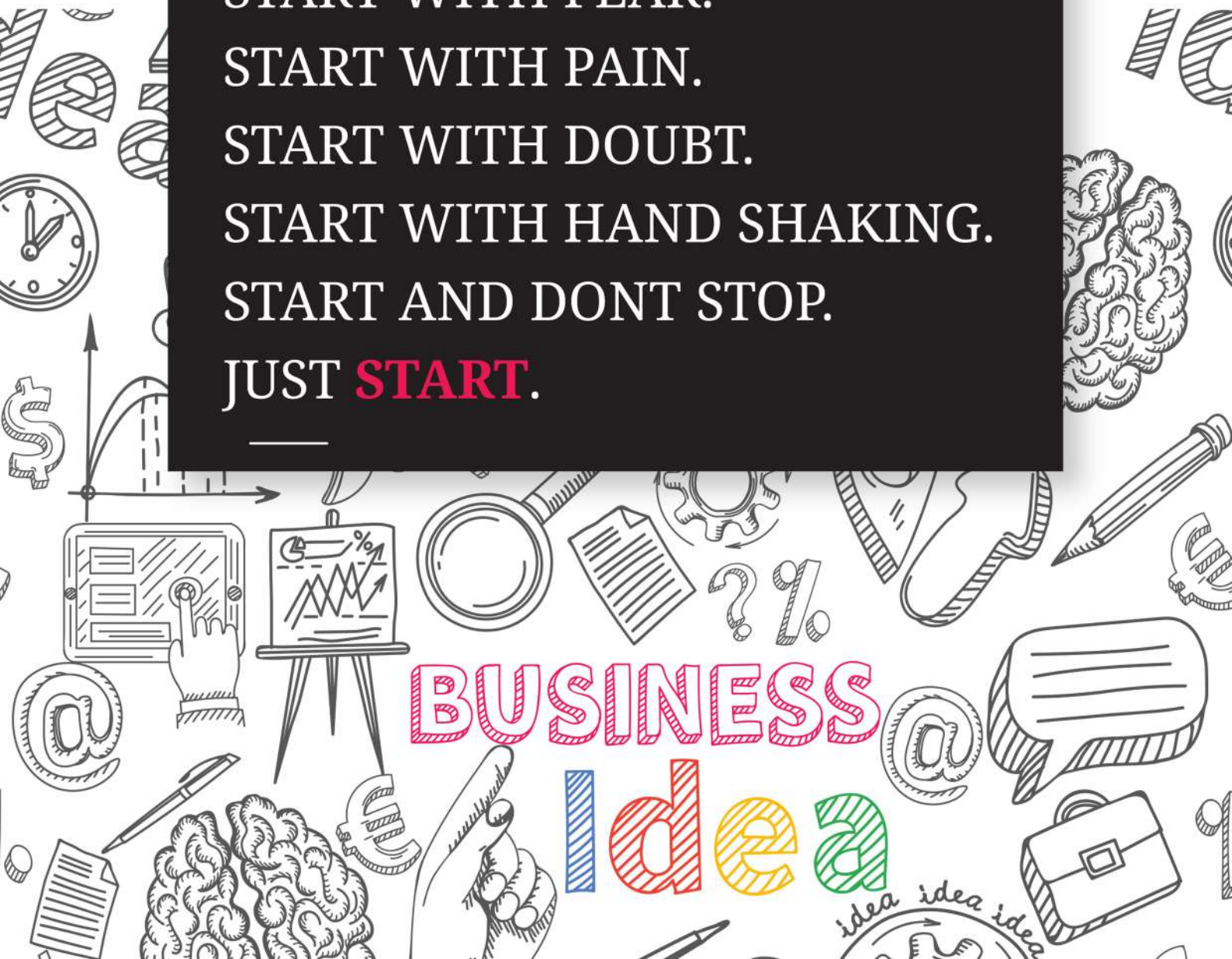
STEP UP

STARTUP

START WHERE YOU ARE.
START WITH FEAR.
START WITH PAIN.
START WITH DOUBT.
START WITH HAND SHAKING.
START AND DONT STOP.
JUST **START.**

BUSINESS

Idea



CONTENTS



HOW DOES THIS PROCEED?

FOREWORD

Foreword for E-Cell by Dr. A.K.S. Suryavanshi, Director and Professor (Marketing) at Amity Business School

INTRODUCTION TO E-CELL

Short introduction to E-Cell of Amity University Mumbai, about what they do, and where to reach them.

PEOPLE OF E-CELL

Contains those who have put in efforts for the functioning and conduction of E-Cell over the years.

OVER THE YEAR

QUICK WALKTHROUGH EVENT GALLERY

LITERATURE

Enhance your knowledge with the research papers and articles submitted by members of E-Cell and students of Amity University Mumbai.

CITATION AND CREDITS

Credits and citations to those who have helped in literature, articles and content on Magazine, Website and Social Media.



**SEMINAR CONDUCTED
BY E-CELL**



**E-CELL MEETS
AMITY INNOVATION
INCUBATOR**



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Like minded students who are really passionate about their dream need to group together.

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DR. A.K.S. SURYAVANSHI

**Director & Professor (Marketing)
Amity Business School**

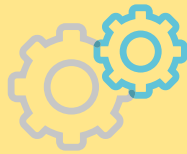
The opportunities are plenty, at premier institutions, for students who wish to become entrepreneurs as venture capitalist and mentors are open to their suggestions and this practice is available at 'E Cell' of Amity University Mumbai as well. The 'E- Cell' has done remarkable work in year 2019-20, wherein they tried to have more than 175 B Plans that were put to various levels of grooming, support and overall guidance. This practice led to eight of proposed ventures, out these 'B-Plans', getting to status of formal inception of these ventures. The constant support given by Amity Innovation Incubator (Delhi) and 'E Cell committee' members have led to good progress and for this - 'Hats Off' to 'E- Cell- members of academic year 2019-20. Those students who are really hit by bug of 'entrepreneurship' need to team up together to overcome adversity that plagues this path. We all know how 'Infosys' was created and Can one forget the story behind Microsoft.

Even cooperative movements, whether be it 'Shri Mahila Griha Udyog (of Lijjat fame)' or various self -help groups that have made a mark in business venture, have all been driven by zeal. Like minded students who are really passionate about their dream need to group together and bring out a start- up and then work up the ladder. At some point, definitely, some push will come along from entrepreneurial eco-system.

My best wishes to 'E-Cell' for their future endeavors.

INTRODUCTION

WHAT WE DO?



The Entrepreneurship Cell was started by the students of Amity University Mumbai under the guidance of Amity Innovation Incubator – Noida to foster Entrepreneurship among the students on Campus. We at the Entrepreneurship Cell (E-Cell) are focusing on developing the Entrepreneurial Spirit of young students which we believe is instrumental for our country to develop.

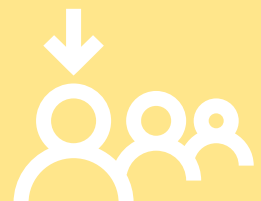
WHY JOIN E-CELL?

E-cell aims to provide an incubator to all the incubates within the campus with industry connections. We also look forward to inspire the students to play a prominent role in leading diverse entrepreneurial activities in the country and make a significant contribution to the global innovation.

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PEOP



of E-Cell





Vedant Modi
President 2016-17



Dhruvil Shah
President 2017-18



Sarath Sasidharan
President 2018-19



Sumedh Desai
President 2019-20



Javneet Singh Wazir

Vice President 2019-20



Shalvi Prasad

General Secretary 2019-20



PRanay Chouhan

Joint Secretary 2019-20



Deepak Bhardwaj

Core Committee 2019-20



Jaspreet Kaur Bhatia

Core Committee 2019-20



Rishabh Pandey

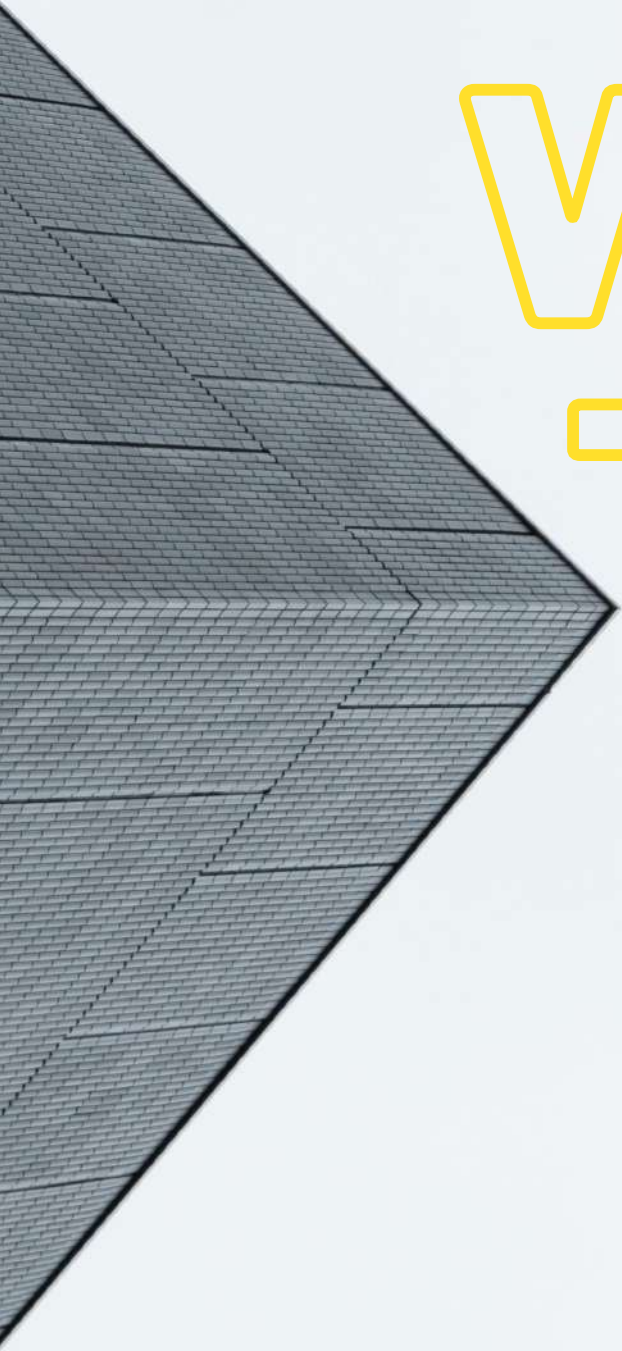
Core Committee 2019-20



Siddhant Kaushik

Core Committee 2019-20

E-CELL WALK THRO -UGH



THE YEAR

THROUGH



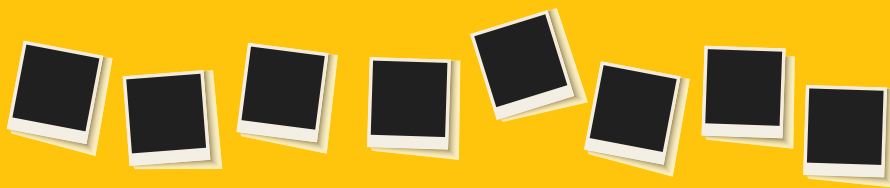


GALE



ERK

Event Gallery of E-Cell





STRATEGY MAKER

#MakingIdeasHappen

28 & 29 FEBRUARY, 2020



Innovation मेला

28 & 29 FEBRUARY, 2020



startup WEEK

1 TO 7 FEBRUARY, 2020





LIT TE RA

READ



ONCE YOU LEARN TO READ, YOU WILL
BE FOREVER FREE!



REVOLUTION IN MENTAL HEALTH – 7 CUPS

Srinidhi Karole

Revolutionizing mental health care facilities with innovative ways is something that is extremely necessary and an important thing to do. At an age where everything is available on our smartphones, wouldn't it be great if you got some mental health support for yourself?

Such initiative is taken by a website known as 7cups. www.7cups.com is a website where you can connect to various listeners. We as human beings just want to be heard. Venting out and speaking your mind can be a very cathartic experience, this is the idea behind the website.

The listeners on the website won't judge, or give opinions or tell you what to do. they are there to just listen and helps a person to clear their head out. Non-judgemental behaviour and empathy are some of the traits that a trained listener must possess and 7 cups ensures that the listener is well trained in those areas. People are allowed to talk about whatever is on their mind. The listeners are from all walks of life from across the world with diverse experience, and the person can choose the listener. They give you space to vent out and clear your head about problems ranging from daily hassles to big existential crisis.

7 cups has received the 2016 Stanford Medicine X award for excellence in Health Care Systems Design. Along with the emotional health service, 7 cups is also an online therapy provider. For the people who do not have the time or resources to go for the conventional therapy system, this is a great way to bring resources easily to the people in need. To make it easier to access them, they have app for both android and iOS. With the help of technology, 7 Cups is bringing together caring people who want to help others with those who just need to talk to someone.!

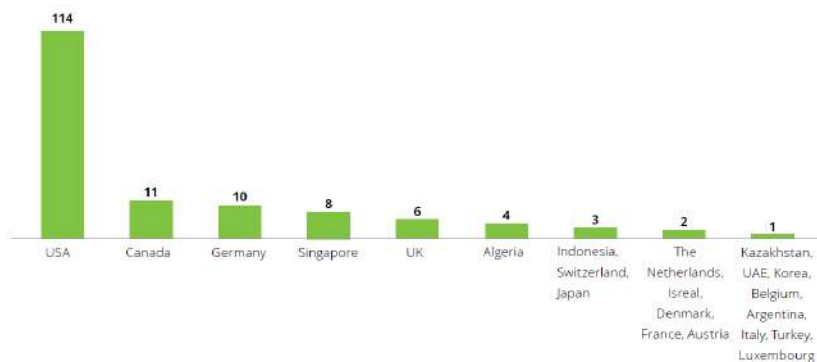
SPACE INDUSTRY ECOSYSTEM IN INDIA

Javneet Singh Wazir

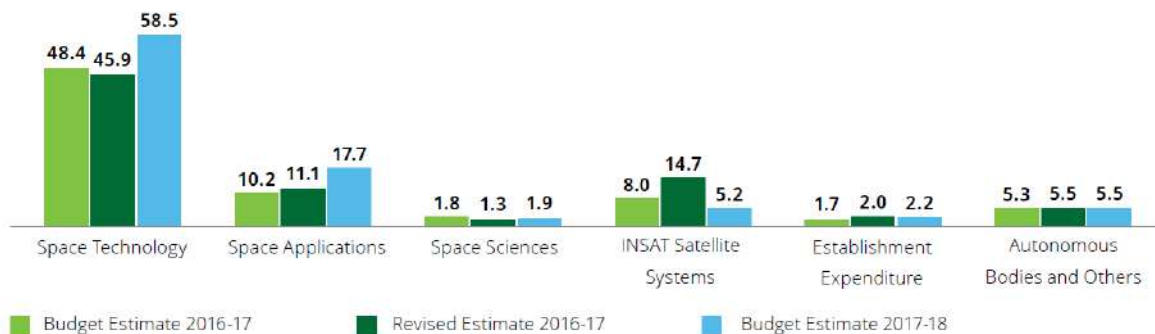
INDIA to Emerge as a Player in The Global Space Business

ISRO and Indian companies both are maturing technologically and are now poised to use this capability to bag more and more international business. India has been launching satellites for foreign countries for over 15 years. It has well established itself as a committed player in the commercial satellite market. The country has become a preferred destination for foreign satellite launches, given the significant difference in costs. Many countries are keen to launch their satellites through ISRO owing to its excellent track record and low-cost satellite launch services. India's Department of Space (DoS) has primary responsibility of promoting the development of space science, satellite technology and applications for development of national space Infrastructure while the Indian Space Research Organisation (ISRO), a government institution under the DoS, has piloted all Indian activities in the space sector since its inception in 1969. ISRO has so far launched 35 foreign satellites all through its rocket polar satellite launch vehicle (PSLV). Then there is ISRO latest rocket, the Geostationary launch vehicle (GSLV). Some of the initiatives successfully taken up by ISRO are Launched 87 spacecraft missions (including 2 Nano Satellites) Exhibited 60 launch missions (including Scramjet-TD and RLV-TD) and 2 re-entry missions. Launched 8 student satellites.

Foreign satellites launched by ISRO



India's space sector budget (INR billion)



Source: India Budget 2017-18

As a part of the government's 12th Five Year Plan 2012-2017, ISRO has submitted a plan for 58 space missions to be undertaken, which includes 33 satellite missions and 25 launch vehicle missions. Between 2012 and 2016, ISRO has been able to launch a total of 52 space missions (meeting 90% of its planned 5-year target), including 26 satellite missions and 26 launch vehicle missions. The government has increased its Space Budget estimate FY2017-18 by more than 20%, to INR 90.94 billion (\$1.35 billion). It will provide initial funding for two new ambitious Indian space science missions—one to Mars and another to Venus.

Satellite launch services

Antrix, the commercial arm of ISRO, is the nodal agency for providing satellite Launch services for customer satellites, on-board ISRO's operational launch vehicles namely, PSLV and GSLV. In FY2016, Antrix earned a revenue of approximately INR 2,300 million (\$35.17 million) through commercial launch services, which is about 0.6% of the global launch services market. In February 2017, ISRO launched a record of 104 satellites, taking its tally of foreign satellites launched to date to 180. The latest launch comprised three of its own, while the remaining 101 were from six countries: US, Israel, Switzerland, Netherlands, UAE, and Kazakhstan.

Opportunities

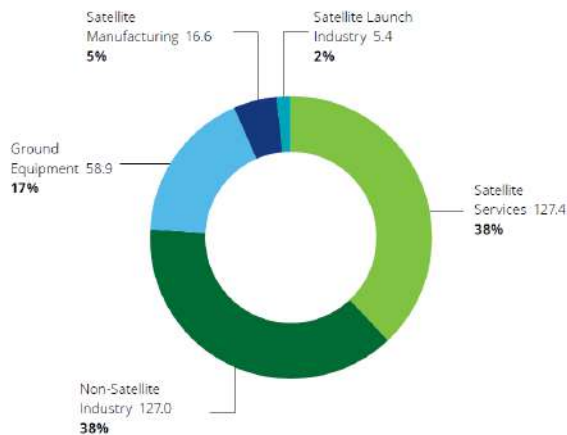
Following the launch of 104 satellites, ISRO plans to take two Google Lunar Xprize contenders to the moon on the same PSLV and drive missions to Mars and Venus. Currently, India has

satellite order book of around INR 2,800 million (\$42.8 million) for third parties, which will take it around 2-3 years to exhaust. The country is also in discussions for contract manufacturing of meteorological satellites with other countries along with Indian industry.

Private sector opportunities in satellite manufacturing (entrepreneurial scope)

India has very few entrepreneurs who have built companies in space engineering domain. When it comes to building a good international business, this number reduces to nearly one if we exclude those who have minor contracts. The lone exception when a Hyderabad based space entrepreneur decided it was time to go international. Subba Rao Pavuluri did was inconceivable he took the first step towards becoming an international satellite operator by signing a \$300-million deal about (1,800 crore) with Russian Company Reshetnev Information Satellite System. Pavuluri is a hardened space entrepreneur. He was a former employee of the Indian Space Research Organization (ISRO) the government primary Space agency, and set up two companies in 1993. First was to make value-added remote sensing Data, Anant Technologies to develop avionics for ISRO launch vehicles. In 2011 he set up one more firm AOneSat Communication as a joint venture with the swiss group INDEN. Anant Technologies participated closely in the Moon and Mars missions of ISRO by building satellite components. It is now large company with 1200 employees 400 engineers and sophisticated facilities for Space engineering. The international satellite service market is expanding rapidly and a lot of economical business can be done. ISRO leaders played key role to involve industries right from development, this has led to the development of a flourishing industry consisting of over 400 companies. Some of these companies have built a solid technology foundation and are now getting ambitious and looking to move on to larger project in this area. Some of them Godrej and Boyce, L&T Aerospace, Walchandagar industries have used this foundation and gone on to build larger business in defence and aeronautics. Space engineering skills will continue to provide expertise that is useful in defence and aviation the space business could easily expand if ISRO decides to ramp up in a big way.

Global Space Industry



Source: Satellite Industry Report, June 2016v

ISRO has invited private sector companies to participate in satellite manufacturing. So far, private companies have only been supplying satellite components. Further, ISRO has announced to develop a 100-acre hi-tech Space Park in Bengaluru, where the private players will set up facilities to make subsystems and components for satellites. The opening up of the high-profile satellite manufacturing sector is a part of the "Make in India" initiative.



The Indian Picture

If ISRO expands big commercially, it will trickle down to companies that work with it, who would otherwise find it difficult to crack the global space market on their own

ISRO'S PRIVATE PARTNERS

Godrej and Boyce

Among other things, makes the Vikas engine that powers PSLV and the GSLV, and does part of the cryogenic engine

MTAR

Makes parts of the Vikas engine and major components of the cryogenic engine, apart from satellite components

Walchandnagar Industries

Has been working with ISRO since the 1970s, provides rocket motor casings and nozzles for launch vehicles, and satellite components

HAL

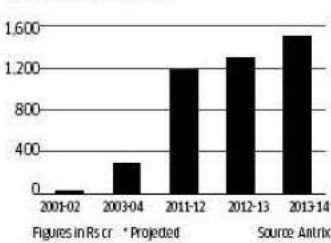
Setting up big facilities as part of the cryogenic consortium with MTAR and Godrej; also makes fuel tanks, spacecraft structures

L&T Infotech

Makes the rocket motor casings, nozzles, solar arrays for satellites; has wind tunnels for testing

ISRO'S COMMERCIAL ARM

Revenues of Antrix (Rs cr)



Growing NewSpace phenomenon

NewSpace is a worldwide phenomenon of enterprises expanding capacity and capability to develop space product and service using private funding. It is challenging the traditional ways

of space services which have been otherwise considered expensive and time-consuming. Enabling NewSpace in India will impact not only start-ups, but also provides an opportunity for SMEs to leverage cluster-based externalities such as technologies, infrastructure and manpower to build space-based services.

Conclusion and recommendations

If Indian industry needs to claim a greater traction in the international space market there is a need to promote and develop a model for promotion of start-ups with independent technology ideas, which carry the potential of producing product/service offerings out of India and are scalable globally.

The government should encourage involvement of private players in the industry to develop capacity and capability in pursuing space activities for future technology development. There is also a need to promote and develop a model for promotion of small and medium-sized enterprises (SMEs) to capture a larger share in the international space market. The government could consider instituting a national fund for promotion of entrepreneurship in the space industry. India could replicate the built-up of Bangalore as an IT hub for the space industry as well. Dedicated land should be allocated for space ventures and assistance should be provided to them in the start-up stage. Additionally, senior ISRO and Antrix officers can mentor the start-ups in space industry to ensure they operate within the Indian space policy framework and leverage technical expertise to ISRO. India is enhancing focus on NewSpace companies which are building (Business-to-Business) B2B

and Business to consumer B2C models which can scale both nationally and internationally. The B2B, B2C ecosystem in the space industry has the potential of tapping the IT infrastructure and extending it to core software-based applications of space-based information such as Geographical Information Systems (GIS). The government support in NewSpace is required to further catalyse the multiplier effect while steps are being taken to upgrade the existing capacity of the space industry. India can look forward to set up an independent space activities focused think tank constituting distinguished experts in the space field. The think tank will provide key insights on space program management, dual-use of technologies, economic impacts of space expenditures, new space laws, and insights on international cooperative space agreements.

QUALITIES OF AN ENTREPRENEUR

Srinidhi Karole

Success is personal to the person experiencing it. Many factors go behind attaining success in one's chosen field. These factors depend on their personalities, mindset, the culture they belong to and the list continues. Every person needs to find their unique path to success. Every entrepreneur out there is very different and the plan that works for some might not work for others. Now, that being said, we can definitely see some qualities or skills that are present in most of the successful entrepreneurs of all times some of which are mentioned here-

Determination – One of the most common traits in an entrepreneur is the ability to be determined to achieve their goals. A firm determination to get things done makes them step ahead of most people. Let's take an instance from the famous V8 motors. When Henry Ford decided to produce his famous V8 motors, he chose to build an engine with the entire eight cylinders cast in one block and instructed his engineers to produce a design for the same. It was simply impossible to cast an eight-cylinder machine in one place but Ford asked to produce it anyway. Even when the engineers persisted upon it being impossible, he insisted they carry on. After a complete year there was no progress, he asked them to continue regardless. And finally like a breakthrough the engine came into existence and finally they had a plan. Henry Ford's deterministic attitude has led him to success in his endeavours time and time again.

A burning desire- Something that sets successful entrepreneurs from others is that burning desire to make their ideas into reality and achieve their goals no matter what. This desire comes from a place of passion, of relentless force that keeps driving them even in the face of setbacks and difficulties. This is different from someone who is half-minded and doesn't follow through. The burning desire comes from something bigger than mere wishing. It is the starting point from which the dreamers must take off. For some entrepreneurs the burning desire is to rise from their rejections and prove themselves worthy, like Bill Gates and Jeremy Andrus, the president/CEO of Skullcandy.

Imagination and generativity of ideas- “Imagination is more important than knowledge. Knowledge is limited. Imagination encircles the world.” – Albert Einstein.

What is now seen was first just imagined. Everything is created twice, first in the mind and then in the outer world. Wright brothers first imagined about a device that could fly and later came up with a plan to follow it through with the invention of the world’s first successful motor operated airplane. In a way imagination could be called a person’s greatest gift as it sets the senses to set free and run wild. JK Rowling, world’s first billionaire author understands the importance of it and that has led her to create a legacy of a wizarding world we would never forget. Her quote states “we do not need magic to change the world, we carry all the power we need inside ourselves already: we have the power to imagine better.”

Power of Influence and persuasion- Warren Buffet’s best advice to some students wanting to succeed was to take up a class in sales and communication. Influencing your customers, investors and everyone involved is important otherwise Warren Buffet would have been just the richest money manager that no one had heard of. Kevin O’Leary advises upon the articulation of the idea in a way that it is convincing in the first few minutes itself.

Definiteness of purpose- Determination of purpose gives the entrepreneur a sense of direction, a compelling ‘why’. The reason why they do what they do. This knowledge and the definiteness of purpose pushes these entrepreneurs when they feel stuck because they have a higher purpose and a clear reason of doing something. This gets them moving into a forward direction. Many entrepreneurs achieve what they do and they feel most unhappy even after achieving that success and they retreat due to the lack of fulfilment.

Self-confidence- Some of the most successful entrepreneurs have had relentless self-confidence. They believed in themselves and their visions and then could they take the necessary steps. Not to mention confidence is an important factor in pitching of ideas and meetings with investors.

Willing to network- Good networking could reap many benefits and successful entrepreneurs know that. Networking through social media as well as through offline meets is a great way to expand and join a community of likeminded people. A strong network helps in reaching to great heights and gives exposure to your product or service. Networking also acts as a support system for entrepreneurs along with giving them identity within a group. Entrepreneurs grow by mutual need fulfilment and forming connections.

Past does not equal future- Successful entrepreneurs know that their past is not their future. Their past failures do not define them, they move on with their heads even taller. As they say failures are not failures, but the inability to learn from them can be termed as a failure.

Finally, trust your intuition. What works for others would not work for you. Find your unique path. What works for others might not work for you. Of-course success techniques can be modelled but it is crucial to remember we are unique individuals who have to find our paths and make our own mistakes before reaching where we ultimately want to.

A group of people, including a woman with curly hair and a man with a beard, are shown in profile, engaged in a discussion. The background is a blurred office or meeting room.

UNCONVENTIONALLY FAMOUS – THE STORY OF PIPA BELLA

Srinidhi Karole

It is not everyday that we get to see the growth of something so unique and refreshing. The e-commerce startup Pipa Bella is a story of an unconventional idea back in the day (2012) gaining popularity. It is brand whose story is unique and the passion of the founder based on love for jewelry as well as brand building and marketing. From a startup to making itself a famous brand, Pipa Bella has come a long way.

A brand that has become so famous for its unique and quirky designs, it releases new designs weekly and has been gushed over by famous Bollywood actors to bloggers. From the famous signature style name lockets to customized charm bracelets, it has it all. It has a modern touch for the modern style Indian women. From formal meetings to cocktail parties, accessories are available for all occasions not to forget at an affordable price.

The founder of the brand Pipa Bella, Shuchi Pandya has completed her MBA from the Wharton School. Born to a family of jewelers, always had a passion for jewellery but wanted to do something different with it rather than choosing the path of the family. This is when the idea of Pipa Bella struck her. Providing quality to the customers has always been a dinner table conversation in her family and has stayed with her. Shuchi believes that a brand must mean a lot more than preaching art to the customer, it has to create a story, a story that would last with the customers.

The story of Pipa Bella lies in its name. Pippa is a Spanish girl, who loves adventures and is sporty. Bella is an Italian girl who is graceful and has a charm to her. They are best friends and their style varies, pipa Bella caters to both their personalities and with many moods within a person as well. Someone might feel like a little Pipa one time, or Bella another.

The brand's USP lies in its design and supply chain, with new styles releasing every single week, it brings their customers back to them on a regular basis. They as a brand are continuously using data to introduce better product as fast as possible for their customers.

As every entrepreneur faces challenges at the start so did she, raising funds was a challenge as the product was aimed at women and as a category, many investors had reservations and a lack of understanding of the sector but she grew from the challenges and has managed to raise over US \$2.8 million in funds. Team building was another challenge, they started with 4 members which later grew throughout the years. Shuchi mentions that one of the best decisions they took was keeping core functions in house. This pushed them to streamline operations, scale quickly and add new categories.

The story of pipa Bella is inspiring, streams from belief in one's idea and realizing one's entrepreneurial dreams. Balancing art and commerce effectively so as to gain success in one's endeavors is a challenge but ones tackled effectively leads to great success.



TEAMWORK

Apeksha Sagbhor

“On a team, it’s not the strength of the individual players, but it is the strength of the unit and how they all function together.”

-Bill Belichick

Teamwork is multiple efforts put together towards a common goal we all know that. We only see the outer picture of what’s been constructed what came into being. All of this is done by course of action not just one person but collective hard work of the team. So, team members, how to you all see them?

Bunch of people doing their own thing sitting in their own chair staring at the computer screen hours. Well the hours spent together and the nights turned in day witness the that it’s not just manual work. When people take charge, they put in their creative ideas, thought, feedbacks, skills and their spirits. They do work individually but they work for each other. In a team every person is connected, in a way like how a clock works little parts working together to make sure to be wherever your supposed to be exactly how your supposed to be. There are many downfalls as well that come in the way. To perform a certain task let’s say in a tech start up and it’s the beginning of the formation of the company naturally a person is not affiliated with all the skills, so hence to solve a particular problem you know nothing about is when your team members pull the unprobeable. They acquire the skill set needed to get the job done they learn the unknown and unaware to come through for their members. Working in overdrive can lead to cataphor, but in this situation it is important that everybody is on the same page and the wok doesn’t overlap but still tangible enough so to come to each other’s aid when and ever needed. And the person in charge, the leader makes sure of that. These issues can be solved with better communication, meetings every day to share work updates and agendas. Everyone one have their different expectations and way of working and their own philosophies for the way they work, hence it is important your group knows about them to. This allows the team to bond over group activities and start to feel comfortable with each other. Teamwork builds trust, which is a touchstone for any team’s success.

“An analyzed data from structured face-to-face interviews with 664 managers from different British workplaces where all employees worked in formally designated teams. The managers talked about how teamwork operates at their workplace, from how much team members depend on each other to do their jobs, to whether team members make joint decisions about how work is done. The managers also reported how their workplaces fared on key aspects of performance – including labor productivity, financial performance, and quality of product or service – compared to other workplaces in the same industry. Next, analyzed survey data from a random selection of five to 20 employees in each workplace where the management interviews were conducted, which amounted to reports from 4,311 workers. The survey asked employees to report on their levels of commitment to the organization, the amount of pressure they experienced at work, and how often they felt tense, worried or anxious due to work.”

After comparing the two organization there was a significant difference between the performance and organizational wellbeing. This was because the shared responsibilities and positive relationship within the team members that lead to better results. This is where we come to see the true meaning of being for each other and being with each other.



IMPROVISING BUSINESSES IN TIMES OF COVID-19

Shalvi Prasad

As the world goes into lockdown and countries, struggle to combat the threats of covid-19, policymakers across the globe have sprung into action, taking a range of approaches to deal with the economic fallout from the coronavirus.

As per news report by Reuters, India could face between 1- 1.3 million confirmed cases of the disease by mid-may if it continues to spread at the current pace. The virus not only continues to impact millions of lives daily but has also brought significant changes in the businesses and economies around the globe.

The near-global lockdown and travel restrictions have brought into the hindsight, the times of recession: low consumption and low business spending. While companies shift their operations to online spaces, the markets continue to experience record falls with no signs of early recovery.

This calls for Businesses to adapt to the growing susceptibility and reform to bring about both short and long-term changes in their business design. According to a report published by KPMG discussing implications of COVID-19, the businesses face significant problems due to lack of contingencies and proper planning:

- No proper plan in place to respond effectively to such situations,
- A pandemic plan that is out of date and too generic for COVID-19 response, and
- Roles and responsibilities designed for crisis management are often not tailored for pandemic response.

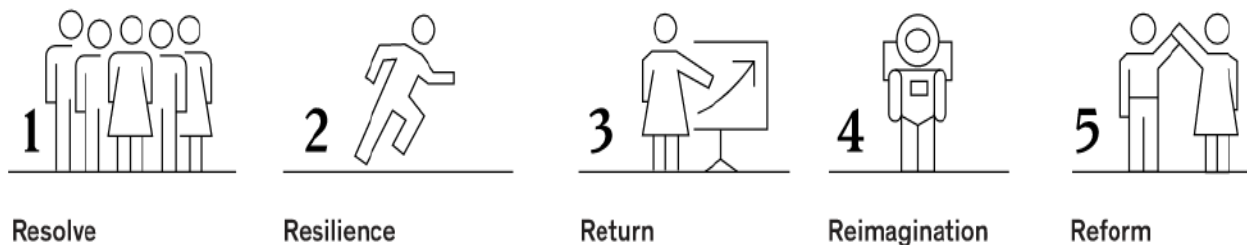
To ensure that businesses can continue with minimal disruptions, these problems must be highlighted, and tailored action plans must be developed for every critical process.

AN APPROACH TO CRISIS MANAGEMENT:

An approach tailored for crisis management that focuses on five horizons can be adopted by companies, leading them from the crisis of today to the next normal that will emerge.

Companies need to think and act across five horizons.

The five horizons



Source: McKinsey & Company; Beyond Coronavirus: The Path to Next Normal

1. **RESOLVE:** Address the immediate challenges posed by COVID-19 to the general functioning of the institution, the workforce, the technology, customers, and the stakeholders as a whole. This, as a whole, will provide institutions to identify key affected areas and develop action plans specifically tailored for these areas.
2. **RESILIENCE:** The ability to adapt to disruptions only comes with continuous planning. Institutions should have in place a crisis control management system specific to pandemic reactions. A proposed multidisciplinary resilience development, crisis management solution can be followed by institutions according to their particular requirements:
 - i. **INCIDENT MANAGEMENT:** Categorize all events that fall outside the general business processes as incidents. These events should be such that require management interference and also disrupt the normal cycle of the business.
 - ii. **EMERGENCY MANAGEMENT:** develop an action plan to manage time-critical threats. These threats could be to the lives of individual stakeholders, protection of assets under threat e.g., inventory, and manage risks of broader environmental impacts

- iii. **IT DISASTER RECOVERY:** IT Services are indispensable to the company in times of crisis management. Thus, it is imperative to focus on the maintenance and recovery of IT systems and assets from several failures or degraded services.
- iv. **BUSINESS CONTINUITY MANAGEMENT:** This focuses on the continued delivery of products or services of the organization at an acceptable level despite the disruption caused. It also focuses on the aftermath of the event and guiding the company from a stage of recovery to full functionality.
- v. **CRISIS MANAGEMENT:** This focuses on defining the strategic impact of the incident on the business. It focuses on the specific repercussions like; severe financial damages reputational damage or curbing the ability of the company to achieve its strategic objectives. All of this can be compiled to analyze the overall Business impact.

All these resilience disciplines are discrete functions, and organizations must ensure these functions are in place, only then can efficiencies be achieved in staffing, response resources, and shared services.

- 3. **RETURN:** when all the disciplines of resilience practices are followed, it is easier to create a detailed plan to return businesses to its standard scale quickly as the crisis surpasses.
- 4. **REIMAGINATION:** Businesses need to maintain positive foresightedness to overcome the adversity. The team leaders should always focus on the bigger picture and then make effective decisions. Simulations can be run to identify necessary trade-offs to be made to meet customer demand, supplier capability, etc. These will help draw a clear picture of how a discontinuous shift from the business cycle looks with its implications drawn. Always try to reinvent solutions by analyzing past events and hypothesizing future threats.
- 5. **REFORM:** By analyzing past events and hypothesizing future threats, organizations can identify strategic and concentrated supplies that are at risk in major crises, and most importantly, recognize when current internal risk capacities prove insufficient. This helps the organization to imagine the shift in the regulatory and competitive environment in the industry. The organizations can adopt a more flexible but, problem-specific risk management strategies and put them to place for abating future threats.

Perquisites that make the crisis response by companies easier:

- The up-to-date staff that is well versed with technology and best management practices.
- A clearly outlined communication approach helps stop the spread of any misinformation and ensure effective operations.
- A well-initiated plan that covers all pointers of the strategic impact assessment and the necessary business impact assessment and has clearly defined business process and the dependencies for each process
- Flexible working arrangements for the workforce with adequate technical support
- Maintaining a critical third-party contact list that ensures effective communication for the completion of business processes.

ACTION PLAN THAT NEED IMMEDIATE IMPLEMENTATION

1. **WORKFORCE PROTECTION:** It is more important than ever that companies leverage whatever resources they have to ensure the wellbeing of their workforce both physically and mentally. Most of the industries have put Basic Protection Protocols in place that composes the physical-distancing-at work for some and no-travel, to work-from-home for others. Leveraging HR expertise to guide employees living in impacted areas and reassessing work policies. A majority of staff also face stress regarding success in extended environments; they worry that staying remote could render them less productive and thereby less valuable in a recessionary environment. Thus, the challenge has been ever-evolving. Companies should keep in mind the essential goals to ensure the physical and mental well-being of these employees. Companies need to increase communication, balancing the needs of the business with expectation setting and morale building, so employees know that their well-being is top of mind. They also need to change working norms, making remote work practical and simple whenever possible. And of course, they must protect people's health, with whatever measures are appropriate to the workplace: positive hygiene habits, personal protective equipment, amended sick-leave policies—whatever it takes to ensure health and safety.
2. **SUPPLY CHAIN STABILIZATIONS:** It is essential to understand how the effects of COVID-19 may affect your supply chain. If your business has exposure in the affected areas, you should appropriately assess the exposure and support the key stakeholders. Critical areas for managing the supply chain effectively include an end to end supplier life cycle management, the evolution of cognitive decision centers, and developing agile and adaptive value chains. Increasingly investing in the development of micro supply

chains that are less vulnerable, more flexible, and decentralized in nature and deliver maximum customer value can facilitate an easier shift to such value chains. Companies can also develop models to understand post crises customer behavior to predict market demand.

3. **STAKEHOLDER ENGAGEMENT:** A successful crisis management plan should ensure clear and effective communication that conveys the ability to provide confidence and understanding regarding the organizations' actions and responses. Proactively keeping the stakeholders engaged and informed of the ever-changing situations will enable the organization to navigate developing challenges.
4. **FINANCIAL STRESS TESTING:** Cash flow profiles, earnings profiles, balance sheets, or credit profiles are likely to be impacted by the effects of COVID-19. Current funders may be expressing concern about providing additional liquidity, resisting to renew commitments or seeking to re-negotiate key terms and conditions, including pricing. Understanding the alternative funding options that are available during times of volatility and how to access these are prudent to help businesses thrive in times like these. Proactive and sound treasury risk management over, foreign exchange, interest rate, and commodity exposures is paramount to protecting cash flows, help manage liquidity positions, and provide boards and executives with confidence in decision-making. Businesses are also beginning to anticipate the potential for impacts on revenues, funding, and liquidity. Thinking through the impacts of specific products or markets experiencing disruption and the flow-on effects of this to short term business performance and also to the potential longer-term results will be essential. It is necessary to monitor the situation and also maintain communication with key stakeholders.
5. **TECHNOLOGY UPGRADES & CYBERSECURITY:** In line with the technology-enabled business climate we currently operate in, organizations should rethink the way their employees collaborate and customers – within the office, regionally and globally. With the ever-increasing use of remote technology and the employees working from home, companies must move to ensure cybersecurity into their contingency planning. Phishing through malware using COVID-19 as bait, online scams installed via social media campaigns can endanger the safe working space and work to the advantage of Cyber Criminals. Companies should invest in providing appropriate training and facilitating the safe exchange of sensitive data via reputable sources on the internet

Like COVID-19, climate change, biodiversity loss, stock market crash or financial collapse, do not observe national or regional boundaries. Actions initiated as a whole will benefit the economy globally. But for the sustenance of businesses and to combat future crises, economies must evolve and change the bottom line of a functional business. COVID-19 represents a broader trend; more planetary emergencies are coming. If we muddle through each crisis with the same economic model that got us here in the first place, future shocks will eventually exceed the capacity of governments, financial institutions, and corporate crisis managers to respond. Economies should increasingly engage in R&D to design systems that can mitigate the threats. Organizations should start investing in green circular economies that are anchored to nature-based solutions and are geared toward the public good.



DRIFTSPACE BY HOK

Ishanea Sabharwal

Travelling is an experience for the soul. Taking in the fresh air from lush green forests or, sitting at a cafe listening to the sound of busy streets, or long walks on the beaches during the night, travelling has never failed to make people thankful for the life that they have been granted. However, with lives getting busier, less time to spare, and growing demand for uniqueness in the travelling experience, changing times need better technologies.

Keeping in mind the dynamic lifestyle, an architectural firm in Canada, HOK, has come up with an idea for a hotel which will change the way we look at travelling for the better. Driftspace is a hotel that combines the luxury of a room with drone technology for creating an enriching and fulfilling experience for its travelers. These airborne pods can be used to live in places that were considered inhabitable and will have a minimum impact on the environment.

Driftspace hotels are made up of several modular glass units. It comprises of two components. First is 205 square feet, single guest room, for the accommodation of two. It would consist of a bed, side tables, and a three-piece bathroom and it will have a 360 degrees view. Second is a modular unit of 2500 square feet which includes the support services, kitchen and tech area. Three of these pods form the 'oasis', consisting of basic amenities, restaurant, courtyard, and communal lounge.

Travelers can map their 2-3 days excursion in advance. They can fly their pods away from the main modular unit to their planned spot with the help of the central navigation system. The travelers will also be notified of the activities in the area that they are visiting. Driftspace is made up of polymer walls and lightweight material for the ease of flying. "Each unit is fitted with 'self-levelling' pneumatic support anchors that retract from the base," the team explained. "They allow the Driftcraft to safely perch on any terrain without negatively impacting the site."

Driftspace is one of the finalists of the Radical Innovation award. It has taken the experience of travelling to another level by allowing their travelers to enjoy the scenery of a place from the comfort of their beds. Long and tiring drives or cramped public transportation is no more a problem and a person can experience the aesthetic scenery without any travelling load. Still, many issues have yet to be addressed. “Foreseen challenges regarding regulatory restriction that govern air space are expected,” the firm confessed.

“However rigorous testing and safety features that eliminate operational errors will help to allay concern and pave the way for widespread use.” Overcoming these problems will surely be a challenge for the company HOK, nevertheless, the innovation will be a game-changer for other companies as well as for future travelers.

AATMA-NIRBHAR BHARAT STIMULUS PACKAGE

1. **RBI Monetary Policy announcements**: Decrease CRR, Repo rate and reverse repo rate to increase liquidity and loan supply. New windows to NBFC and Mutual Funds. The package was worth 8 lakh crores.
2. **PM Garib Kalyan Yojana**: Free Food grains, cylinders, 50 lakhs worth health insurance to corona warriors, EPFO withdrawals norms relax. The package was worth 1.7 lakh crores.
3. **Aatma-Nirbhar Bharat Stimulus package is based on 5 pillars**: (i). Economy; (ii). Infrastructure; (iii). System; (iv). Demand; (v). Vibrant Demography.
4. **6 pillars of economy are**: (i). Banking/Finance; (ii). Budget; (iii). International Trade; (iv). Sectors of economy; (v). Infrastructure; (vi.) Human Resource Development.
5. **Banking/Finance**: RBI announced measures to increase loan supply.
 - **Cash Reserve Ratio (CRR)** is the amount every financial institution (banks) must keep as buffer protection and is not allowed to give loans. This has been decreased for 1 year so that banks have more money at their disposal to circulate in the market as loans.
 - **Repo rate** is the rate at which the clients of RBI (Banks, Financial institutes etc.) can borrow from RBI. It was 5.15% pre-COVID-19, which is now 4%. This means banks can borrow more at lower rates.
 - **Reverse Repo rate** is the rate at which the clients of RBI can deposit their surplus amount in RBI and can avail interest benefits. It was 4.90% pre-COVID-19, which is now 3.35%.
 - Policy corridor (Repo rate – reverse rate) = 0.25 basis points (Before); 0.65 basis points (After). This means banks must roll out more and more loans, they can't deposit more to RBI.
 - **NBFC (non-banking financial companies)**: insurance, investments, mutual funds, housing finance etc. NBFC borrowed money and gave short-term and long-term loans to beneficiaries based on debt securities. Short-term loans (<1 year) were given on commercial papers whereas long term loans (>1 year) were given on corporate bonds & non-convertible debentures. RBI launched '**Targeted Long-Term**

Repo Operations (TLTRO)'. Banks will deposit money to RBI as Government security collateral and RBI will give banks loans on repo rate for 3 years. The condition here is that the banks must invest 'X'% of money borrowed from RBI in 'Y' number of days into NBFCs as debt security. In March 2020, 1 lakh crore were planned under TLTRO 1.0 and 50k crore in April TLTRO 2.0.

- Government under Finance Ministry will launch Special Purpose Vehicle (SPV) Company which will give credit guarantee to debt securities of NBFC to investors so it will increase the confidence of investors. This money will go to NBFC and will go to builders and businessman and thus employment will increase, and economy will revive. This is termed as 'Special Liquidity Scheme for NBFC/HFC (housing finance company) giving credit guarantee over securities.'
- In Budget 2019, it was announced that if the banks give loans to NBFCs and incur loss, the Government will repay 10% of the loss under 'Partial Credit Guarantee Scheme.' This has now been raised to 20% under 'Aatma-Nirbhar Bharat Package.'

6. **MSMEs**: PM Mudra Yojana. Non-banking financial company under the name of "Mudra" is created which will be funded by RBI Private Sector Lending Shortfall, Small Industries Development Bank of India (SIDBI) and Government Budget. This money will be lent to Public Sector Banks. Banks will give loans to Micro-enterprises under three categories: (i). Shishu loan (under 50k); (ii). Kishor loan (50k-5L); (iii). Tarun loan (5L-10L). Suppose these micro-enterprises are not able to re-pay the loans, National Credit Guarantee Trust Company (NCGTC) under Ministry of Finance will cover the loss for banks.

- Under Aatma-Nirbhar Bharat package, 2% interest subvention is given to micro-enterprises who have availed 'Shishu Loan' under PM Mudra Yojana. (Under this scheme, the bank decides the Rate of interest but whatever the ROI be, The Government of India will pay 2%).
- For Small and Medium enterprises whose previous loan account is not NPA, the system is same, but the loan amount can be up-to 25 crores and the tenure will be 4 years. ROI will vary from 9.25% (Banks) to 14% (NBFC). This scheme is termed as 'Emergency Credit Line Guarantee Scheme (ECLGS)'.
- For Small and Medium enterprises whose previous loan account is NPA, he can avail loan worth 75 L. The credit guarantee is provided by 'Credit Guarantee Fund Trust for Micro and Small Enterprises (CGTMSE)', which is funded by SIDBI and Department of Financial Services under Finance Ministry. This scheme is called 'Subordinate Debt for Stressed MSME.'

- Definition of MSMEs is changed from turnover limit of 100 crores to 250 crores and investment limit from 20 crores to 50 crores to include more such companies and provide more benefits to such companies under Aatma-Nirbhar Bharat package.
- Government tenders worth 200 crore or less are now not eligible for global companies. (Protectionism in public procurement).
- Temporary relief for MSMEs under RBI Loan Moratorium which will enable MSMEs borrowers to delay EMIs by 6 months.
- If a firm is unable to re-pay the loan, according to Insolvency Bankruptcy Code (2016), an Insolvency Professional will be appointed by the bank who will make a plan with the firm and if the plan works with the bank, the firm will be saved or else auctioned for liquidity. According to Aatma-Nirbhar Bharat package, with an ordinance the Government will not register fresh cases of insolvency for next 6 months with the notation that this period may extend for another 6 months if necessary.

7. **State Governments**: Due to lockdown, state governments are incurring huge losses (revenue collection decreased) and are unable to pay salaries to the staff. Also, they are unable to contribute their share to Central Government Schemes like MGNREGA, PM Jan-Arogya Yojna (5 lakh health insurance) etc. To compensate, state governments charged cess on liquor sale, but the revenue collected was insufficient to cover the losses. So, VAT was increased on petrol and diesel which in turn was hard on people's pocket. Aatma-Nirbhar Bharat Package offers:

- According to the Fiscal Responsibility and Budget Management Act (FRBM), 2003 States can borrow capital worth 3% of GSDP (Gross State Domestic Product) from Centre which has now been increased to 5%, subject to conditions such as the state will have to ensure 'One Nation One Ration' schemes, electricity reforms and ease of doing business.
- Even though Centre's tax collection is low, it will still stand to its commitment of releasing Grants and Tax devolution as per the Financial Commission's report in Budget 2019, 2020.
- RBI has increased 'Ways and Means Advances (WMA)'. WMA is method to address the temporary mismatch in cashflow observed by Government. RBI lends loans for short term (3 months) and this is not counted in fiscal deficit. Since pandemic, tax collections have decreased and expenditures (free food, masks, LPG cylinders etc.) have increased. So, the RBI has increased its WMA limit by 60% to facilitate the borrowing limit of State Governments (51,560 crores) and Central Government (1.2

Lakh crores). The loan interest will be equivalent to repo rate and if any state or the Centre wants to borrow more than their limit, the surplus will be called “**Overdraft**” and it will be charged at (repo rate + 2%).

- RBI has relaxed ‘Consolidated Sinking Fund (CSF)’ norms. If State Governments take loans from RBI through collateral and borrow money from NBFC, Banks, Primary dealers, foreign investors etc. the state is entitled to keep ‘X’ amount of money from outstanding amounts of loan in a ‘Consolidated Sinking Fund’ of RBI as a buffer. This fund is neither included in consolidated fund or public account of State Government. The only purpose of CSF is for repayment of state loans. In Aatma-Nirbhar Bharat Package, RBI has relaxed technical norms for withdrawal of this fund to facilitate State Governments.
8. **SEBI:** Without getting shares directly listed on foreign stock exchange, American Depository Receipts (ADR) & Global Depository Receipts (GDR) were issued, prior to COVID-19. Directly listing Indian shares on foreign stock exchanges was not allowed by RBI and SEBI, with the fear of currency convertibility & money laundering. In Aatma-Nirbhar Bharat Package, ADR & GDR are still issued whereas the permission to directly list Indian shares on foreign stock exchanges has been granted. This will help foreign investment in reviving the Indian economy.
9. **Corporate Governance:** According to the Companies Act, company has to hold Regular Meeting of Board of Directors, Annual General Meeting for Shareholders, a certain portion of the profit has to be contributed towards ‘Corporate Social Responsibility (CSR)’ and all the documents of the meetings should be uploaded on the website of Ministry of Corporate Affairs, failing to do so ‘National Company Law Tribunal (NCLT)’ penalty can be incurred and in some serious cases, even imprisonment is implied. In Aatma-Nirbhar Bharat Package, Companies Act is relaxed through an ordinance/bill to ease the business for companies. The deadlines of meeting, document submissions and CSR compliance have been extended. The offences are decriminalised and made compoundable, so imprisonment is removed, and monetary penalties are incurred, and the issue is settled outside the court.
10. **Insurance:** To cover the health workers in COVID-19 such as doctors, nurses, paramedical staff, ASHA workers etc. a 50 lakhs accident insurance is given in case any of them dies on Corona duty (illness/mob lynching etc.). There is no age limit for this scheme. New India Assurance, a public sector general insurance company is allotted for this scheme and the premium will be paid by Ministry of Health and Family Welfare. The duration is set of 90 days from March 30, 2020.
- Employees State Insurance Corporation (ESIC): For any non-seasonal establishment with 10 or more employees, for the workers who earn less than Rs. 21,000/- a month, the owner must pay ‘X’% and the worker has to pay ‘Y’% of premium and the fund is accumulated in ESIC. If the worker or his family member gets ill, this fund is used at ESIC hospitals as insurance cover. The worker also gets unemployment

allowance and disability cover. This does not cover non-seasonal farm labourers. Under Aatma-Nirbhar Bharat Package, a company with less than 10 workers is included. Hazardous industries are compulsory to register under ESIC whereas other industries are allowed voluntary inclusion.

- Employees Provident Fund Organisation (EPFO): For any establishment with 20 or more workers, a worker whose salary is under Rs. 15,000/- a month, the employee, and the employer both must contribute 12% each towards EPFO. The employee gets 12% in Provident Fund with 8.33% in pension whereas the employer gets 3.67% in Provident Fund. 8% interest is levied on the Provident Fund and it can be withdrawn under a set of conditions. Under Aatma-Nirbhar Bharat Package, these withdrawal conditions were relaxed to ensure liquidity in the hands of people.
 - ✓ For small firms (less than 100 workers), the Government decided to waive off 12% each from the employee and the employer, instead the Government will cover the EPFO funds.
 - ✓ For large firms (more than 100 workers), the Government decided to decrease the % from 12% to 10% for both the employee and the employer, to increase liquidity.
- Gig Worker/Platform Worker: Workers that have written contract but are independent contractors and not employees, hence not entitled to ESIC or EPFO. Under Aatma-Nirbhar Bharat Package, the Government will provide social security (health insurance, disability cover, maternity benefits etc.) to all these workers.
- Informal/Unorganised Sector: For workers who don't have a written contract and are not eligible for EPFO/ESIC/Minimum wages. Under Aatma-Nirbhar Bharat Package, the Government will offer such workers an appointment letter to categorise them into organised sector. This will give job security, annual health check-up, right to minimum wages and portability of social security cover even when they return to their home states.
- Women Jan-Dhan accounts: Under PM Garib Kalyan Yojana, around 20 crore women Jan-Dhan account holders have registered. Under Aatma-Nirbhar Bharat Package, these account holders will be given Rs. 500/month for 3 months. This will help in encouraging digital payment system and will boost rural liquidity.
- Poor Widows/Poor Disabled/Poor Elderly: Under Aatma-Nirbhar Bharat Package, all the people who fall under this category will be given Rs. 1000/- single time. Not every month because under the Ministry of Rural Development, these categories are entitled to National Social Assistance Program where they get free pension without subscription.

11. **Taxation:** Under Aatma-Nirbhar Bharat Package Through 'Tax Ordinance 2020' issued on 31.03.2020, The Government extended 'Vivad se Vishwas' and 'Sabka Vishwas Legacy Dispute Resolution' were extended till 30.06.2020. There are certain technical reliefs in deadlines for depositing GST, TDS (25% decreased), TCS etc.
12. **Strategic Disinvestment (Privatisation):** Under Aatma-Nirbhar Bharat Package, all the sectors will be classified into two categories:
- Strategic Sector (Defence, Oil etc.): Keep only one 'Central Public Sector Enterprise (CPSE)' and privatise the remaining CPSEs.
 - Non-Strategic Sector (Telecommunications, Aviation etc.): Private all the CPSEs.
13. **Fiscal Deficit (FD):** Budget Deficit + Market Borrowing. In 2020, The Government decided to borrow around 7.96 lakh crores. In May 2020, looking at the extraordinary circumstances, The Government decided to borrow around 12 lakh crores since the revenue collected is low and the relief expenditure is high.
- Moody's Sovereign Credit Rating: Since India's FD increased, Moody's Sovereign Credit Rating lowered from 'Baa2' to 'Baa3'. Currently, India is in 'Lower Medium Grade Investment' range. If India's FD further increases, India will be pushed into Ba1 or 'Non-Investment Grade (Junk Status)'. This means India will have to offer higher interest rates to attract foreign investment and the rupee will fall in the international market as well as imports will be expensive and the repayment of previous \$ loans will be expensive. This will also degrade Dollar-Rupee stability.
 - If the Government provides a bigger stimulus package, it will either have to increase tax cuts and borrow more money (which will increase FDI) or adapt to monetizing of deficit (RBI prints more notes) which will destabilise the market and lead to hyper-inflation.
 - Donations: To decrease the borrowing to some level, 'Prime Minister's National Relief Fund (PMNRF)' was created by Jawahar Lal Nehru in 1948 during partition. It is nowadays used for disaster relief, medical treatment etc. PM Narendra Modi created 'Prime Minister's Citizen Assistance & Relief in Emergency Situation Fund (PM-CARES)' in 2020 to deal with any kind of emergency or distress situation. PM-CARES is registered under 'Indian Trusts Act (ITA)'. The chairman of this fund is PM Modi. 3 ex-officio trustees (Defence Minister, Home Minister & Finance Minister) and 3 nominated trustees (Doctor, Lawyer, Scientist etc.) will form the Board to take decisions on this fund. Both PMNRF and PM-CARES are operated from PMO, does not include anything from the budget, are meant completely for donations from

citizens, the donors get tax exemption and the companies which donate will get exemption from CSR.

14. Agriculture: Under Aatma-Nirbhar Bharat Package,

- 'PM KISAN' beneficiaries to be paid Rs. 2000 ahead of regular instalment (front-loading).
- Moratorium on farm loans for 3 months till August 2020.
- Cheap loans via KISAN credit cards will be given to PM KISAN, Fishermen & Animal Husbandry Farmers.
- 'National Bank for Agriculture and Rural Development (NABARD)' to give additional refinance to Rural banks and cooperative banks.
- Infusion of more capital into NABARD's Rural Infrastructure Development Fund. Increased loans to states to facilitate rural infrastructure projects and provide more job opportunities to poor people.
- Minimum Support Prices to be increased.
- Reforms in APMC, contract farming and essential commodities act. To implement these reforms, The President of India signed three ordinances in June 2020:
 - ✓ Ordinance #1: Aims to fix the shortcomings of APMC Acts, thereby enabling farmers to sell their produce through competitive alternative trading channels (within the state, outside the state & on electronic markets).
 - ✓ Ordinance #2: Nationwide uniform framework for corporate farming. It will help farmers to engage with more food processing firms, wholesalers, large retailers, exporters. Farmers can sign such 'Corporate Farming Agreements' for minimum 1 crop/season and for a tenure of 5 years.

- ✓ Ordinance #3: On Essential Commodities Act. Commodities like cereals, pulses, oils, onions & potatoes to be kept out of this list. Stock limits can be only under “very exceptional circumstances” like natural calamities and famines. Stock limits can be imposed only if the retail prices are higher by 100% for horticulture (tomatoes) and 50% for non-perishable food (sugar). No stock limit on food processing units and exporters. This will increase the investment in this sector.

- ✓ Essential Commodities Act 1955: It aims to control production, supply, and distribution of essential commodities. Ministry of Consumer Affairs does not lay any rules or regulations but allows the State Governments to issue control orders regarding dealer licensing, stock limits, restrict movement of good during an emergency etc. According to the ‘Economic Survey 2020’, 76000+ raids were conducted on onion traders yet only 3000 were penalised. To stop black marketing, corruption and harassment on essential commodities, Ordinance under Aatma-Nirbhar Bharat Package was announced. This Act was passed in 1955 when India was worried about large-scale famines, but it has lost its relevance in today’s time. Hence, with this ordinance, inflation on essential commodities can be controlled.

- Operation Green: In Budget 2018, The Government launched a sub-scheme under ‘PM KISAN SAMPADA YOJANA’ called ‘Operation Greens’ for T-O-P (Tomatoes-Onions-Potatoes) to improve infrastructure for storage and transportation to ensure round the availability of T-O-P at affordable prices. Under Aatma-Nirbhar Bharat Package, the Government has extended Operation Greens to ALL FRUITS & VEGETABLES. In addition, 50% subsidy will be given for transportation from surplus market to deficient market and 50% subsidy on storage infrastructure. This will reduce food wastage, offer better prices for farmers and affordable food for consumers across the country.

- Food Enterprises Promotion: Existing Micro-Food Processing Units, Farmer Producer Organisations, Self Help Groups, & Cooperatives will be given funding, training & support so that they can comply with FSSAI Food Standards, Brand Building & Marketing. To increase exports, cluster-based development approach will be promoted (Mango in UP, Kesar in J&K, Bamboo shoots in North-East, Chilli in Andhra Pradesh etc). Separately, herbal cultivation of medicinal plants & beekeeping will be encouraged.

- Agriculture Infrastructure Fund: It is a fund worth Rs. 1 lakh crores to develop cold chain & post-harvest management infrastructure. It will reduce spoilage of food, increase income for farmers & provide affordable prices for consumers.

- Dairy Cooperatives: Since the milk sale had reduced in the lockdown, The Government will provide 2% loan subvention to dairy cooperatives and will provide additional 2% if they regularly repay loans. 'Animal Husbandry Infrastructure Development Fund' will be set-up at Rs. 15,000 crores. 'National Animal Disease Control (NADC)' will provide 100% vaccination of domestic animals against Foot & Mouth Diseases & for brucellosis.
- PM Matsya Sampada Yojana: It was included in The Budget 2019 but not launched. Under Aatma-Nirbhar Bharat Package, Marine, inland fisheries, aquaculture, cage culture, seaweed farming, ornamental fisheries will be developed. Fishing harbours, cold chains and markets will be created. Fishermen will be given personal & boat insurance. Quality testing laboratory network will be created to facilitate the exports comply with food safety standards in US & EU. It is expected to create 55 lakhs jobs & exports worth Rs. 1 lakh crores.

15. Infrastructure: Under Aatma-Nirbhar Bharat Package, 4 segments are briefed in this sector.

- Mining: Joint auction of Bauxite & Coal mineral blocks so that it can be used to smelt into Aluminium and reduce electricity costs for mining company. Coal Gasification will be encouraged for the creation of gas based Indian economy. Commercial Mining will be allowed in Coal Sector, through revenue sharing model.
- Energy/Power: Since the industry shutdown, demand for electricity has been reduced and hence the Electricity/Power Distribution Company (DISCOM). The Government will inject funds in Power Finance Corporation (PFC) and Rural Electrification Corporation (REC).
 - ✓ The Government will reform electricity tariff policy. It will also encourage 'Direct Benefit Transfer (DBT)' for electricity subsidy to farmers, install small prepaid meters and will privatise Union Territories DISCOM/Power Departments to make operations more efficient.
 - ✓ Atomic Energy: Public-Private Partnership (PPP) in research reactor to produce medical isotopes used in cancer treatment & IR radiation for food preservation.
 - ✓ Civil Aviation: Develop a greater number of World-class airports through PPP. Industry's tax-regime will be fine tuned for Aircraft maintenance, repair & overhaul. The aim is to make India a global hub like India is for ship-breaking industry.

- ✓ Space-Tech: To allow private sector players to use ISRO facilities for their projects, outer space travel and planet exploration. Sharing/Selling Remote sensing data to tech-entrepreneurs (also recommended in Economic Survey 2019).
 - ✓ Defence: To ban the import of certain weapons & equipment to encourage “Make in India”. FDI limit in defence manufacturing sector increased from 49% to 74%.
- Housing/Real Estate: Under Aatma-Nirbhar Bharat Package,
- ✓ In the Real Estate Regulatory Agency (RERA) Act, COVID-19 will be treated as ‘Force Majeure’ (if a builder doesn’t complete the project under a stipulated time, the owner can’t complain to the RERA). Validity for 6 months from March 2020. If RERA authority wishes, they can extend it for another 3 months.
 - ✓ PM Awas Yojana (PMAY): To provide ‘Credit Linked Subsidy Scheme (CLSS)’ for (i). Economically Weaker Section; (ii). Low Income Groups; (iii). Middle Income Groups (MIG). It was to expire for MIG on 31.03.2020 but under Aatma-Nirbhar Bharat Package, it is extended for one more year. This will create demand for raw material/transport and jobs for construction workers.
 - ✓ Rental Houses: Under Aatma-Nirbhar Bharat Package, The Government will build affordable rental housing complexes with the help of (i). State Governments; (ii). Public-Private partnerships with real estate developers.
 - ✓ MPLADS: In April 2020, The Government suspended ‘Member of Parliament Local Area Development Scheme (MPLADS)’ so that more money can be spared for COVID-19 relief.
- Public-Private Partnership (PPP) Investment Reforms: The Government will provide 30% ‘Viability Gap Funding (VGF)’ for social infra projects such as schools, universities, hospitals, community housing, sports parks etc. Railways/Road Transport/ Highways/ Central Public Works Development contractors will not be penalized for non-completion of work in given tenure and will also be given an extension of 6 months.
- Miscellaneous: Fastrack investment will be encouraged in 12 booming sectors:

- ✓ IT & ITeS
- ✓ Tourism & Hospitality
- ✓ Medical Value Travel
- ✓ Transport & Logistics
- ✓ Accounting & Finance
- ✓ Audio Visual
- ✓ Legal
- ✓ Communication
- ✓ Construction related engineering
- ✓ Environmental
- ✓ Financial
- ✓ Educational



Project Management Unit (PMU) to support contract management in defence sector.



Project Development Cell in each Ministry to prepare investable projects.



Technology Development cum Incubation Centres will be set up for fostering synergy between research facilities and tech entrepreneurs.

16. **Human Resource Development (HRD):** Under Aatma-Nirbhar Bharat Package, the Government will increase expenditure on healthcare and health research.

➤ Health:

- ✓ E-Sanjeevani telemedicine: Ministry of Electronics and Information Technology (MeitY) will launch a program named “**E-Sanjeevani**” under ‘Centre for Development of Advanced Computing (C-DAC, Mohali)’. It will provide patient registration, Audio-Video consultation with a doctor and an e-prescription.
- ✓ Integrated Government Online Training (iGOT) portal: HRD Ministry’s ‘Digital Infrastructure Knowledge Sharing (DIKSHA)’ Platform for education and training will launch iGOT which will provide training modules for Doctors,

Nurses, Paramedics, Hygiene Workers, Policemen, Union & State Civil Servants, National Cadet Corps (NCC) and other volunteers for COVID-19 crisis to increase the capacity building.

- ✓ Aarogya Setu app: It uses Bluetooth Technology and GPS location data to track people infected with Corona / those who came in contact with infected patients. It is developed by 'National Informatics Centre (NIC under MeitY)' with the help of Niti Aayog and Private Sector IT Experts.

➤ Education:






- ✓ PM eVidya initiative: HRD Ministry will upload content on DIKSHA Portal for those students who have access to the internet. More digital textbooks will be uploaded on e-Paathshala portal. Textbooks will have QR Codes which when scanned will provide digital lectures and multimedia animation online. HRD Ministry will dedicate 1 TV channel for each class from 1 to 12. It will deliver lectures on TV via GSAT-15 satellite.
- ✓ Manodarpan initiative: For psychosocial support of students, teachers and families for mental health and emotional wellbeing.
- ✓ National Foundation Literacy and Numeracy Mission: This aims at providing every child learning levels and outcomes in grade 5 by 2025.

➤ Poverty Removal:

- ✓ Food Security: Under PM Garib Kalyan, Free monthly LPG cylinders to PM-Ujjwala beneficiaries for next 3 months. Under PM Garib Kalyan Anna Yojana, 5 kg (wheat/rice) + 1 kg pulses per family every month for next 3 months. If a migrant isn't registered under 'National Food Security Act (NFSA)', State Government will provide the ration for 2 months and the Union will bear its cost. 'One Nation One Ration Card' to be implemented by March 2021. Currently it is covered in 20 states. With this, anyone registered under NFSA, will get subsidised ration in any part of the country.
- ✓ Shelter: State Governments will be allowed to use the 'State Disaster Response Fund' for creating shelters/quarantine facilities. Urban Homeless will be given 3 meals a day in shelters.

- ✓ Street Vendor's Aatma-Nirbhar Nidhi Scheme (SVANidhi): Under Ministry of Housing and Urban Affairs, Street Vendors will be given Rs. 10,000 loan via banks, NBFCs and Micro-Finance Institutions. The loan repayment is to be done on a monthly basis for a tenure of 1 year. Government will give 7% interest subsidy in their account on timely repayment. Scheme is valid till March 2022.

- ✓ Unskilled Jobs: Budget 2020 had allocated Rs. 61500 crores to MGNREGA, Aatma-Nirbhar Bharat Package added another Rs. 40000 crores. The daily wage of the MGNREGA workers has been increased from Rs. 182 to Rs. 202. 'Compensatory Afforestation Management & Planning Authority (CAMPA)' to give funds to State Governments for forest plantation projects to create jobs for poor families.

- ✓ Self-Help Groups (SHG):
 -  Women SHGs to be given Rs. 20 Lakhs collateral free loans.
 -  Formation of new SHGs for Urban Poor.
 -  Government will procure masks and sanitisers made by SHGs to provide income for poor families.
 -  Re-skilling and loans to SHGs under 'National Rural Livelihood Mission (NRLM)'
 -  Allocation of Rs. 10-15k loans as revolving fund to SHGs which keep proper account books.

SUMEDH DESAI

The Post-COVID-19 Global Aviation Plan for Airlines

~ by Vaishakh Suresh and Javneet Singh Wazir

In this world, we are taught to surpass our boundaries, where it was possible to easily travel among countries. But was the same freedom there to allow the spread of the novel COVID-19 coronavirus in such a dynamic way? Indeed, the effect of this freedom that has led all of us to realize the gravity of the situation only when these boundaries were closed.

Before the advent of this pandemic, we were witnesses of a gradual spreading and embracing of technologies connected globally. Aviation has progressed from high altitude flight, flight at supersonic speeds, and flight to space and back. The world has celebrated over 100 years of powered civilian flight. Aviation has been integrated into our modern world and has eased the mobility across the boundaries of countries enhanced business and communication across the world, and become an integral part of military operations.

To contain the COVID-19 outbreak governments of many countries have had applied progressive restrictions to production, activities, permitting only those that are considered strategic or that provide essential services.

One such industry which has been hit by the outbreak is the Aviation sector which has been facing the effects of this uncertainty throughout. The guidelines issued by the governments of the countries to contain the spreading of the virus has shut down the pathways to facilitate International Airline Aviation. A temporary 30 days coordinated

restriction of non-essential travel from third countries into European Union has been issued, as well as the global market has banned production and transportation of Asian mainly Chinese products due to the virus being initially observed in the Wuhan province of China. To contain the outbreak, the

Government of India has also placed several restrictions in the country which also effects the aviation industry.

On March 19th the Travel and visa restrictions related were issued.

On April 14 the parliament invited members states to extend the temporary restrictions on non-essential travel until 15 May which was further extended.

The aviation domain has been the most affected sectors in this pandemic which has an enormously impacted on all the elements of the Air Traffic Management systems. The spread of COVID-19 cases across the globe has caused the air traffic demand to plunge in the initial phase of the restriction itself, resulting in a sharp drop of revenue for the international airline aviation.

- Airlines
- Airports
- Air Navigation Service Providers (ANSP)
- Regulatory Entities and Agencies
- Industries
- Aircraft-Leasing sector

With more than 210 countries and territories around the world have reported a total of 5,101,476 confirmed cases of the coronavirus flight cancellations have been accelerating

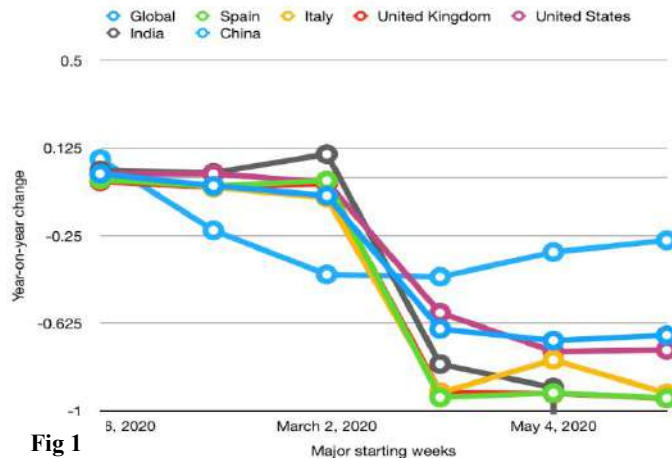


Fig 1

weakened and certain airlines are at a phase of bankruptcy if they aren't aided by the IMF and other Government plans.

Many airlines have been asked to temporarily suspend flight schedules, to, from and within the country, Italy is the major example. Other countries are similarly taking such restricts into consideration for containing the virus, while countries like India, implemented these decisions quickly by the actions of the government and national and local health authorities.

“The DGCA being the Indian governmental regulatory body for civil aviation under the Ministry of Civil Aviation, has had a sharp drop in traffic (around 90%) leads to a drop-in revenue. A loan of 500 million euros has been authorized by the government and voted by the parliament to meet the expenses of the year 2020.

Airlines would have to survive by making cuts to their capacity in response as this may or may not be a short-term crisis. Material adjustments would be required at a lower operating cost to keep the air travel strive.

and fast pace, as well as bookings, are drastically declining as consumers delay or cancel the trip due to the corporate travel policies being heavily restricted by the various governments across the world.

Prime countries like United States, Russia, Brazil, Spain, United Kingdom, Italy being the exotic travel destinations for passengers have been stricken hard by the virus have cancelled major events due to which the global international airlines' aviation market have

According to APAC, “In the past few weeks, the European airlines have announced temporary capacity cuts of up to 50% in the coming weeks and most U.S. airlines have announced significant, albeit less drastic, capacity cuts.”

The sudden and rapidly spreading virus has drawn comparisons with the Severe Acute Respiratory Syndrome (SARS) outbreak of 2003, which was most severe in Hong Kong. It has still not been able to quantify the impact, as uncertainty seems to prolong over the past months.

According to the IATA, an industry trade group the passenger air traffic (revenue passenger kilometers) was about 35% lower at the SARS outbreak's worst point for the airlines in Air-Pacific region. For 2003 as the whole accounting year the IATA has estimates SARS cost those airlines 8% of their revenues which is about \$6 billion at that time. Then it was only Hong Kong which has to bear the economic damage but now the world economy is at stake which might serve damage far more than worse. It is a plausible precedent that indicates the possibility of sharp, albeit which is hoped to be only temporary, but this drop of revenues is already hitting a decline in the cashflows to the airliners as the government-imposed

quarantines and restrictions on transportation on selected routes which are mainly the epicentres of direct air links to the rest of the world, mostly preferred for air travel of retail as well as tourism.

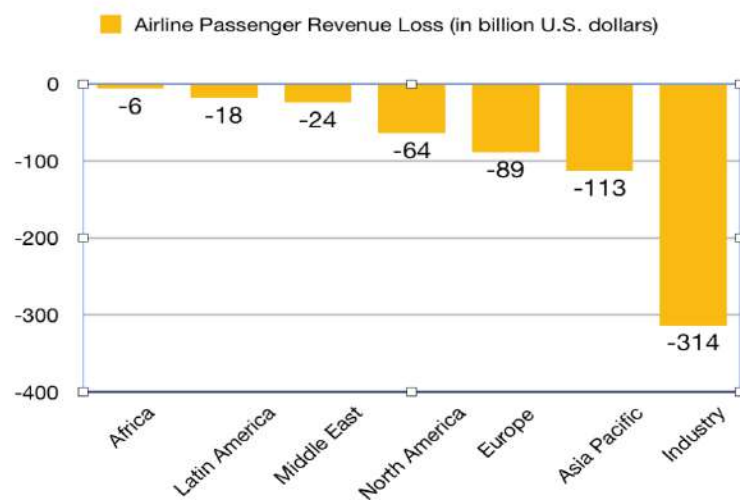
Indeed, the airline industry has proved to endure tribulation without cracking to such sudden heavy impact shocks. But this ripple of COVID-19 seems larger as with the benefit of hindsight on the SARS, the government and health officials may mobilize more quickly and act more effectively, but the Novel Coronavirus is more difficult to contain as we understand it can take 14 days before carriers show any symptoms, thus there is an increased risk of a wider transmission. China has a larger air travel and being better connected to the world

International (ACI) estimates a reduction of more than two billion passengers at a global level in the second quarter of 2020.

Airport revenues have been paralyzed estimating a decline in total airport revenues on a global scale to be \$39.2 billion (USD) in the second quarter.

Fig 2 to the outbreak the above statistical data provides the airline passenger revenue loss worldwide in 2020, by region or airline registration

“ACI World Director General, Angela Gittens, said. “As traffic and revenue have collapsed, the airport industry has taken all possible measures to preserve stability, but the challenge remains that a significant portion of airport costs are fixed.



in global aviation as they carry 15% of global air traffic, thus not only the Chinese economy will face damage but the larger ripple effects to the countries it is connected.

ACI world had taken an economic analysis at a global level, the prevailing COVID-19 pandemic is predicted to wipe out two-fifths of passenger traffic and almost half of revenues for airports in 2020 which is equivalent to roughly 4.6 billion passengers and more than \$97 billion by the end of this year. As of May 5 2020, Airport Council

This outlook illustrates the stark need for government assistance for airports to preserve essential operations and to protect the jobs and livelihoods of millions.

The base assumptions for the industry which can be expected to evolve now include:

- At least 20% revenue decline globally varying from region to region due to pricing erosion and developments.
- Capacity (available seat miles or kilometers) declines equal to about half of the decline in passenger numbers because it is difficult for airlines to reduce flying as much as lower traffic while still maintaining a viable flight schedule.
- Revised oil price assumptions would provide some cost relief although hedging would be a substantial time lag for many airlines that hedge.

When an airline does not hedge fuel, but adjusted to account for fuel hedging thus resulting in less savings from lower fuel prices.

- Non-fuel cost per available seat mile or kilometers increases somewhat airlines have fixed costs that do not vary with flight activity.
- Airlines take various measures to save cash, including trimming discretionary spending, reducing capital expenditures (including deferring planned deliveries of new aircraft in some cases), and suspending share repurchases.
- Some airlines have announced drastic capacity cuts, varying widely across regions and operators. As flight cancellations have brought the costs down, the significant proportion if costs would be flexible.
- Many airlines have asked employees to take unpaid leave or are furloughing employees as staff costs are another major cost for airlines.
- Flexible booking charges have been announced for consumers so that consumers can rebook at no extra charge.
- Meeting aircraft deliveries is one of the difficult choices as it's a part of longer-term, strategic plans thus fuel efficiency and environmental benefits have to be considered. Thus, aircraft leasing companies are facing mounting requests from their airline customers for deferral of lease rentals, and will very likely have to repossess planes from airlines that enter bankruptcy or shut down.

Some of the new measures issued by countries to safeguard its airline regulators and commence its activities:

1. European Union, the United Kingdom

Airlines and airports are required to reorganize luggage drop-off and pick-up section to avoid crowds. Travelers should also keep minimum movement onboard a flight to avoid physical contact with co-passengers and cabin-crew.

2. United States

Being one of the largest tourist destinations they airlines have started to work but have issued advisories for passengers to wear face coverings. middle seats have been asked to leave empty in the flight as a part of social distancing measure. major airports are conducting temperature checks of passengers and staff member thus containing the wires as well as providing a safe travel.

3. China

While things are subsidizing in the Wuhan province, the passengers are requiring to fill out an electronic health declaration before boarding a flight. Chinese aviation regulator has made temperature checks mandatory and has made all the other measure to the run throughout to contain the journey.

4. India

Despite the total lockdown of three weeks, in the last 14 days the airport remained functional 24x7 to handle cargo and special evacuation flights, operated by countries like Japan, Norway, Germany, Afghanistan,

Poland, Russia, France etc. to repatriate their nationals stranded in India. The DGCA has ordered international airports to extend passenger screening to all travelers arriving from Nepal, Vietnam, Indonesia and Malaysia. Self-declaration forms will be filled out by the passengers according to the instructions of the health and family welfare ministry.

As the common wisdom goes that for every crisis, an opportunity rears its head. Globalized countries like Russia USA and China and many more could shatter the storied view that globalization will become the greatest casualty if the Coronavirus Outbreak.

Many International groups are still exploring possible ways to facilitate a “restart” of international airline aviation. This resumption, however, will require several hurdles to be countered such as the government allowance to travel and passenger journey which would include in removing the ban from airports of departure and arrivals and other few elements regarding the transmission of the airlines to the aircraft themselves.

Hundreds of research articles have been published since the outbreak began a tremendous amount of work is in progress within both researchers and industry. Many logistical, financial and political aspects are in process to restart plans well beyond the scope that is specific to airports and immigration processes. The aviation industry is an ecosystem and will recover in a balanced way which does not favor one part of the industry over others – we all need each other.

The ACI has tried to get some market-based solutions between airports and airlines as

both are an interrelated business with shared risks. Generally, airports want to work closely with their airline clients to incentivize the growth to traffic which would have to be a mutual interest in the recovery period. Between all this restoring consumer confidence will be an important part.

Free webinars and podcasts have been focusing on the key topics to make a safe road map for the airport industry’s recovery in response to the holistic situation. The Policy Brief-COVID-19: Relief Measures to Ensure the Survival of the Airport Industry – outlines measure exceptionally to help policymakers. Briefly, these include the protection of airport charges and revenues, tax relief, concession fee waiver, the temporary suspension of slot usages, the continuity of air cargo operations and comprehensive financial relief. These measures will ensure that financial assistance does not benefit one part of the industry over another.

At this point, one good business model would be the availability of renewable energy for critical airports to transition to a net zero-carbon but will have more leverage for support from the government if they manage to join efforts in actions with airport operators who can collaborate with municipalities, communities and other business sectors that can benefit from the government investment in renewables.

The CANSO which represents the air traffic management industry welcomed the adoption of a rescue package for European ANSPs

The bottom line is that airports are one of the driving forces of the global economic growth, wealth creation and employment. Just like ACI pledges to support its members through the global crisis, slowly

but progressively. After this pandemic surely, the world will be different in search of a new equilibrium for being free to fly across the globe!

Keywords: Novel Coronavirus, Aviation, Supersonic, Civilian Flight, Government, Restrictions, Traffic, Operating cost, Capacity Cuts, Airlines, APAC, IATA, SARS, ACI.

Abbreviations:

- COVID-19 - Coronavirus Disease 2019
- ANSP - Air Navigation Service Providers
- IMF - International Monetary Fund
- DGCA - Directorate general of Civil Aviation
- ICAO APAC - International Civil Aviation Asia-Pacific
- SARS - Severe Acute Respiratory Syndrome
- IATA - International Air Transport Association
- ACI - Airport Council International
- CANSO - Civil Air Navigation Services Organization

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COVID 19 AND MENTAL HEALTH

CORONA VIRUS ANXIETY AND FEAR

The government of India announced a toll-free help line number launched by National Institute of Mental Health and Neuro-Science for consultation. According to the data from The Print 2500 calls were received in 9 help lines within 5 days. These help lines are controlled by doctor and non-doctor trained in mental health. The most asked questions on the help line are the ongoing pandemic and lockdown. They are also to verify the news about the outbreak. The professionals are calling it 'corona anxiety and fear'.

The nation wise lockdown has caused people to be stressed about the financial and experience boredom out of staying at home. For patients of anxiety and depression, coronavirus has entered the list of 'triggers' for their mental health problems (Neha Mehta, 2020)

According to a [report](#) by the World Health Organization, 7.5 per cent of Indians suffer from mental health problems and the treatment gap in the country is about 70 per cent. By 2020, the report predicted, 20 per cent of the population in India would suffer from mental health issues. With only [4,000 mental health professionals](#), the country is not equipped to deal with the onslaught of patients. (WHO, 2011)

The patients with depression and anxiety have doubles their therapy session and the one without symptoms have started showing the symptoms. The uncertainty about the tenure of lockdown has resulted in the anxiety and fear. According to Dr. Varun Shreshth, house wives are affected the most from the lockdown. Their domestic helper couldn't come and their burden has increased with the entire family staying home. This is particularly the case of the house wives who do not receive any help from their family.

According to an online counselling providing site, My Fit Brain, there is a spike of 30 per cent in the number of cases on marriage counselling and parenting on the platform. Because mental wellbeing does not need immediate care, such as physical illnesses, couples who neglected their marital problems are now pursuing counselling.

COVID 19 AND MENTAL HEALTH PATIENTS

The process and therapy can be done using online digital platform, but the patients who already have an underline mental illness who are on medication are being affected. Firstly, the coronavirus is exaggerating the symptoms of their already existing condition. Secondly, the lockdown is making it difficult for them to access medications.

Patients are not able to get their medicines because some of the psychiatry drugs fall under Schedule X, which require prescriptions from doctors, and chemists are expected to keep a record of the prescription for two years. Therefore, most patients are unable to get their medications.

COVID 19 AND ITS PATIENT'S MENTAL HEALTH

Patients with either confirmed or suspected COVID-19 cases may experience the fear due to the consequences of the newly discovered virus. The people quarantined or isolated may experience loneliness, boredom and anger. In addition, symptoms of the infection, such as fever, hypoxia, and cough, as well as medication adverse effects, such as corticosteroid insomnia, may contribute to anxiety and mental disorder worsening.

COVID 19 AND CHILDREN MENTAL HEALTH

Lockdown, Isolation and social distancing will specially affect children who have faced enormous disruption in their life. Children are likely to feel stress, anxiety, and fear, and this can include the types of fears that are somewhat similar to those faced by adults, such as fear of dying, fear of dying from their families, or fear of what medical care entails. Schools being closed due to lockdown have caused children to lack structured environment that can stimulate them. Also, children are unable to meet their friends, which is necessary for the good social support and their mental wellbeing.

Being at home can put some children at increased risk of child protection accidents or exposure to them, or have them experience interpersonal abuse if their home is not a safe place. This is a very worrying matter.

While all children are perceptive to change, young children may find it difficult to grasp the changes that have arisen, and both young and older children may show irritability and anger. Kids may find they want to be closer to their parents, make more demands on them and, in effect, some parents or caregivers may themselves be under undue pressure.

COVID 19 AND ELDERLY MENTAL HEALTH

Older people with underline health conditions are more vulnerable to COVID 19. This fact can be extremely frightening and fear inducing for them. For these populations the psychological impacts can include anxiety and feeling anxious or angry. Its impacts may be particularly hard on older people who may experience cognitive impairment or dementia.

And some older people may already be socially isolated and feel loneliness that may deteriorate their mental health.

STRATEGIES TO IMPROVE METAL HEALTH

For Children:

Giving young children young and attention to resolve their fears is an effective strategy. Being honest with them and explain them what is happening in such a manner that they understand the situation even if they are young. Children are very perceptive and will model how to respond from their carers (WHO,2020). Parents do need to be encouraged to handle their own stressors so they can be models for their kids. If the kids are not going to school, then establishing routine for them and helping children to find ways through which they can express themselves can help them.

For Elderly people:

Strategy such as undertaking physical activities and to keep to habits or to build new ones, and to participate in activities that offers a sense of achievement. It is also necessary to maintain the social connections. Some older people may be familiar with digital methods and others may need guidance in how to use them. Once again, the mental health and psychosocial support services and other services that are relevant to this population must remain available at this time.

For Patients with underlying mental health conditions:

Prescribing and accepting E-Prescriptions would be helpful. Since the chemist is supposed to keep the record of the prescription for 2 years, they need a facility to keep the tract of E-Prescription.

INDIA'S ECONOMIC EXPOSURE TO THE CORONAVIRUS PANDEMIC

ABSTRACT

The 2020 Coronavirus pandemic has had a disastrous effect on the Indian economy that was already struggling with a slowdown caused in the economy due to various reforms and amendments in fiscal policies. India is set to face its 4th recession since Independence, first since the economic liberalisation of 1990 but the worst of the lot. The coronavirus pandemic which took the world by surprise was in reality a fatal lapse of judgement from the world leaders and health supervision organisations. The World Bank and several rating agencies had initially downgraded India's growth forecast for financial year 2020-2021 but still showed positive growth for India while the rest of the world's growth was projected to contract by atleast 6%. But as the rating agencies began to see the possibilities of a very hazy future, which was backed by the nature of the crisis and the methods used to curb it, a very harsh truth began to appear in front of them which was the world economy facing a severe recession which would be worst since the Great Depression. This reality now had India too in its downfall with the latest figures showing India's economy to witness negative growth in the first and second quarters of FY 2020-2021.

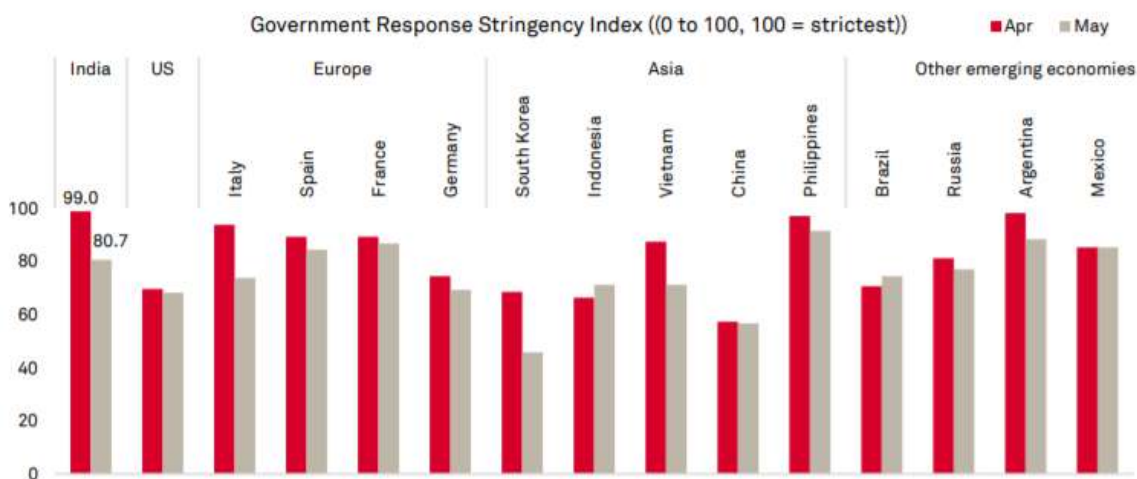
Unlike the previous recessions of 1958, 1966 or 1980 which were mostly caused due to a monsoon shocks that hit the agricultural sector hard which was a sizeable part of our economy then, the recession we face today has a stark contrast with the rest by having implications on the whole economy as a whole, affecting all its branches. Although having said that it would prove to be irony that agricultural sector would cushion the economic downfall for the projections show normal monsoon conditions over the Indian subcontinent in the coming months thereby a favourable monsoon period in India.

Today we are faced with an acute situation unlike any other caused by a Virus of a size of 0.12 micron taking on the world economy on its own. The following report will track the effects and implications of the pandemic to the Indian economy in brief and also look into the steps taken by the government to cushion the blows of the crisis. In the end the report would also state recommendations from the author and also venture out to find some trends in the new economic world order after the post covid-19 era.

INTRODUCTION

India faced a severe slowdown in its economy from Q3 of fiscal year 2018-2019 to Q3 of fiscal year 2019-2020 with the GDP growth rate dropping from 6.2% to 4.1% in the mentioned time frame. According to many analysts this slowdown was caused due to structural problem in the economy and not the usual reason of change in cyclic trend in the economy marked by a reduced income earned by the Indian households. A sequence of reforms brought in by the government with demonetisation as the big one dealt a severe blow to businesses in India. The Micro, Small and Medium Enterprises (MSMEs) faced a huge disruption in this time period with many businesses from different sectors facing a drying cash flow. The aggregate demand in the economy fell with loss of positive sentiment being the main reason. Also, during the same period inflation rose to reach levels of around 7%. Although hopes of trend reversal looked brighter than ever after signs of demand restoring in the economy in Q3 of FY19-20.

The most stringent lockdown in the world



On 30th January 2020, India saw the first confirmed case of Coronavirus. In the coming months this virus brought havoc on the world by spreading through countries at an exponential rate. The main blow of the virus was felt in India, march onwards. This was followed by the most stringent lockdown implemented by the Government of India with over a billion people under severe restrictions since 25th march. The pandemic situation was unlike any other crisis we had faced in India since Independence. Covid-19 which originated in China in December of 2019 led to a disastrous effect to its economy but China being the manufacturing hub of the world, several sectors faced the wrath of the virus even before it reached India. Many industries like the Automotive Industry or the Smartphone Industry to name a few faced the problem of loss of inventory or inability of manufacture more products

in local factories due to blocked shipment of raw material from China. The supply chain disruption affected the viability of several corporations around the world.

The economic implication from the pandemic was unlike any other crisis we had faced through our history. Many analysts compared the economic crisis of today with The Financial Crisis of 2008 or even The Great Depression of 1930s. But, the very nature of this crisis provides a very bleak image of the future. One of the primary methods implemented to combat this global pandemic is of social distancing through lockdowns. This is the first time that we are seeing a significant amount of physical economy coming to a standstill. Even through various crisis we have faced, it has never happened that the economic wheel has slowed down to such an extent with millions of people in India without any income source with a large proportion of businesses being shut down or having suspended their operations. This has affected the general spending power in the economy being seen through a massive fall in the aggregate demand. Businesses are capitalising on their digital presence to continue their existence but the logistics sector being totally disrupted is bringing havocs to the economic system in India. This crisis has brought both demand and supply side shocks in the economy which has led to massive depreciation in the income for companies which is compensated by reducing operational costs coming in the form of firing of employees who are in turn left unemployed in the economic system. Hence a series of events initiated by the pandemic will have a domino effect in the economy. The Unemployment rate reached 26% in the last week of April from 7.1% months ago with the daily wage earners and migrant laborers facing the true heat of the moment. This fact highlights the true nature of the crisis and the implications it is and will have on the Indian Economy. The lockdown has left only a quarter of the \$2.8 trillion economy operational with 53% of businesses directly affected by it. The financial markets of India have seen huge fall in indices during this period with many foreign institutional investments being taken out from the market.

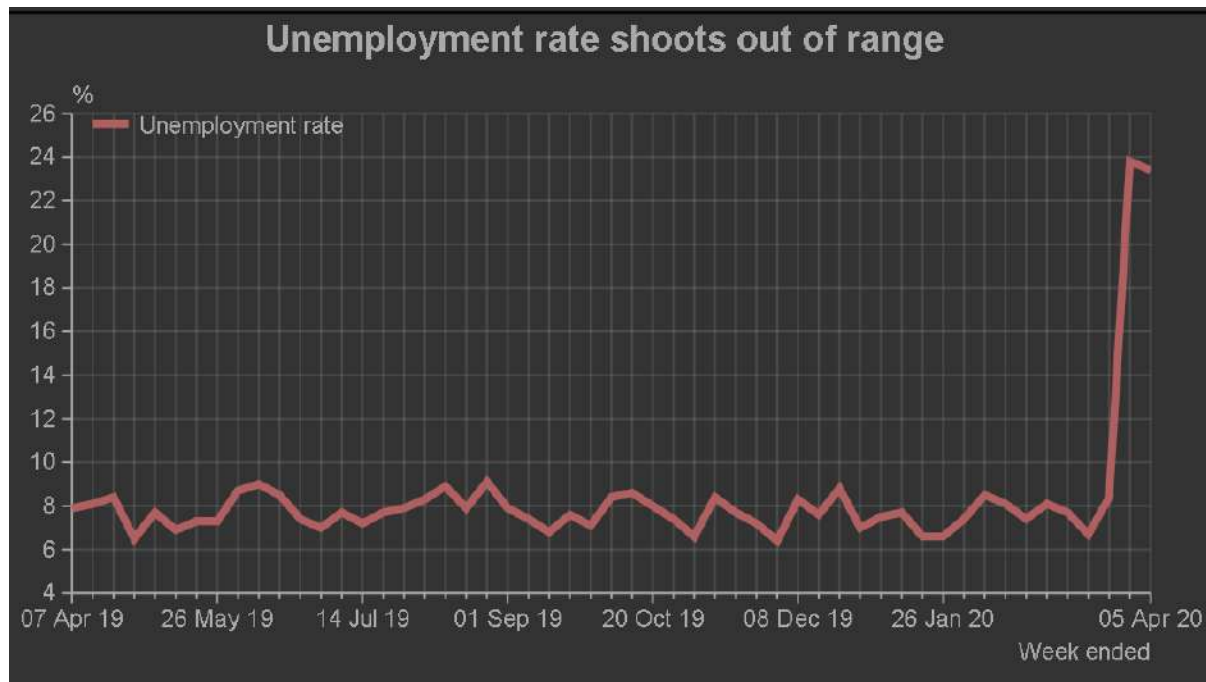
Going by the uncertain nature of the virus, the government initiated a response based on the motto 'Lives before Livelihood' but it wasn't long before there was a realisation of the severity of the economic implications from the economy that it became clear that 'both livelihood and lives matter'. This approach led to a number of changes in the lockdown restrictions and announcement of economic aid in the form of liquidity injection from the Reserve Bank of India and through a series of reforms and loan guarantees from the Government as a fiscal response to the crisis.

The global crash in oil prices provides a cushion to the economy as India imports more than 80% of its crude requirements. India's economy is fuelled mainly by the domestic consumption; hence the recovery will be quicker than other major global economies. But as the uncertainty still looms over the spread of Covid-19 in India and the period till which the lockdown can be enforced remains to be seen. Hence developments regarding steps taken to minimise the community spread of the virus have to be closely monitored along with its

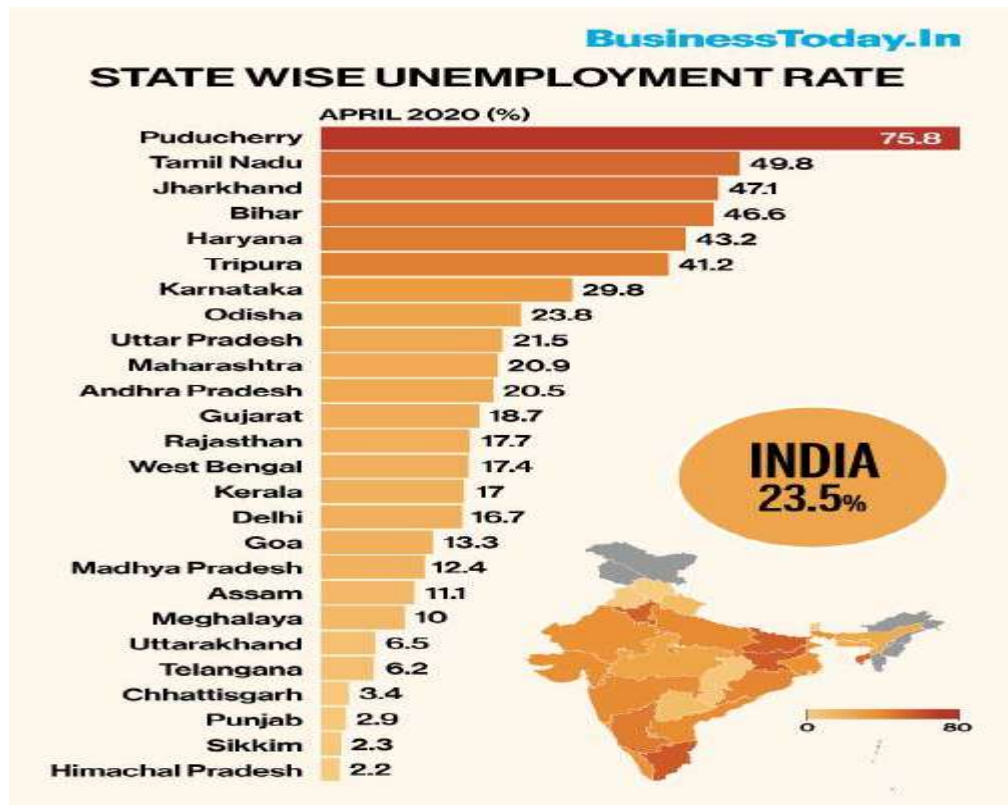
effectiveness to come to any sort of conclusion to predict the direction in which we are headed.

MACROECONOMIC OUTLOOK

Unemployment Rate



The Unemployment Rate in India shoot up to reach 24% for week ended 5th April from 7% in mid-march. Upto 53% of businesses have specified some extent of disruptions caused due to shutdown forced due to lockdown. The shutdown has forced several companies to suspend their operations with manufacturing taking a hard beat with many production centres having shut down and employees sent for leave without pay. Industries facing a high risk of job loss includes the Hospitality and Travel and Tourism industry as the current travel ban across the globe has shown huge dip in sales and revenue for them in the most critical period of the year which was marked as the Seasonal period for travel across India and accounted for a huge proportion sales period for these industries. Aviation supplements the damage experienced by these industries as air travel has been shut in India since mid-march. Therefore, these industries have to just rely on economic support from the government and write off Q1 FY21 from their books. Rest several companies around India have initiated pay cuts and suspension of bonuses and incentives being awarded.

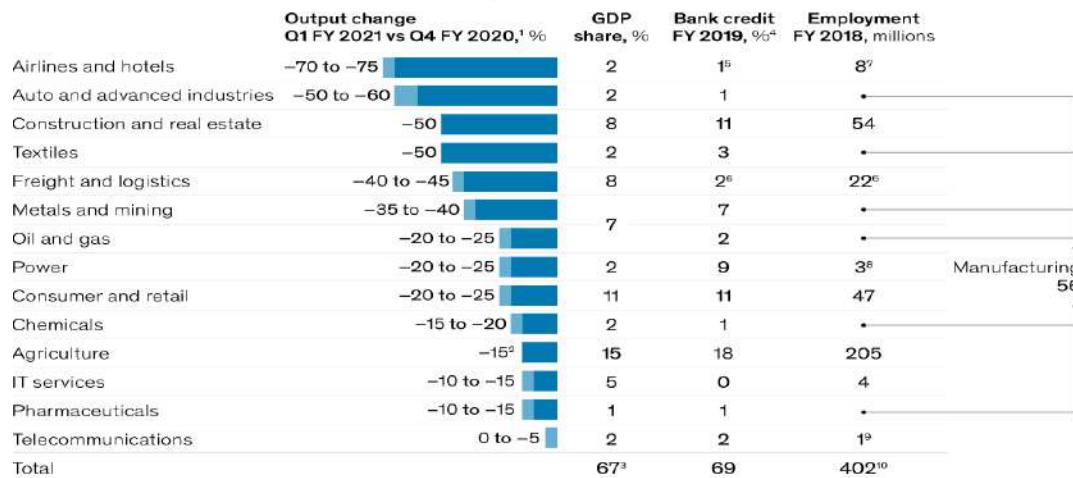


In the start-up ecosystem of India, several unicorns have been leading the charge including the likes of Swiggy and Udaan to fire off an average 25% of their workforce. Several Start-ups are on verge of going bankruptcy while others are securing fresh funding from its venture partners. But due to the current amendment in FDI policy by the government of India, China a major player among funding the entrepreneurship scene in India has suspended future funding in the Indian start-ups.

Industry centric Impact

The economic impact of COVID-19 in India will vary by sector.

Scenario 2 (lockdown continues until mid-May 2020): Potential impact on key sectors



Manufacturing – Several major industries from Infrastructure to Automobile have suspended their manufacturing operations since the lockdown was initiated. The automobile Industry has seen the worst month in its history after recording zero sales in April for commercial vehicles. Also considering the BS6 reforms, the industry is left with a huge inventory which would be very difficult to clear with the consumer real income being badly affected due to the lockdown. The smartphone industry has also been sharply affected by the shutdown as the sales in April and may have been in hundreds as compared to the average of 10-11 million units monthly.

The story of the Pharmaceutical sector in India has been of massive losses and massive global opportunity. India is a major hub for manufacturing generic drugs in the world with having a share of 50-60% of global exports. Also, India is a major player in the vaccine race as 60-70% of vaccine exported finds its source in India, hence any vaccine that would be developed will most likely find its way to India to mass produce. But the pandemic has not been a merry story for this sector which sources majority of the raw materials from China. The supply chain disruption caused due to shutdown of factories in China around January to March saw pharma companies short on raw materials which ultimately impacted the production capability and hence the sales effectively after shutdowns were enforced in India. Moving on to the post COVID era, this sector has massive opportunity on its hands as in recent times many pharma companies have successfully achieved the regulation standards for many drugs in the United States and Europe.

Consumer and retail businesses have suffered some of the hardest blows as these businesses were already cash starved due to many past reforms and hence there is huge possibility of widespread bankruptcies. The micro, small and medium enterprises (MSME) has been struggling since the slowdown in the economy and is already debt laden. MSMEs contribute to 29% of India's economy and accounts for 49% of India's exports.

‘There could be solvency risk within the Indian financial system, as almost 25 percent of MSME and small- and medium-size-enterprise (SME) loans could slip into default, compared with 6 percent in the corporate sector (although the rate could be much higher in aviation, textiles, power, and construction) and 3 percent in the retail segment (mainly in personal loans for self-employed workers and small businesses). Liquidity risk would also need urgent attention as payments begin freezing in the corporate and SME supply chains. Attention will need to be given to the liquidity needs of banks and nonbanks with stretched liquidity-coverage ratios to ensure depositor confidence’ – McKinsey & Co. (Getting ahead of coronavirus: Saving lives and livelihood in India- article dated 9th April,2020)

E-Commerce has seen massive change in its approach. Many companies like Amazon and Flipkart suspended its operations for non-essential items. This starved the sales for many small sellers on such platforms who were dependent on them for majority of its operations. Though Covid-19 brought innovative models to work in this sector with close collaborations between companies to extend their services and pivoting to offer new services. Though the original sales being down forced this sector to lay off massive proportion of their workforce.

SUPRESSED GOVERNMENT REVENUES

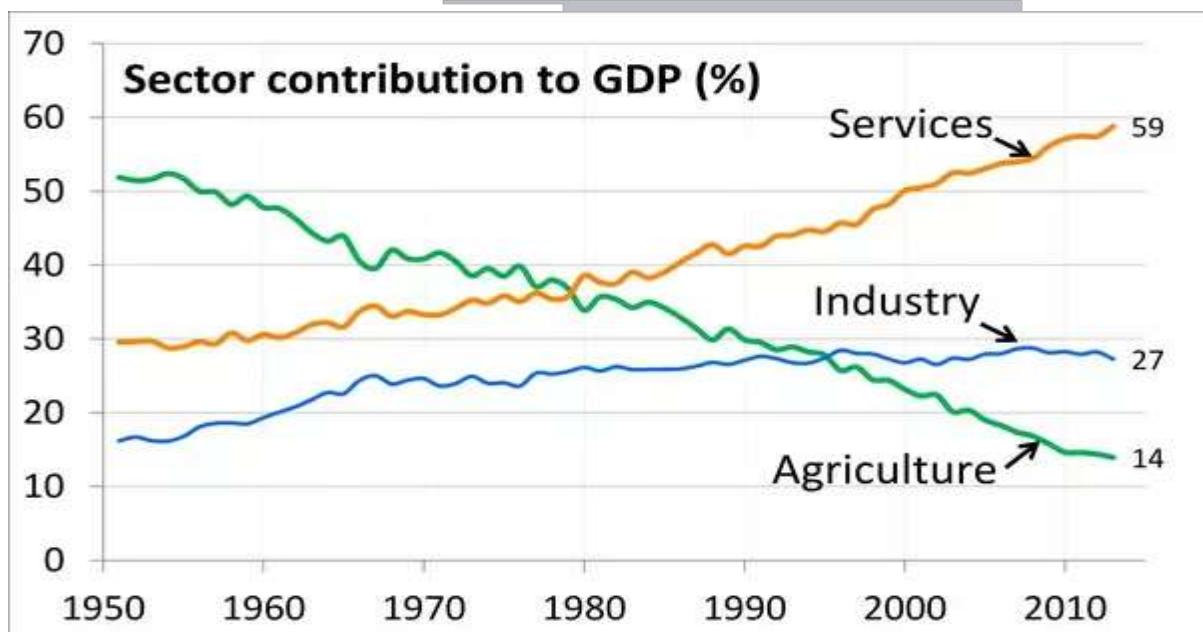
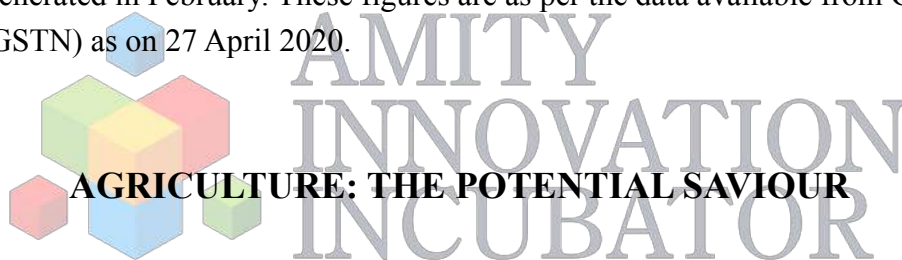


State governments have incurred huge losses to the extent of having to cut capital expenses as well as government plans in the near future and finding alternate ways to pay salaries. The Delhi government has fallen 90% short in tax collection as compared to 2019 and is planning to take loans and raise taxes in certain sectors. Maharashtra put a hold on all new capital

works till March next year; spending under government development schemes has been reduced by 67% for the current fiscal. The income of the Madhya Pradesh government has fallen by 85% in April and borrowing has increased.

The Delhi government as well as the Andhra Pradesh government imposed a 70%-75% "corona" extra tax on liquor. Excise duty on liquor is the third largest source of income for a number of states, nearly 10-15% of total tax collection for some states. The ban during the lockdown affected alcohol sales, in turn having a major effect on the state revenue.

GST collections are expected to see huge dips, considering huge suspension in consumer and business activity due to the lockdown. This could translate to increased fiscal pressure on the government who is expected to roll out huge spending initiatives to ride over the recession. When looking at April 2020, the taxpayers had generated only 67 lakh e-way bills, against the 4.06 crore made in March 2020. There is more than 83% fall in e-way bills generated in April 2020 set to have a significant effect on the GST revenue to be collected in May 2020. Also, the 4.06 crore e-way bills generated in March reflect a 28.9% drop from over 5.71 crore e-way bills generated in February. These figures are as per the data available from GST Network (GSTN) as on 27 April 2020.



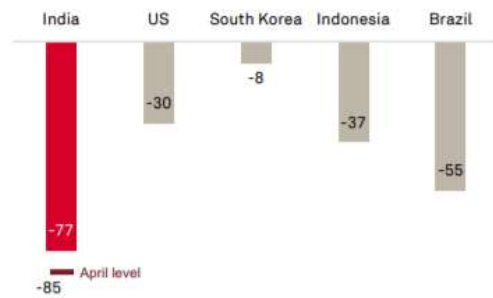
Unlike the previous recessions India has experienced since Independence which was caused mainly due to monsoon shock with the agriculture sector which was a sizeable proportion of

India's economy then had seen huge offsets in production irregularities. But it would be the first time when agriculture has the opportunity to have a cushion effect on the contraction which the economy would face. Agriculture is projected to maintain its positive outlook for the current fiscal year while many other major sectors projected to see contractions. Having said that some of the critical issues faced by the sector includes labour unavailability, logistical issue to access markets for produce and inadequate storage facility. The stringent lockdown enforced led to scarcity in labour availability for harvesting process. This maintains huge risk of disrupting the whole cycle of operation for farmers and the crops being spoiled which is supplemented by the age-old issue of inadequate storage infrastructure which leads to huge losses to already debt laden farmers annually. The logistical issue has led to massive supply chain disruption in India which has fuelled the vegetable inflation up. This risen inflation has eaten into the savings of many Indian consumers. The logistical nightmare also led to massive lost to the sector in form of hitting the cash crop cultivation and transporting it to markets. The change in consumer preference has shifted the dynamics for these class of crops by preferring inferior goods in order to build savings.

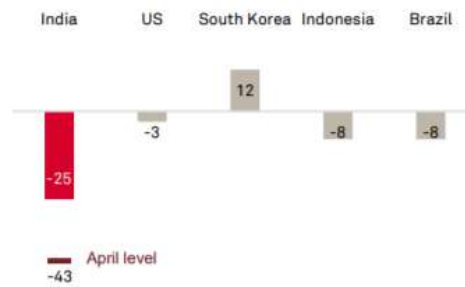


Mobility trends for May* (% drop or rise in trips to places, compared with baseline)

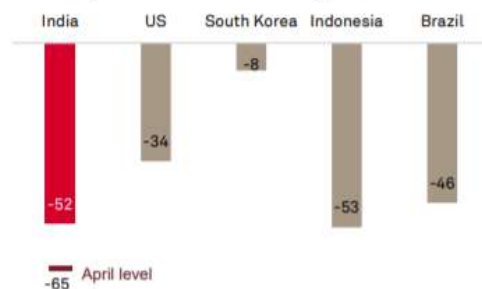
Retail and recreation: Restaurants, cafes, shopping centres, theme parks, museums, libraries, and movie theatres



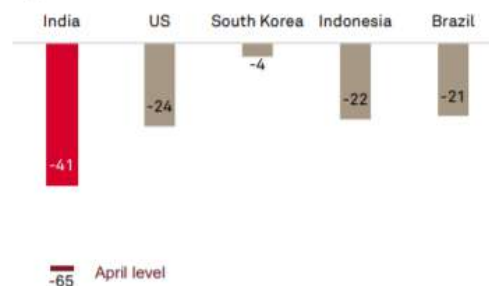
Grocery and pharmacy: Grocery markets, food warehouses, farmers markets, specialty food shops, drug stores, and pharmacies



Public transport: Hubs such as subway, bus, and train stations



Workplace travel



Note: Data is for May 17, 2020. Google's Community Mobility Reports use smartphone location data to publish reports about people's movement in an area. India's smartphone penetration is 25-30%

Source: Covid-19 Community Mobility Reports by Google, and CRISIL

It is estimated that for each month of lockdown, the GDP (Gross Domestic Product) contracts by 2.5%. But with a microeconomic perspective, the pandemic has crippled our savings and tremendously affected our spending capability. It will come down to how each consumer reacts to the crisis which will shape the macroeconomic trends and implications.

The migrant labourers and daily wage earners that form the base of the employment pyramid are the ones who are hit to the core. The lockdown has displaced huge population of this class and left them with no work. They hail from the rural economy which accounts for majority part of the Indian economy as a whole.

Also seeing the huge unemployment rate that suggests that every 1 out of 4 persons from the employed class lost their jobs. The extended lockdown and future uncertainties over containment of the pandemic delivers a very grim image for India. This has led to exhaustion of savings in the economy and hence the aggregate demand is affected on a nationwide level. There are projections of massive shift in consumer preference and behaviour towards their needs and wants. Premium goods might have trouble getting accepted in the economy and the urge to adopt a superior product would vanish. This would in turn lead to the slowing of the economic wheel and any chances of future recovery are stunted as the lockdown progresses. Also, the above action would have a domino effect on other aspects of the economic activity such as there would be reduced investments back into the economy.

According to a survey, 50% of the rural Indian population has been eating less meals since the lockdown progressed. The depressed class including the daily wage earners and migrant workers have been forced to migrate to their home states in order to sustain their chances of survival. 67% of workers from India's unorganised sector lost their livelihood due to the lockdown, 74% of these households are consuming less food than they were before the lockdown.

So, there is an urgency to support the rural economy as it could wash away the tremendous and years of effort in India to uplift millions of citizens above the poverty line. Neglecting them would lead to another crisis in India which be more fatal than coronavirus and may be caused not due to any virus but due to hunger. It is in best interest of the government to support them for they form a huge portion of the local demand and also source of labour for many industries who could not resume their operations without them.

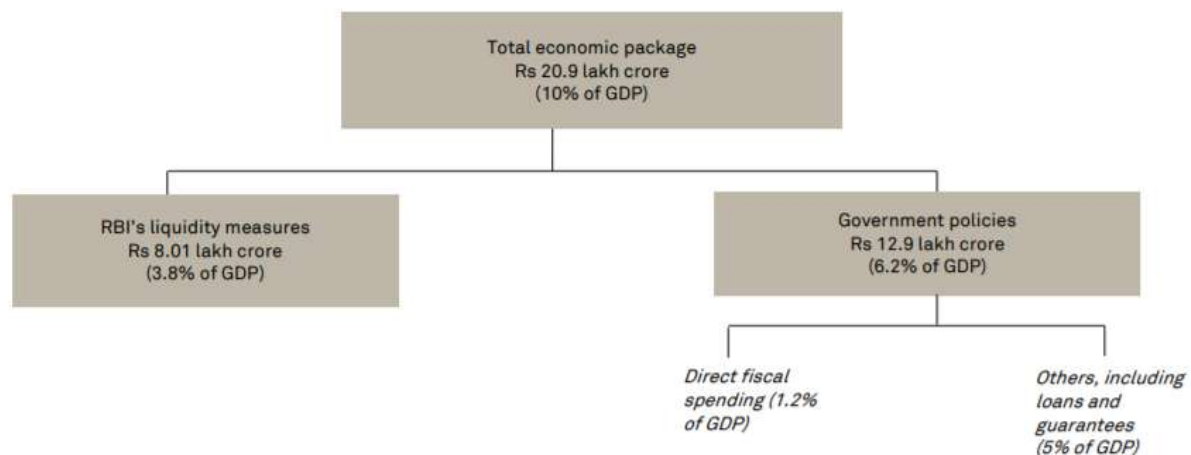
Conclusion

Arsenal of policy weapons to address the liquidity issue

Fiscal policy	<ul style="list-style-type: none"> • Providing guarantees against loans extended to MSMEs • Relief from insolvency proceedings in fiscal 2021 • Indirect equity infusion in MSMEs through fund of funds • Creation of liquidity facility to facilitate purchase of debt paper of NBFCs and HFCs
Monetary policy	<ul style="list-style-type: none"> • Slashing benchmark interest rates • Lowering reserve requirements for banks by cutting cash reserve ratio • Ramping up open-market operations • Targeted liquidity infusion to corporates through targeted long term repo operations • Regulatory forbearance including extending moratoriums • Special liquidity windows and refinancing facilities to certain financial entities

The Coronavirus pandemic highlighted the deep cracks in the Indian economic system wide open and clear. The crisis faced today is unprecedented and massive in scale of its economic cost. The Government of India announced the 'Aatma Nirbhar Abhiyan' that packed all the monetary measures announced by the Reserve Bank of India and all the fiscal measures by the government in a single initiative marketed mainly as being equivalent to 10% of India's GDP or \$270 billion in value, which was majorly in form of liquidity injections and loan guarantees. Though the actual fiscal spending by the government amounts to only 1% of the GDP.

Only ~1.2% of the 20.9 lakh crore package translates to a direct fiscal stimulus



The economic package was far sighted and included many reforms for the long terms that could prove to be monumental towards revolutionising certain industries but lacked to act on the immediate issues risen from the pandemic and uplifting the supply side. The package aimed to target the two big targets of supporting MSMEs and the agriculture sector. Schemes like 'One Nation One Ration Card' and liberalising the rules framework to provide more options and flexibility to farmers to sell their produce at a competitive rate in other states thereby abolishing the practices of a monopsony market situation which proved a major role in depreciating the value earned by the producers in the sector and thereby transferring their gains to the middlemen who worked in collaboration and aided by the outdated central rules that prevented farmers from selling their produce in other states.

The Economic package aims more at easing the pain than providing immediate gains to the stressed sectors. The allotment of 3 lakh crore rupees as loan guarantee to the MSMEs would provide only little relief to these businesses majority of which were already in massive debt and on verge of defaulting. This could however be complemented by a direct liquidity injection which could have been more effective in providing capital for immediate operations like covering working capital and maintaining cash flow.

The Economic package introduced several schemes to provide ration to the poor and provide shelter by setting up camps but it is no surprise that India lacked implementation. We lack the data system to identify these people and to also track self-employed people like the hawkers and the vendors. One of the critical infrastructure that was created called the Jan Dhan accounts could be monumental in supporting the poor. But there are challenges experienced in this field too. Around 20% of these accounts are dormant. For the rest, banking facilities are not that easily accessible in rural India. And for the rest population of stressed class would have bank accounts, so it is truly a challenge to get the benefits of the schemes to them. This is also evident from the below scenario.

A scheme that aimed at providing loans worth 10000 rupees to the hawkers and vendors was announced in the package. It aimed at benefitting 50 lakh hawkers and vendors. But in the 2020 budget it was estimated that there are 1 crore hawkers and vendors in India. In reality the mismatch between claims and facts arises with the situation that there are only 13 lakh people with a valid certification that certifies them in class of hawkers and vendors.

Also, one of the main expectations from the package included the direct cash transfers to the poor in order to uplift the demand side. Though this failed to become a reality but it is a need of the hour. We are quickly turning into high risk of letting more people die of hunger than coronavirus.

With respect to the economy as a whole we are in midst of crisis experienced never before with a very uncertain nature involving risk of second wave of the virus. Though there are some positives for the economy in form of low crude oil prices which could provide some fiscal breathing space to the government and an onset of normal monsoon this year. Also, the strength of the Indian economy lies in its huge domestic consumption and hence if we are able to moderate the supply-demand disruption, we could expect to achieve steady recovery.

It is imperative that we ride the wave and not just predict ourselves on the other side without some pain. It is necessary for government to focus on effective packages and not on them being grand. Also, it is the need of the hour to have an approach of thinking of policies for a world where coronavirus may be a critical part of for a long time. The assumptions surrounding development of vaccine is only an escape in our minds from the actual pain that we have suffered and disruptions that would become a part of our lifestyles. There are several metrics that people debate of crossing the critical limits but these are unusual times which requires some difficult measures and difficult decisions that may shape our future wellbeing and ultimately also the direction in which the new economic world order would develop.

COVID-19: AN IMPACT ON THE FINANCIAL MARKET

INTRODUCTION

Financial markets have been on a downward swing since the spread of COVID-19. The massive change in asset prices, a drastic increase in volatility and downgraded ratings are the current market trends. The global lockdown, supply shocks, lower production and higher operating costs followed by massive demand cuts have pushed the companies into an early economic recession. Global economists and the world economic forum itself quotes "Globally, the coronavirus shock is severe even compared to the Great Financial Crisis in 2007–08". The biggest shock witnessed by the market was the adverse price of the Crude WTI future falling as low as -\$37 a barrel. Underscoring the market swing, there have been various corrective measures by the governments globally.

HISTORICAL BACKGROUND

Mark Twain said, "History doesn't repeat itself, but it often rhymes."

The COVID -19 pandemic has been a crisis like no other. It surpasses the Spanish flu, Ebola, the Great Depression and the 2008 Recession in all its characteristics. The mortality rate due to the pandemic has been on the lower end when compared to similar respiratory disorders, but the infection rate is far higher.

EPIDEMICS	FATALITY RATES(DEATH/ CASES)	INFECTION RATES(PER INFECTED PERSON)
EBOLA	50%	1.5-2.5
MERS	34.30%	0.42-0.92
SARS	10%	3
COVID-19	1%-3.4%	1.5-3.5
SEASONAL FLU	1%-3.4%	1.3

Table: 1 Depiction Of The Fatality Rates And Infection Rates For Different Epidemics

Looking at the far-reaching effects of the outbreak of infectious diseases and the investors' sentiment related to it, the effect of the 2003 SARS virus resulted in a loss as high as \$3 trillion value in GDP, and \$2 trillion value in financial equity markets. Ming-Hsiang Chen, Shawn, and Gon studied the effect of the SARS virus on the Taiwanese Hotel Stocks employing the event study methodology, which reflected that during the outbreak period, seven publicly traded hotel companies saw a steep decline in stock prices which was a result

of the decrease in the hotel incomes. The hotels showed abrupt negative Cumulative Average Abnormal Return (CAAR) on the day of the event and after the day of the event, which confirms the significant impact of the SARS Virus on the performance of the Hotel Stock.

In other research works carried out by Del and Paltrinieri, which evaluated the performance of 78 Mutual Funds geographically based in African Countries, suggested that Ebola and the Arab Spring led to severe effects on the fund flow and spending resulting in reasonably low performance of the fund and reduced returns. Macciocchi et al. studied the short-term economic impact of the Zika virus outbreak on Brazil, which showed significant negative gains.

STUDY OF THE INVESTORS' SENTIMENT

The WHO and other public health officials have been on a permanent role in communicating the possible risks of the outbreak. Despite this, significant economic hotspots face a massive contraction of the disease, with the United States being affected the most with over 100,000 deaths in the country by the end of May 2020. All of these have been instrumental in shaping the investor's sentiment towards the disease. This investor sentiment, although often underestimated, influences the markets significantly. Nullifying the Efficient Market Hypothesis, when the market is trending upwards, and there is a less perceived risk, and then investor behaves more optimistically. When the market is trending downwards, then investors' sentiments become relatively pessimistic, and investors will tend to wait to enter the market until a revival begins. Such situations lead to short term investor overreaction. Researchers suggest that media coverage also affects the actions of investors, the higher the number of articles relating to unexpected events, the higher the number of withdrawals.

Investors, in general, are attracted to an investment that has a high Sharpe Ratio. Named after its creator, William Sharpe, this ratio describes the excess return received for the extra volatility endured from holding a high-risk asset. Simply put, it is the reward to risk ratio.

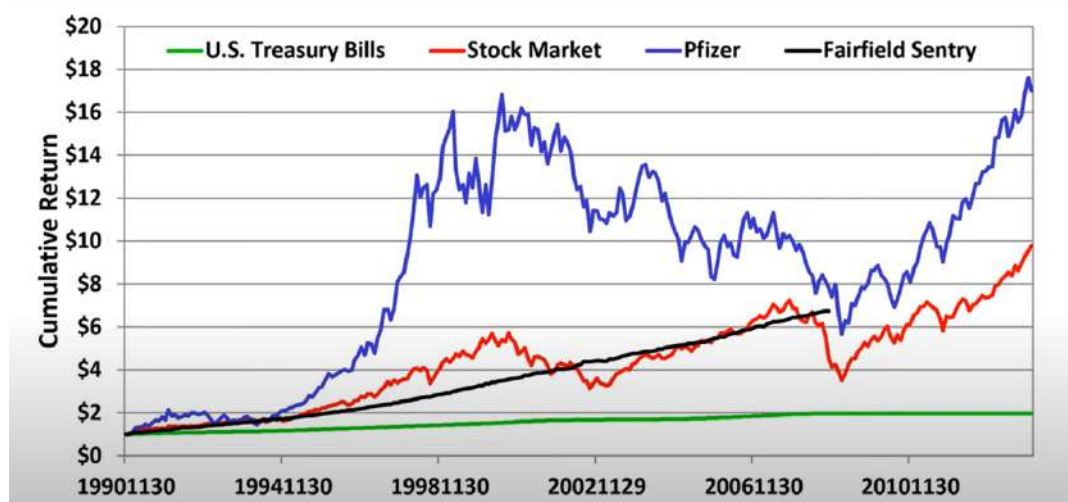


Figure: 1, Cumulative Returns for different investment option over a period of 20 years

In a depiction of the Sharpe Ratio, we see four different investment avenues. The U.S. Treasury Bills depicted by the green line, the general stock market say the S&P 500 by the

Red line, investment into a particular company, for example, Pfizer, and the Fairfield sentry fund. The black line indicating the Fairfield Sentry fund has the highest Sharpe ratio and thus the most chosen option for the investment. The safer and lower the risk, lesser is the return. This is shown by the U.S. Treasury Bills, which are perceived as the safest investment option.

According to researchers, the behavioural relation of the investors to uncertainty has been significant. In this situation, a discussion on the risk and uncertainty feels necessary. Risk is any quantifiable randomness in the market, whereas uncertainty is unquantifiable randomness in the market. It is unknown. There are significant challenges of COVID-19 to personal lives, include lockdowns or lockdown-like situations for a large number of people. Due to the extreme occurrences of death and disease, many people across the globe are panicking because of this fast-spreading infectious disease. Such external and unexpected shocks can bring down economic trends and suddenly change investor's sentiments. COVID -19 is the unknown, and in the face of this unknown, investors feel pessimistic about the investment prospects in a given market and mostly sell off the stocks under the threat of an outbreak. In countries with low institutional participation and a higher susceptibility to herd-like actions, the investor sentiment on the stock market is more pronounced.

MARGINAL CHANGE NUMBER				
DATE	CHINA	USA	SHANGHAI F/STOCK	NEW YORK F/STOCK
1/3/2020	-	-	2982	25910
2/3/2020	202	5	2982	25910
3/3/2020	123	25	2998	26000
4/3/2020	119	22	3002	26361
5/3/2020	139	31	3005	26511
6/3/2020	143	79	3020	26391
7/3/2020	99	85	3020	26391
8/3/2020	44	111	3020	26391
9/3/2020	40	140	3036	25970
10/3/2020	19	170	3016	25789
11/3/2020	24	282	3009	25820
12/3/2020	18	302	3005	25609
13/3/2020	1	403	3007	23474
14/3/2020	27	607	3007	23474
15/3/2020	0	504	3007	23474
16/3/2020	36	941	2998	22361
17/3/2020	21	935	2898	21729
18/3/2020	13	1806	2894	21248
19/3/2020	17	7792	2865	20135

20/3/2020	56	19	2833	20015
21/3/2020	41	5321	2833	20015
22/3/2020	46	7461	2833	20015
23/3/2020	39	8307	2833	19594
24/3/2020	78	11029	2741	19383
25/3/2020	47	8786	2671	19233
TOTAL	1392	55163	73515	587203

Table 2: Daily marginal change for the COVID - 19 confirmed cases in China and USA. The rest column shows the China - Shanghai Stock Financial Market and USA - New York Dow Jones from 1st March 2020 to 25th March 2020 in China and USA

The table above shows the daily marginal change for the confirmed cases of COVID-19 in USA and China compared with the performance of the stock market in the two countries. The study by Nuhu A Sansa establishes that there is a strong positive correlation between the number of confirmed cases and the stock market. This study is proof of the influence of the investor sentiment on the investing activity. It has also been seen that the Chinese market generally remained stable compared to overseas markets despite the spread of the coronavirus.



Globalization, economic assimilation, and integration among countries have led to the formation of interdependent and interlinked financial markets. A rapid increase in the cross-border mobility of private capital inflows due to investors seeking portfolio diversification and better yields, a growing reliance of nations on the savings of other countries, and a shift in the leverage preference of companies from debt to equity finance have all contributed to higher linkages between the stock markets globally. The general perception of integrated markets has been linked to the various benefits like effective price discovery and development of the market, which will eventually lead to better investments on the part of the investors, increased savings, and hence economic progress.

Nevertheless, the linkages can also pose a risk to the financial market, such as the contagion and disruption of the economic activity evident during a crisis as seen in Asia in the late 1990s and more recently in the 2008 Global Financial Crisis. This has had a severe impact on the investors' decisions regarding asset allocation and on economists regarding economic policies to ensure stability. A study by researchers Kim and Yoon analyzed the linkages between the Asian stock market using the vector autoregression model and concluded that all Asian markets, except Malaysia, showed a strong correlation during crises. This correlation may, however, have individual variations, as some markets appear more correlated than others.

Although Globalization brings several benefits with itself, it also plays significant roles during global infectious outbreaks. The world has already been hit by several infectious diseases such as the Crimean Congo hemorrhagic fever, Nipah Virus, Zika Virus, SARS, Ebola virus, MERS CoV, and many others. Studies show that the frequency of such outbreaks is on the rise. It thus becomes essential to monitor the spread of such contagious diseases as they affect the health of numerous people and decelerate the global economic wheel.

It has also been studied that impact of coronavirus on various countries has been on the aspects of importation. Since a large number of states are dependent on the Chinese production for their raw materials, the import of goods has been a problem due to the severe supply shock, thus leading to a decline in the production of products in other countries as well. Therefore a massive number of countries that depend on Chinese imports are automatically affected due to COVID-19.



MARKET ANALYSIS

Various studies show a steady decline in the returns of indices around the globe, especially in the most affected countries. Table 3 shows the list of the ten worst days on the markets for the S&P 500 in history. March 2020 lands at the third spot here with the most significant change in terms of points dropped by the Index. The other events are the Great Depression of 1929 and the 2008 Global Financial Crisis.

RANK	DATE	PERCENTAGE CHANGE
1	<u>1987-10-19</u>	-20.47
2	<u>1929-10-28</u>	-12.34
3	<u>2020-03-16</u>	-11.98
4	1929-10-29	-10.16
5	1929-11-06	-9.92
6	<u>2020-03-12</u>	-9.51

7	1937-10-18	-9.27
8	<u>2008-10-15</u>	-9.04
9	2008-12-01	-8.93
10	1933-07-20	-8.88



Table 3: Top 10 worst days for S&P, 500

The overall fall in production all around the globe has been a significant cause of this drop in the market. The Indian market represented by the SENSEX also experiences two of its most significant declines in March falling by 2467 points and 1460 points on the 9th and 6th of March respectively.

Figure 2 shows a comparative analysis between the CBOE Volatility Index (VIX) and the S&P 500. Created by the Chicago Board Options Exchange, VIX represents the 30 days forward-looking volatility of the market. It is a real-time index, based on the price inputs from the S&P 500. VIX is used by investors to measure the perception of risk, fear and stress for the investors while making their investments. The blue line is symbolic of VIX, whereas the Black line measures the performance of the S&P 500. It can be seen that volatility has gradually been increasing from February and peaks in March. As volatility increases, the performance of the S&P drops. Volatility is also symbolic of the investor distrust, thereby resulting in severe price movements.



Figure 2: A comparative analysis of CBOE VIX and S&P, 500

An analysis of the NIFTY 50 also shows a significant drop during the Coronavirus pandemic. The Index that was close to 12,000 points dropped without any signs of recovery to as low as 8000 points in March only to recover to up to 9500 points. We have to remember that this drop has been a result of the market integration but more importantly, because of the nationwide lockdown imposed by the Government of India. The investor's sentiment in anticipation of low demand, Lower production and hence a recession like situation has led the market to drop significantly.



Figure 3: Analysis of the performance of NIFTY 50

RANK	DATE	CLOSE	DAY HIGH	DAY LOW	POINT SWING	NET CHANGE
1	2020-03-13	2,711.02	2,711.33	2,492.37	218.96	+230.38
2	2020-03-17	2,529.19	2,553.93	2,367.04	186.89	+143.06
3	2020-03-12	2,480.64	2,660.95	2,478.86	182.09	-260.74
4	2020-03-16	2,386.13	2,562.98	2,380.94	182.04	-324.89
5	2020-03-18	2,398.10	2,453.57	2,280.52	173.05	-131.09
6	2020-03-25	2,475.56	2,571.42	2,407.53	163.89	+28.23

7	2020-03-03	3,003.37	3,136.72	2,976.63	160.09	-86.86
8	2020-03-20	2,304.92	2,453.01	2,295.56	157.45	-104.34
9	2020-03-10	2,882.23	2,882.59	2,734.00	148.59	+135.67
10	2020-03-19	2,409.39	2,466.97	2,319.78	147.19	+11.29

Table 4: Largest Intraday volatility swings

The pandemic has also led to increased volatility in the market. The instability can also be seen in the intraday point swings. Table 4 shows the most considerable intraday point swings for the S&P, 500. The 10 of the most significant fluctuations in history have been in March 2020 following the classification of the COVID-19 as a pandemic. This gives investors a chance to benefit from such intraday trades if they know the market strategies and enter and exit the market at appropriate timings.

CONCLUSION

It is imperative to recognize that the coronavirus pandemic is a time like no other. The market inevitably imitates the other economic downswings like the Black Monday of 1987 or the Global Financial crisis of 2008. Still, these were an economic crisis that could be recovered with the help of government stimulus. The COVID-19 crisis has left both the markets and the governments at the face of uncertainty about the future. This unpredictability has resulted in a pessimistic investor attitude.

It has also been seen that there has been a constant increase in the investment in government bonds which is indicated by their declining yield rates over time. The government bonds are perceived as the safest investment over time. This shows that investors in the face of uncertainty, become risk-averse and take a flight to safety and quality.

However, the market is not all gloomy. When we notice that steadily declining prices of several stocks, there have also been stocks that have risen to most significant highs during the pandemic. The figure below shows precisely this story. Where the pandemic has pushed people back into their homes, stocks of video communication company like zoom are performing at an all-time high whereas the cruising line that has been adversely hit has

stooped to an all-time low. An intelligent investor can benefit by investing in such stocks and gaining returns from them

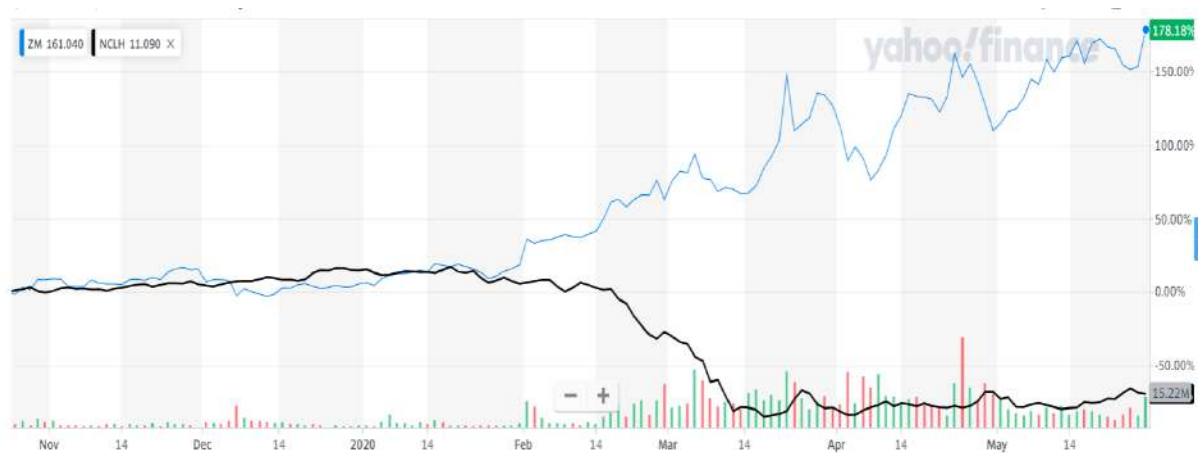


Figure 4: A comparative analysis of the stock prices of Zoom Video Communications and the Norwegian Cruise Line Holdings

Sure the market shows signs of recovery at the easing of lockdowns globally in several countries, but we do not have an estimate of where the economy will stand when it fully recovers from this shock. To make matters worse, there has been a growing distrust with regard to the Chinese market and the tension between the United States and China sees no end. This can lead to an increased investment of the West in other countries with the potential to meet the supply standards of China in all respects.

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THE TALE OF COVID-19 IN THE GENTLEMAN'S GAME

INTRODUCTION

Cricket is an international sport, with first origin dating back to 1500s. Cricket was popularized by the imperials on the colonials during 19th and 20th century. With more and more colonies competing against England, the need of a proper administrative structure was felt. Imperial Cricket Conference was formed by England and its two colonies, Australia and South Africa in 1909. It was later renamed to International Cricket Conference in 1965 once independent countries started competing at the international level post World War II. 'Test Cricket' was the only format known to cricket lovers worldwide, which was played across a stretch of 5 days. In 1971, 'One-Day' format was introduced to cut-short the cricket game to 60 overs a side to obtain result within a day's play, in order to increase the declining viewership owing to the long duration of the game. England hosted the 'First Cricket World Cup' in 1975 and it was brought about as a revolution by the entire cricket community. India won the First title in 1983 when Kapil Dev led Indian team conquered the 'Mecca of Cricket - Lord's' and brought about a revolution in the third world. No one would have dared to imagine that the country who was reluctant to accept cricket as a national sport back in 1983, would become the centre of International Cricket's attention by the time 21st century sets in. In 1989, International Cricket Conference was again renamed to International Cricket Council with induction of more international countries. With evolving time, the viewership of 50-over side One-Day games were on a decline when England Cricket Board decided to introduce a new format. The blockbuster of cricket, eye-catchy to even non-cricket followers, Twenty-20 format was first rolled out in English counties in 2003. By 2005, the World was ready to adopt to the format which was meant to change cricket forever. 2007 saw the First Twenty-20 World Cup played in South Africa. Mahendra Singh Dhoni led young Indian team not only won the world competition, but also brought around a revolution in a country with over a billion population. Board of Control for Cricket in India (BCCI) quickly realised that the Indians had fallen in love with this format and in came Lalit Modi founded 'Indian Premier League' which would prove to be amongst the most expensive sports leagues across the globe. Indian Premier League helped Indian Cricket achieve a global stage with mass revenues and popularity. Since the inception of IPL, BCCI has become the richest cricketing board on the planet. IPL is nothing short of a global centre-stage where the viewership of the 'IPL Final' reaches nothing short of half a billion people across the World. 'The Big Three', as referred to the cricketing boards of three biggest cricketing nations, Board of Control for Cricket in India (BCCI), England Cricket Board (ECB) and Australian Cricket Board (ACB), prove to be the strongest and the best in terms of revenues and mass acceptance with BCCI accounting for 28.3% of all the revenue generated by the ICC. The cricket match between the arch rivals India and Pakistan at Adelaide Oval, Adelaide at the ICC Cricket World Cup 2015

was estimated to have been viewed by over a billion people. The recently hosted ICC Cricket World Cup 2019 by England, was estimated to have boosted the United Kingdom economy by \$538 million in a span of 46 days. The last edition of Twenty-20 Global tournament was hosted by India back in 2016 and was expected to be held in Australia in late 2020 after a span of 4 years. Due to the COVID-19 pandemic, the chances of the tournament getting a green signal from the stakeholders seems bleak as the cricketing boards anticipate a huge revenue deficiency in terms of operations cost.



IMPLICATIONS OF CORONA-VIRUS DISEASE 2019 (COVID-19) ON INTERNATIONAL CRICKET

The global economic slump triggered by the COVID-19 Pandemic could change the entire sports industry in ways thought unthinkable till now. Some sports will be hit harder than others depending on how much it is followed in which part of the World. The economic structure of international cricket is likely to change and lower-ranked nations will face a crunch in funds. The key revenue generation for cricketing bodies is through licensing of television broadcast rights. With the stoppage in global events, it is likely that most cricket boards will face financial hits. Indian cricket could be relatively better placed as compared to other cricketing nations like West Indies, Bangladesh and Sri Lanka which can face challenges if their media contracts are not renewed. Without enough cash flow, some nations might even struggle to meet basic expenditure and unless they are provided with support, there could be some irreversible casualties.

The broadcast rights of Sri Lanka Cricket (SLC), Pakistan Cricket Board (PCB) and the West Indies Cricket Board (WICB) – held by Ten Sports (Sony Pictures) have come to an end. The Bangladesh Cricket Board (BCB), that had sold its world media rights for six years in 2014 for an approximate \$20 million (around Rs 140 crore in today's exchange), was due to renew its broadcast deal in April. Should cricket remain absent from the calendar over the next six months, these boards run the risk of a massive economic and financial failure. Simply put, other than India and to an extent England, the rest of the cricket world will be on a hand-to-mouth existence if this scenario continues.



The WICB has been in the market from January this year after their existing broadcast deal with Ten ended last year and due to the declining popularity of cricket in the island countries, they seem to be left out without a contract. PCB, which already lost out on revenue with the Pakistan Super League (PSL) being called off mid-way, too happens to be in the same boat as Sri Lanka and the West Indies. Bangladesh cricket, otherwise a sustainable property, will sit without a broadcaster and sponsors once their existing deal runs out.

The big question in midst of the global pandemic right now is: "Where will these cricket boards earn from? The only other opportunity to make up for the losses was through participation money in an ICC tournament, for instance the T20 World Cup. Each participating country earns a participation fee of around \$5 million (approx. Rs 35 crore). If T20 Cricket World Cup gets cancelled, they'll lose this money too. The Asia Cup is unlikely to be held, so PCB – whose turn it was to host it – will end up losing substantially once again.

It is obvious that the COVID-19 pandemic has devastated world cricket and set it belly up:

England's season has been ripped apart and the attendant loss of revenue has crippled counties. The Hundred, ECB's much-touted innovation in limited-overs cricket, which was to be launched with much fanfare, looks a doubtful starter. Counties have already taken a massive blow with their season yet to start and staff has been furloughed (leave without pay). Professional cricketers (their agents, families, sundry folks) are left staring at huge pay cuts. Sure, England have an ambitious calendar of international cricket planned for the summer which includes Test series against West Indies and Pakistan and limited-overs series against Australia, besides matches against Ireland. But it is likely that none of it might see daylight, especially if COVID-19 and travel restrictions stayed in place.

West Indies players have not been paid January's installment of their contract. South Africa, Sri Lanka, Pakistan, Zimbabwe and other boards are all reeling under loss. The US\$ 7 million July pay out (half-yearly amount; varies from country to country) from the ICC looks unlikely, especially if television deals connected to ICC property events do not go through.

Unlike England dithering between their The Hundred and international cricket, Cricket Australia seem focused on pulling off the Test series against India later this year. They confess that they would take a devastating 300 million dollars hit in television revenue if the lucrative series is called off and their anxiety is apparent in the list of unheard-of measures presented. This includes playing all Tests (from four to five) at the Adelaide Oval and without any spectators. The Tests and warm-up games would be beamed over live television for worldwide audiences. They have offered a brand new 138-room luxury hotel in which South Australia Cricket Association has a 50 percent stake in management for the exclusive use and quarantine of the Indian team. In any case, hosting the Indian team would be far simpler than juggling with 15 countries over seven venues in the ICC T20I World Cup during October-November this year.

Besides the obvious mega bucks that will come their way, India (360 points) and Australia (296 points) would like the Tests to go ahead to retain their top positions in the World Test Championship race to the 2021 final in England. The third and fourth-placed teams, New Zealand (180) and England (146) are far behind. Of course, many Tests still need to be gone through against the backdrop of COVID-19 and it would come as no surprise if the final was put off by one year.

International Tenders scheduled to come out in 2020-21

1. IPL starting 2023;
2. ICC global rights for 2023-31 cycle;
3. BCCI bilateral rights starting 2023;
4. ECB bilateral rights (2024).

INTERNATIONAL CRICKET SCHEDULE FOR 2020 THAT NOW RUNS THE RISK OF NOT BEING PLAYED

TEST CRICKET

1. West Indies tour of England;
2. Australia tour of Bangladesh (no broadcaster);
3. Pakistan tour of England;
4. India tour of Sri Lanka (no broadcaster);
5. South Africa tour of West Indies (no broadcaster);
6. India tour of Australia (heading into 2021).

ONE-DAY CRICKET

1. Ireland vs Zimbabwe (no broadcaster);
2. Bangladesh vs Ireland;
3. New Zealand vs Scotland;
4. Pakistan vs Netherlands (no broadcaster);
5. New Zealand vs West Indies (no broadcaster);
6. Australia vs England;
7. Ireland vs England;
8. India vs South Africa (proposed).

GLOBAL TWENTY-20 LEAGUES

1. Indian Premier League (IPL - India);
2. Caribbean Premier League (CPL – West Indies);
3. Pakistan Super League (PSL – Pakistan);

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IMPLICATIONS OF CORONA-VIRUS DISEASE 2019 (COVID-19)

ON INDIAN CRICKET

Indian cricket saw the series against South Africa abandoned due to the virus and could see the IPL washed out, however, it could still emerge with a bigger role to play going ahead. Cricket is likely to see a return of the 'Big Three' revenue sharing model, with the lion's share going to India, England and Australia, a financial model originally devised to tide over the 2008 recession.

The cancellation of the IPL will cost the BCCI, the tournament's broadcasters and the franchises at least Rs. 3,000 crores. All IPL franchises combined hire around 600 people, which includes freelancers and people on the payroll. Without any revenue coming in, their jobs will be impacted. That figure would be approximately Rs 10 crore. This, in turn, will have an effect on the Indian economy as well. The 2015 IPL contributed 1,150 crores to the Indian GDP, the BCCI had revealed. Even more than the cancellation of the IPL, the breaking of the chain of industries supporting sports is likely to hurt the Indian economy. Support staff, logistic companies, airlines and hotels are some of the sectors which could face the brunt

Cricket is most profitable in India. IPL's only in its thirteenth season and has already generated more money from sponsorships than Major League Baseball. According to advertising media company GroupM, the IPL made \$1 billion in sponsorship money in 2017. In 2017, the IPL was valued at \$ 5.3 billion, according to financial advisory firm Duff & Phelps. The IPL saw a 26 percent increase in its value from 2016, thanks to new broadcasting deals, the value of its title sponsor Vivo, and an increase in brand value for all of the teams, Duff & Phelps said.

Leagues like the IPL have adopted a streamlined version of the sport known as Twenty20. These games can, making matches easier to watch, and allows for more matches to be played. Hundreds of millions of viewers are now watching this new version of cricket. Over six weeks, eight teams in the IPL play against each other in a series of matches that culminate in a championship match with the final two teams. During the first week of IPL's 2018 season, it pulled in 371 million total viewers, according to Star India.

The hundreds of millions of viewers have caught the eyes of major U.S.-based media companies. In 2017, there was a bidding war for the global broadcasting rights for IPL. Companies like Fox, Facebook, and Sony threw their hats in the ring to get the rights. The winner was Fox, which struck a five-year \$2.25 billion dollar for the rights.

IPL's popularity extends well beyond India's borders, making its global broadcasting rights important. Cricket players around the world typically play in more than one Twenty20 league each year. The Twenty20 matches aren't just shorter, the seasons are shorter too. At a time when the world seems to be worried about the status of the Indian Premier League (IPL), and the damage it will do to the BCCI coffers, the industry is yet to wake up and smell the coffee

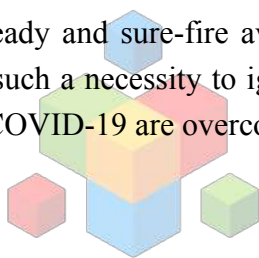
globally. Should the virus outbreak relent in some months from now and live cricket return to television, it's not a misnomer anymore that the IPL will take precedence over every other property, barring India's tour of Australia.

The world-wide chorus for some form of IPL to be staged either in India or elsewhere is a clear indication that there is a near-universal acknowledgement that world cricket would be in a good place only if Indian cricket is on song.

The impact of IPL goes way beyond its US\$ 7 billion brand value and the fat pay cheques that star players draw. There are scores of organisations that ride on it, including more than 100 team sponsors from industries as varied as mobile phones, telecommunications, cement, air-conditioners, televisions, finance companies, education, liquor, soft drinks, paints, cars, hospitals, food, food delivery, insurance, banks and dozens of others.

Then there is the broadcaster, social media outlet, hospitality industry, travel, event management, outdoor and other forms of advertising and scores of media companies and their employers that feed off the IPL.

It is this ready and sure-fire availability of diverse sponsors and assorted stakeholders that make IPL such a necessity to ignite world cricket as soon as these challenging times thrown up by the COVID-19 are overcome.



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‘BACK-TO-CRICKET’ GUIDELINES

Former India Captain Anil Kumble led committee was formed to draft the guidelines for cricket resumption in various parts of the World as the Global lockdown restrictions are being eased. ICC published the guidelines on May 20, 2020. The purpose of this report is to guide ICC Members in making policies for safe resumption of cricket based on their own evaluation of situation. The guidelines are relevant for all forms of cricket, international, domestic, community cricket as well. Some salient features of this report are:

- ✚ Cricket requires players to be in close proximity at times and involves the use of shared facilities. Therefore, should a team member or opponent develop any COVID-19 symptoms or be found to develop an infection, participants will require isolation and testing as they are most likely to have been in close contact.
- ✚ Although Cricket is not a contact sport, the cricket ball is a potential transmission medium and rules should be applied around the management of the ball.
- ✚ On-field behaviour that includes celebrations with body contact, and shared use of drink bottles, towels and equipment can pose a risk in cricket and should be strongly discouraged.
- ✚ Players should be encouraged to take responsibility for their own items (sunglasses, cap, jumpers, towels etc.) and instructed against handing over any items to umpires or teammates.
- ✚ Participants, in particular umpires, match referees and support staff may be considered vulnerable individuals that are at higher risk of severe illness due to COVID-19. This includes older individuals (approx. 60+) and people of any age with underlying medical conditions such as cardiac, kidney, diabetes, obesity, weak innate immunity, etc.
- ✚ Safe and effective return of players to strength and conditioning (particularly bowlers). Limited preparation may cause higher injury levels.
- ✚ Cricket is officiated by umpires on the field of play and their health and well-being needs to be taken into full consideration as they spend the greatest amount of time in close proximity to players.
- ✚ Government restrictions on air travel could delay the resumption of domestic and international cricket.
- ✚ Based on international evidence, transmission of COVID-19 is assumed to be greater for indoor sporting activity than for outdoor activity, even with taking similar mitigation steps. Extra caution should therefore be taken for any indoor cricket activity.
- ✚ Education of the health risks associated with COVID-19 underpins all other measures set out.

- ✚ Education will help promote and set expectations for player behaviour ahead of resumption in play.
- ✚ Players at all levels should be made aware that the ICC is expected to ban the use of saliva on the ball in the very near future (on medical advice).
- ✚ Education should include preventative measures such as: general hygiene practices – regular and thorough washing of hands with soap and sanitizing with an alcohol-based hand-rub, refraining from touching your eyes, nose and mouth and good respiratory hygiene such as coughing or sneezing into your bent elbow etc.
- ✚ Hygiene practices specific to cricket such as no sharing of drink bottles and towels and the safe management of the ball. Wherever possible, items of cricket equipment should not be shared with anyone else unless an appropriate cleaning protocol is followed.
- ✚ Players should be advised to minimise the use of changing rooms, shower facilities and other communal areas. Where possible, players should be encouraged to shower and change at home instead of at match and training venues.

BACK TO TRAINING

- ✚ Consider appointing a Chief Medical Officer and/or Biosafety Official who will be responsible for implementing government regulations and the biosafety plan to resume training and competition.
- ✚ Consider the need for a pre-match isolation training camp with health, temperature checks and COVID-19 testing – e.g. at least 14 days prior to travel to ensure the team is COVID-19 free.
- ✚ Develop an appropriate COVID-19 testing plan during training and competition.
- ✚ Testing plan – frequency and timing of COVID-19 tests.
- ✚ Polymerase Chain Reaction (PCR) – laboratory based or point of care testing (speed, accuracy, and cost considerations)
- ✚ Optional serology testing
- ✚ Private vs government laboratory (speed and cost)
- ✚ Medical support – requirement of infectious disease doctors and nurses for sample collection and results management.
- ✚ A risk assessment of training and match venues must be carried out to ensure precautions are taken to minimize risks and provide a safe workplace for those participating in cricket. This should include: The protocol and frequency of cleaning shared facilities
- ✚ Availability of hand sanitizers in prominent places (entry/exit and high traffic areas) around training and match venues.

- Ensure protocols are in place for players attending training or competition to maintain social distancing of at least 1.5m on-field and off-field (or as indicated in government guidelines in your country).
- Consider the age and health of participants and recommend against high-risk individuals participating in training or competition.
- Develop a process for participants to report COVID-19 symptoms and for team doctors to monitor health.
- Personal equipment should be sanitised before and after use (training and competition).
- Equipment sharing should be avoided where possible and if sharing is required (such as in the gymnasium) strict hygiene and sanitising protocols should be followed.
- Treatment beds in medical rooms should have no bed linen and should be appropriately and thoroughly cleaned before/after every patient.
- All participants should adopt a 'ready to train' approach where possible i.e. come to training prepared without the need to use any communal facilities such as changing rooms or showering facilities.
- It is important that players are given adequate timescales to build to the required intensity. The three international formats all have differing physical requirements. An adequate level of physical preparedness is required to underpin the return to international cricket.



BACK TO TRAINING

- Health and temperature checks should be monitored for all participants at training and match venues

- do so and there is no evidence that the local COVID-19 transmission rate has risen because of this training activity.
- When using a training facility, training should be staggered where possible to minimize numbers, maintain social distancing, and reduce contact. Consider modifying training times so there are less people present at any one time.
- Personal equipment should be sanitized before and after use (training and competition). The use of external equipment should be limited where possible.
- Equipment sharing should be avoided. If unavoidable, an appropriate cleaning protocol should be followed before and after use.
- Consider the age and health of participants and recommend against high-risk individuals participating in training or competition.
- Participants should arrive ready to train and avoid using communal facilities where possible.

BACK TO TRAVEL

- Where possible, players should travel alone to and from trainings and matches unless they are living in the same household. Where this is not possible, social distancing should be maintained.
- Where using public transport to travel, players should avoid travelling at 'peak' transport times to limit contact with others.

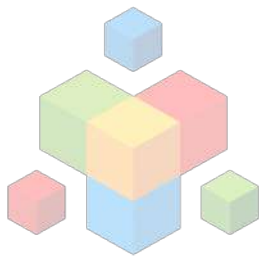
BACK TO PLAY

- Review domestic playing conditions to minimise risks associated with playing during this COVID-19 period.
- Consider rule amendments to allow for the safe management of the ball:
 - ✓ Regular hand sanitising when in contact with the ball
 - ✓ Do not touch eyes, nose, and mouth after making contact with the ball
 - ✓ Saliva should not be used on the ball
 - ✓ Umpires to consider wearing gloves when handling the ball.
 - ✓ Consideration should also be given to rule amendments to maintain social distancing (e.g. field positioning).
 - ✓ On-field protocols – For example, no unnecessary body contact and no handing over items (cap, towels, sunglasses etc.) to umpires or teammates. Each player should be responsible for their own items.
 - ✓ Off-field protocols – For example minimal use of communal facilities before and after the match, social distancing to be maintained at all times. A 'ready to play' approach should be adopted.
 - ✓ Discourage sharing of all equipment where possible. If it is required ensure equipment is cleaned appropriately.

✓ If spectators are permitted, social distancing should be maintained.

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Covid-19: Impacts on Chemical & Fertilizer Industry

Deepak Bhardwaj

02nd June 2020

Overview of Chemical & Fertilizer Industry in India

India is predominantly an agrarian economy. Around 71% of the land in India is agricultural land. The Indian economy mainly depends upon its agricultural produce. The agricultural outputs contributes to about 25% of the India's GDP. As a result of the chemical fertilizers being one of the related parts of the agriculture, there is tremendous scope for the growth of the chemical fertilizer industry in India.

Today, the Indian chemical fertilizer industry is developing fast in ways of using the latest world-class technology. Indian manufacturers of chemical fertilizers are now adopting some of the world class and most advanced manufacturing processes to prepare innovative new products to supplement the Indian agriculture. India, however is also ranked as the third-largest exporter and producer of nitrogenous fertilizer.

In the present day scenario, there are more than 57 large-sized and 64 medium- and small-sized chemical fertilizer production units all over India. The main objective of these chemical fertilizer industries is to make sure that there is a proper supply of primary and secondary fertilizers to the Indian crops in enough quantities. Some prominent products manufactured by the Indian fertilizer industry are nitrogenous fertilizers, phosphate-based fertilizers, calcium ammonium nitrate, urea, ammonium sulfate, ammonium bicarbonate and other complex fertilizers.

The chemical fertilizers industry in India has performed a major role in enabling the increased supply of essential nutrients to plants. However it has also helped India achieve the objective of being self-sufficient in the production of food grains and has accelerated the growth of agriculture in India.

The chemical fertilizer industry is one of the most energy-intensive sectors, and it is very vital from the viewpoint of environmental discussions and environmental sustainability. Today, there is a great need to increase the productivity of chemical fertilizers through implementation of pollution-free and environment-friendly technologies. This will be helpful in achieving economic, social, and environmental development objectives. Thus promoting sustainability in the economy.

The chemical fertilizer industry of India gained momentum after India adopted the liberalization and globalization policy in early 1991. The government aimed to reduce subsidies and attract new investments by decontrolling all the phosphatic and potassic fertilizers in India.

The Department of Fertilizers is the nodal organization that is responsible for the planning, development, and promotion of the chemical fertilizer industry in India. This department also monitors the production, distribution, and imports of fertilizers in the economy. Besides, it is also responsible for management and provides financial assistance to the investors who are investing in the sector.

The Indian Chemical Fertilizer industry promises a great future for investments. India's demand for fertilizers is set to increase its supply manifold in the near future. Thus, there are great investment opportunities for foreign investors to invest in the Indian chemical fertilizers industry, optimize the fertilizer production through the use of modern technology, and gain valuable returns. The government of India has made ambitious plans to set several chemical fertilizer projects in place. These plans aim to increase the production of fertilizers; thus, there are a lot of opportunities for new investors to enter into a joint venture with government undertakings and earn good returns on investments. Thus helping in increasing flow of FDI (Foreign direct investment) in the economy.

Great potential lies ahead for foreign investors looking to invest in the chemical fertilizers industry in India if they invest in the state of Gujrat as the state is foreseen to be a leading state in the production of fertilizers as compared to the other states.

Market Analysis:-

Data from the Department of Fertilizers shows all-India nutrient sales at 20.56 lakh tonnes (ltr) in April 2020, as against 14.17 ltr in April 2019 and 12.96 ltr in April 2018. The annual sales growth in April was 36.2 per cent for urea (10.95 ltr versus 8.04 ltr in April 2019), 71.7 per cent for di-ammonium phosphate (2.97 ltr versus 1.73 ltr), 81.4 per cent for nitrogen-phosphorous-potash-sulphur complex fertilizers (3.9 ltr versus 2.15 ltr), 43 per cent for muriate of potash (1.33 ltr versus 0.93 ltr), 5.6 per cent for single super phosphate (1.31 ltr versus 1.24 ltr) and 37.5 per cent for compost (0.11 ltr versus 0.08 ltr).

The 45.1 per cent year-on-year sales jump in April does not seem a one-off phenomenon. As the accompanying table shows, every month from November has registered double-digit growth in retail fertilizer sales.

The rabi season was great for us because of an extended monsoon, that led to groundwater tables getting recharged and reservoirs being filled to near capacity. Farmers, therefore, planted more area. They now want to utilize the substantially improved soil moisture for the ensuing kharif season as well, which is reflected in the April sales.

The covid-19 lockdown has clearly not impacted nutrient sales, partly because of agricultural inputs being exempted from any movement, distribution or retailing restrictions. If anything, it may have helped.

Just as with the panic buying we saw for foodstuffs, dealers wanted to stock up in anticipation of kharif demand. We normally supply on 2-2.5 months credit to enable sales that peak only after June, but they actually lifted material on cash this time. Also, they feared that the rupee's weakening may cause prices of imported fertilizers and inputs to go up in the coming months.

ALL-INDIA FERTILISER RETAIL SALES (LAKH TONNES)

	2018-19	2019-20	% Growth
Oct	48.37	45.17	-6.62
Nov	63.26	73.84	16.72
Dec	70.86	87.08	22.89
Jan	58.04	64.5	11.13
Feb	30.39	46.61	53.37
Mar	24.6	28.96	17.72
Apr	14.17*	20.56**	45.1

*April 2019, **April 2020.

Source: Department of Fertilisers.

UREA Production:-

Installed Capacity and Production of Urea During 2019-2020

Name of Plants	Installed Capacity
Public Sector	
BVFCL:Namrup-II	240
BVFCL:Namrup-III	315
MFL:Chennai	486.8
NFL:Bhatinda	511.5
NFL:Nangal-II	478.5
NFL:Panipat	511.5
NFL:Vijaipur-I	864.6
NFL:Vijaipur-II	864.6
RCF:Thal	1706.8
RCF:Trombay-V	330
Total (Public Sector)	6309.3
Co-Operative Sector	
IFFCO:Aonla-I	864.6
IFFCO:Aonla-II	864.6
IFFCO:Kalol	544.5
IFFCO:Phulpur	551.1
IFFCO:Phulpur-Exp	864.6
KRIBHCO:Hazira	1729.2
Total (Co-Operative)	5418.6
Private Sector	
CFCL:Gadepan-I	864.6
CFCL:Gadepan-II	864.6
GNFC:Bharuch	636
GSFC:Vadodara	370.6
IGCL:Jagdishpur	864.6
KSFL:Shahjahanpur	864.6
MCF:Mangalore	380
NFCL:Kakinada-I	597.3
NFCL:Kakinada-II	597.3
SFC:Kota	379
SPIC:Tuticorin	620
TCL:Babrala	864.6
ZIL:Goa	399.3
Total (Private Sector)	8302.5
Grand Total:	2458.5

Here we'll be focusing on Rashtriya Chemical Fertilizer's (Trombay Unit) Urea & Ammonium bicarbonate (ABC)

Rashtriya Chemicals & Fertilizers Limited (RCF) is a Mini-Ratna company, it is a leading fertilizers and chemicals manufacturing company with about 75% of its equity held by the Government of India. It has two operating units, one at Trombay in Mumbai and the other at Thal, Raigad district, about 100 KM from Mumbai.

RCF manufactures Urea, Complex Fertilizers, Bio-fertilizers, Micro-nutrients, 100 per cent water soluble fertilizers, soil conditioners and a wide range of Industrial Chemicals. It produces around 25.00 Lakh MT Urea, 4.75 Lakh MT Complex fertilizers and 4.5 Lakh MT of Industrial Chemicals every year. The company is a household name in rural India with brands "Ujjwala" (Urea) and "Suphala" (Complex Fertilizers) which carry a high brand equity. RCF has countrywide marketing network in all major states. Besides fertilizer products, RCF also produces a large number of industrial chemicals that are important for the manufacture of dyes, solvents, leather, pharmaceuticals and a host of other industrial products.

The Make in India mission was launched by the Hon'ble Prime Minister, Shri Narendra Modi in September 2014 with an objective to give the Indian economy sustainability and global recognition. The government is committed to transforming India into a global manufacturing hub, while ensuring that manufactured goods have 'zero defect' and 'zero effect' on the environment.

In consonance with the PM's mission and Vision 2022, RCF endeavors to be one of the main driving forces behind India's sustainable agriculture. RCF is one of the earliest units set up in the country with a vision of growth in fertilizer production for food security. The company was the first in the country to produce complex fertilizer which was introduced in the market in 1967 under the brand name "Suphala". RCF took the lead in the country in setting up mega size fertilizer complex at Thal which was commissioned in the year 1985 and after that many more domestic mega plants followed suit. The company also made significant contribution in the great "Green Revolution" of the nation. RCF has also pioneered the manufacture of basic chemicals such as Methanol, Ammonia, Ammonium Nitrate, Sodium Nitrate, Sodium Nitrite, Ammonium Bicarbonate, Methyl amines, Dimethyl Formamide, Dimethyl acetamide, Formic Acid, Argon in India. RCF has been successfully operating a Sewage Treatment Plant (STP) of 22.75 MLD (Million Liters per Day) sewage capacity at Trombay unit since January 2000. RCF and BPCL have entered into MOU for new STP Project at RCF- Trombay. RCF shall supply around 40% of the treated water to BPCL. In its bid towards India's vision of achieving ecologically sustainable growth, RCF has already forayed into solar power generation. RCF has set up a 2 MWp ground mounted Photovoltaic Solar power plant within the factory premises and an aggregate capacity of 1.29 MWp solar rooftop facilities.

Chemical & Fertilizer

PRODUCTION LOSS in M.T.				
	Capacity	Production	Loss	Remark
28-Mar	1250	460	790	PLANT SHUT DOWN DUE TO FIRST POSITIVE CASE
29-Mar	1250	0	1250	
30-Mar	1250	0	1250	
31-Mar	1250	0	1250	
1-Apr	1250	0	1250	
2-Apr	1250	0	1250	
3-Apr	1250	0	1250	
4-Apr	1250	0	1250	
5-Apr	1250	0	1250	
6-Apr	1250	0	1250	
7-Apr	1250	0	1250	
8-Apr	1250	0	1250	
9-Apr	1250	0	1250	
10-Apr	1250	0	1250	
11-Apr	1250	0	1250	
12-Apr	1250	0	1250	
13-Apr	1250	0	1250	
14-Apr	1250	0	1250	
15-Apr	1250	0	1250	
16-Apr	1250	0	1250	
17-Apr	1250	0	1250	
18-Apr	1250	0	1250	
19-Apr	1250	0	1250	
20-Apr	1250	0	1250	
21-Apr	1250	0	1250	
22-Apr	1250	0	1250	
23-Apr	1250	0	1250	
24-Apr	1250	100	1150	
25-Apr	1250	1051	199	
26-Apr	1250	1236	14	
27-Apr	1250	1235	15	
28-Apr	1250	1233	17	
29-Apr	1250	1228	22	
30-Apr	1250	994	256	
1-May	1250	1228	22	
2-May	1250	1231	19	
3-May	1250	1230	20	
4-May	1250	1230	20	
5-May	1250	1229	21	
6-May	1250	1232	18	
7-May	1250	1244	6	
8-May	1250	1247	3	
9-May	1250	1253	-3	
10-May	1250	1251	-1	
11-May	1250	1249	1	
12-May	1250	1250	0	
13-May	1250	1251	-1	
14-May	1250	1251	-1	
15-May	1250	1249	1	
16-May	1250	1249	1	
17-May	1250	1251	-1	
18-May	1250	1251	-1	
19-May	1250	1251	-1	
20-May	1250	1254	-4	
21-May	1250	1253	-3	
22-May	1250	1105	145	HIGH STOCK /LESS DESPATCH
23-May	1250	1031	219	HIGH STOCK /LESS DESPATCH
24-May	1250	1029	221	HIGH STOCK /LESS DESPATCH
25-May	1250	1005	245	HIGH STOCK /LESS DESPATCH
26-May	1250	1013	237	HIGH STOCK /LESS DESPATCH
	75000	38854	36146	8

RASHTRIYA CHEMICAL & FERTILIZERS

Impact of Covid 19
Post 1st Positive
case in the industry
forcing it to sieze all
production facilities
at UREA, Trombay
Unit.

Chemical & Fertilizer

PRODUCTION LOSS in M.T.				Remark
	Capacity	Productio	Loss	
28-Mar	90	54	36	PLANT SHUT DOWN DUE TO FIRST POSITIVE CASE
29-Mar	90	0	90	PLANT SHUT DOWN DUE TO FIRST POSITIVE CASE
30-Mar	90	0	90	PLANT SHUT DOWN DUE TO FIRST POSITIVE CASE
31-Mar	90	0	90	PLANT SHUT DOWN DUE TO FIRST POSITIVE CASE
1-Apr	90	0	90	PLANT SHUT DOWN DUE TO FIRST POSITIVE CASE
2-Apr	90	0	90	PLANT SHUT DOWN DUE TO FIRST POSITIVE CASE
3-Apr	90	0	90	PLANT SHUT DOWN DUE TO FIRST POSITIVE CASE
4-Apr	90	0	90	PLANT SHUT DOWN DUE TO FIRST POSITIVE CASE
5-Apr	90	0	90	PLANT SHUT DOWN DUE TO FIRST POSITIVE CASE
6-Apr	90	0	90	PLANT SHUT DOWN DUE TO FIRST POSITIVE CASE
7-Apr	90	0	90	PLANT SHUT DOWN DUE TO FIRST POSITIVE CASE
8-Apr	90	0	90	PLANT SHUT DOWN DUE TO FIRST POSITIVE CASE
9-Apr	90	0	90	PLANT SHUT DOWN DUE TO FIRST POSITIVE CASE
10-Apr	90	33	57	PLANT SHUT DOWN DUE TO FIRST POSITIVE CASE
11-Apr	90	90	0	
12-Apr	90	90	0	
13-Apr	90	90	0	
14-Apr	90	90	0	
15-Apr	90	90	0	
16-Apr	90	90	0	
17-Apr	90	90	0	
18-Apr	90	90	0	
19-Apr	90	90	0	
20-Apr	90	90	0	
21-Apr	90	90	0	
22-Apr	90	90	0	
23-Apr	90	90	0	
24-Apr	90	90	0	
25-Apr	90	90	0	
26-Apr	90	90	0	
27-Apr	90	90	0	
28-Apr	90	90	0	
29-Apr	90	90	0	
30-Apr	90	90	0	
1-May	90	90	0	
2-May	90	90	0	
3-May	90	90	0	
4-May	90	90	0	
5-May	90	90	0	
6-May	90	90	0	
7-May	90	90	0	
8-May	90	90	0	
9-May	90	90	0	
10-May	90	90	0	
11-May	90	0	90	
12-May	90	0	90	
13-May	90	64	26	
14-May	90	90	0	
15-May	90	90	0	
16-May	90	90	0	
17-May	90	90	0	
18-May	90	90	0	
19-May	90	90	0	
20-May	90	90	0	
21-May	90	90	0	
22-May	90	90	0	
23-May	90	90	0	
24-May	90	90	0	
25-May	90	90	0	
26-May	90	90	0	
	5400	4021	1379	

RASHTRIYA CHEMICAL & FERTILIZERS

Impact of Covid 19
Post 1st Positive
case in the industry
forcing it to sieze all
production facilities
at Ammonium
Bicarbonate - ABC
Trombay Unit.

CONCLUSION:-**Fertilizer sales jump 45% in April despite lockdown, why?**

Seed processing plants are still operating at about 60 per cent capacity on account of labour shortages. But transportation issues have been significantly sorted out, particularly with the Railways stepping in. Out of the estimated 90 lakh packets requirement of cotton seeds for Northwest India, 50-60 lakh have been moved in rail wagons from Salem (Tamil Nadu) to Bhatinda (Punjab). The rest have been delivered by trucks well in time for sowing.

Nursery sowings of paddy will begin in Punjab and Haryana by may end while kharif plantings in the rest of India will take off with the monsoon's arrival in June. The transport of vegetable seeds – which takes place in 40-50 kg packets through surface courier services, as opposed to truck or wagon loads for others – continues to face bottlenecks but the overall situation is much better than what it was two weeks ago.

The most important thing at the end of day, though, is that the farmer wants fertilizer and seed & that has been acted by the government of India, under essential commodities Act which has allowed operation of fertilizers plants based in India so that agriculture sector especially farmers may not feel the heat of lockdown.

At the end loading and unloading of fertilizers are on and that too in full swing at all the fertilizers plants and also at railway stations & ports, n compromise is made with precaustions in order to avoid COVID-19. Preventive equipments like masks and other products are provided to labours and all the other working staff.

REPORT ON

DIGITAL AND MEDIA INDUSTRY

-By PRanay Chouhan



Introduction - The What?

An arcade game on the smartphone, an E-Commerce shopping app, Online Education sources, or your favourite Netflix series, all come under Digital Media.

Digital media are any media that are encoded in machine-readable formats. Digital media can be created, viewed, distributed, modified and preserved on digital electronics devices. (Wikipedia)

The untapped potential of Digital Media has been discovered in the recent years, and it is flourishing like never before.

The Growth

“The What Industry?”, is the question you may ask. Unlike other industries, which have been running for decades now, Digital Media Industry is among the young players. This is one such industry that has captured people from all over the world, people are dependent on this for most parts of their life, they are trapped into this ecosystem of Digital Media, yet they don’t know much about this industry.

This is much like an unknown well which gets you most of the water you consume, but you don’t know what’s exactly going on. You see digital media everywhere and all the time in our daily lives, on our phones, our computers and our televisions. As such, it demands to be talked about.

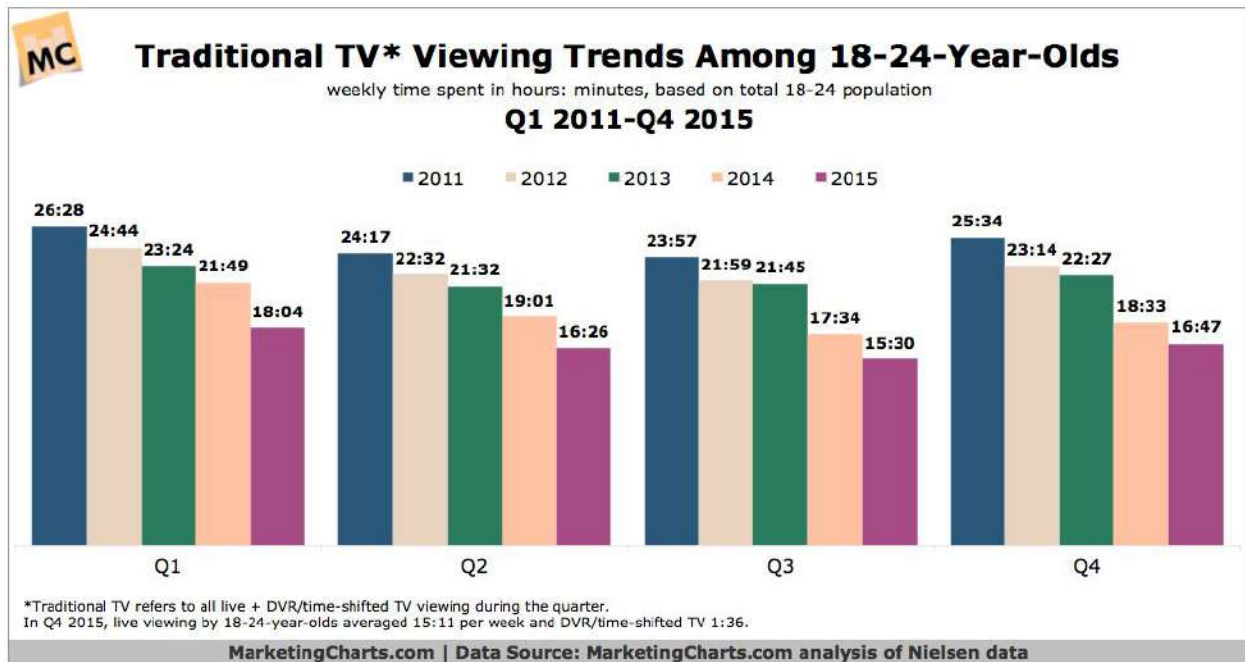
Traditional content consumption habits of the people, like newspapers, TV Serials, Magazines, etc have seen a huge downfall. Why?

Because digital content consumption is much easy, portable and know-what-you-need type.

Know What You Need

If we have to bifurcate the growth of Digital Media Industry into ‘reasons’, “know what you need” will cover a large portion of the chart. You no more need to acquire the information you don’t want to, here you are in the world of Digital Media, where you can search for whatever you want. Unlike Newspapers, you no longer need to purchase an entire piece of booklet and find your favourite news. You can just search for the news you need and skip the rest.

The Growth of Digital Media among 18-24 year olds (2011-2015) has been shown in the following chart.



Although most of the millennials are well aware of the Digital World, the elder once have also started to move digital. From local businesses, to shops, to vegetable vendors, to rickshaw drivers, almost everyone has begun their digital journey.

Video Content : The Lifeline of Digital World

It would not be inappropriate for us to compare Videos with the well known 'Mumbai Locals', as they both serve as the lifeline. Video content has flourished over the years.

"Video is the future" - Are the words said by a lot of masters of this field.

Why? Simply because videos are interesting to watch, they challenge our emotional thinking. They combine the two most important senses of a human, vision, and hearing. Video content has taken a huge leap, especially when it comes to the world of internet.

After the launch of YouTube, the Digital Industry was blown. It had become so easy to share video art with the world.

Slowly, the TV Series converted into Web Series, Movies into Online Premiers, and Books into Audiobooks.

The Digital Industry saw another boom, especially in India, after the revolutionary launch of Reliance Jio, providing Data at the cheapest cost ever.

Recently, short video platforms have also gained popularity, one of which is TikTok.

Class of People vs Digital Platforms

Unlike other industries, the Digital Industry is very transparent. But like other industries, the class and economical status of people has divided people into using different sources of consumption. This is not a generalised fact, but is true for the most part.

- 1) The Upper Urban Class - The Upper Class of the people prefer more subscription based platforms rather than the open-source/free sources. Streaming Platforms such as Netflix, Amazon Prime, Hulu, etc are highly consumed by these people. Apart from video, these people have also preferred to purchase paid subscriptions to the open source apps as well, for added services and to skip advertisements. The digital payment world has dissolved to the following classes from this class only.
- 2) The Middle-Upper Urban Class - They consume more open source content rather than purchasing subscriptions. YouTube is one such platform that is very popular for them. Digital payment was no later introduced to this category. Infact, in some scenarios, they consume even more Digital Media Content, because it is cheaper in price and highly customizable.

-
- 3) The Rural People - More than 500 Million people are yet about to use internet. This is the untapped portion of the society which mostly has no or little access to Digital Media. But slowly, with the rise of Internet consumption in India, rural people have started to explore the digital world. One such platform, TikTok has grown very popular among this category. Although it is popular in the above 2 categories as well, but due to short attention span, and ease of use and creation, TikTok has gained huge popularity among this category of people.

COVID-19 and the Digital Media Universe

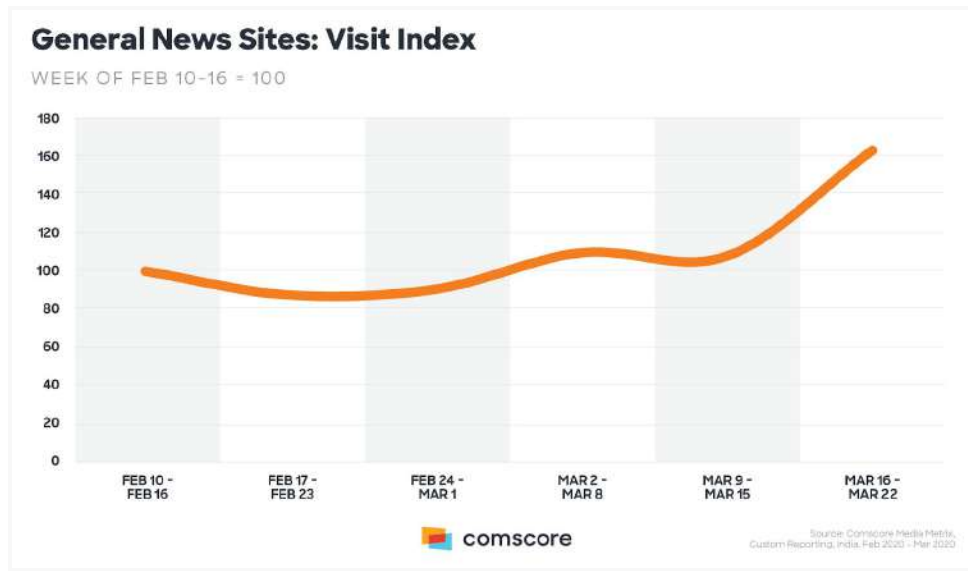
Like all the other industries, the COVID-19 Epidemic had a huge impact on the Digital Media Industry. But unlike others, it was not a downfall. Instead, this industry saw one of its biggest booms especially in India. Though some categories that fall under Digital and Media Sectors have seen a downfall, like the Travel Booking Sites, Cinemas. But most of the sectors saw an upward trend.

Educational Institutions have shifted to provide online education and tests. Concerts are being held online. Use of social media apps like Instagram, and TikTok, YouTube etc saw a big rise.

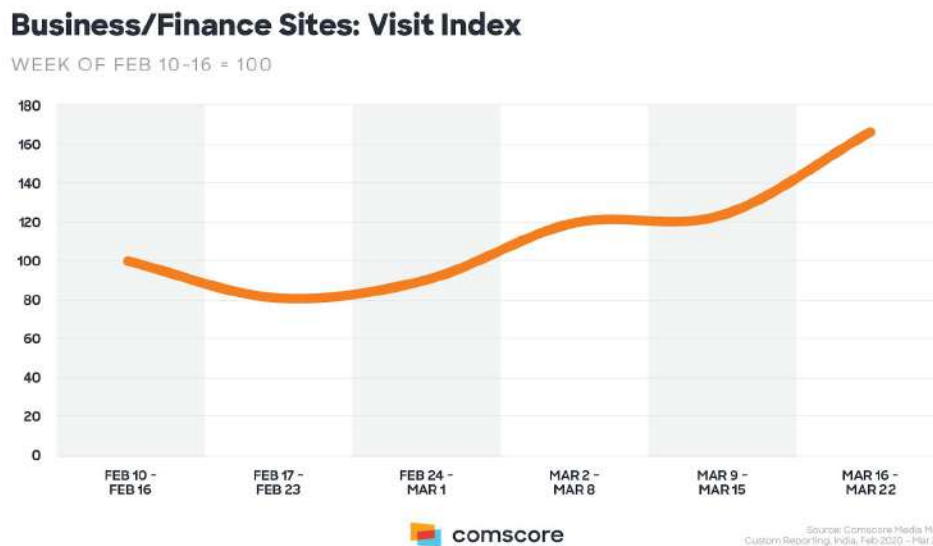
Here are a few statistical reports by Comscore -

Compared with the week of Feb. 10-16, 2020 visits to websites and mobile apps in the “General News” category increased by 61% in the week of March 16-22, 2020. However, most of the increase occurred recently: compared with the week of March 9-15, 2020,

visits went up by 50% during the week of March 16-22, 2020.

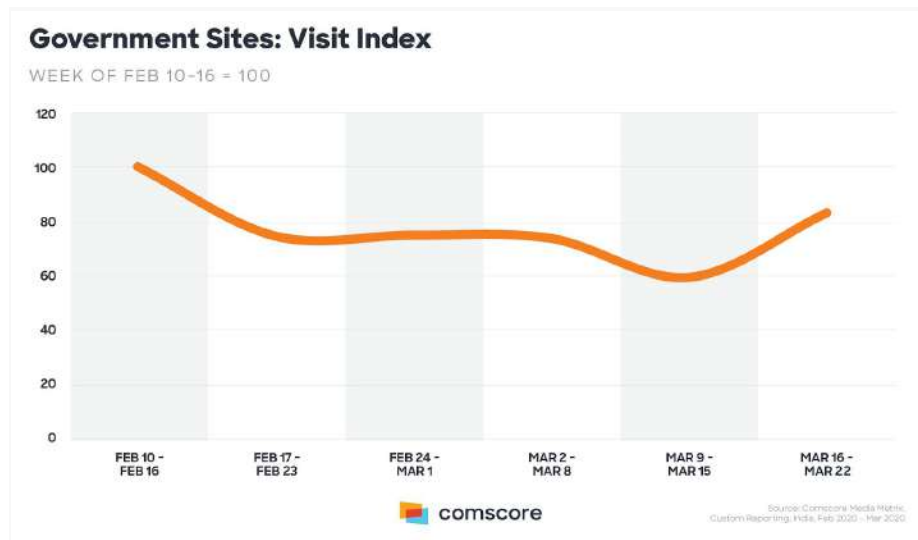


As financial markets fluctuate with the spread of the pandemic, the reach of, and engagement with, digital content within the “Business News” category have surged. The number of unique visitors increased by 22% between the weeks of March 9-15, 2020 and March 16-22, 2020, while the increase in total visits was 34%, and total minutes increased by 27%

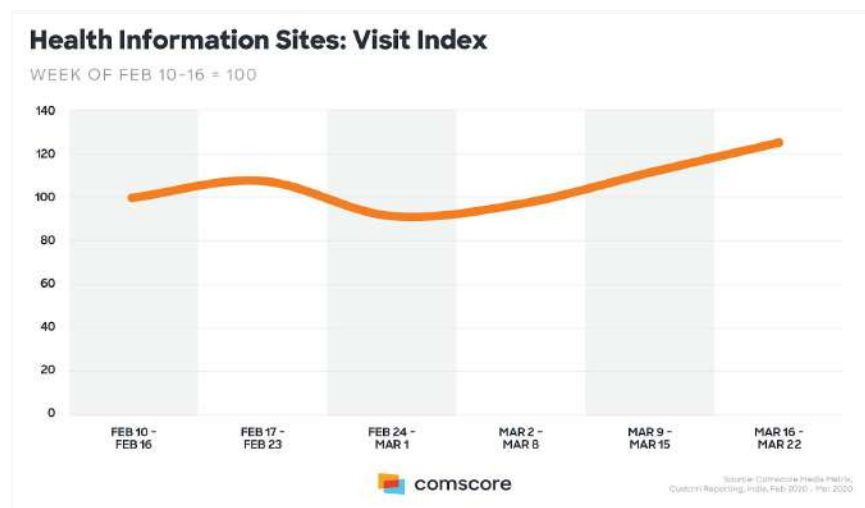


Consumers have shown increased interest in content hosted on “Government” sites, whether that is the latest number of COVID-19 positive cases or the most updated

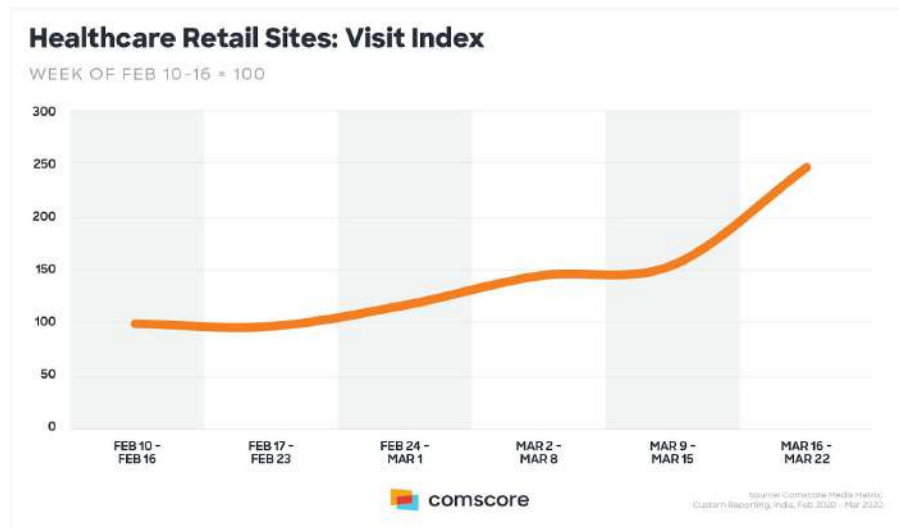
guidelines to be followed. While traffic went down in February up until early March, it jumped during the week of March 16-22, 2020, as the reality of the pandemic took hold. Compared with the week of March 9-15, 2020, websites and mobile apps belonging to the public sector saw a 29% increase in reach, as measured by the number of unique visitors. Engagement, in terms of visits, increased by 39% and time spent on them increased by 27%.



As people sought information about this relatively novel illness, traffic to health-related websites increased. Between the weeks of Feb. 10-16 and Mar 16-22, 2020, visits to health information websites and mobile apps increased by 25%.

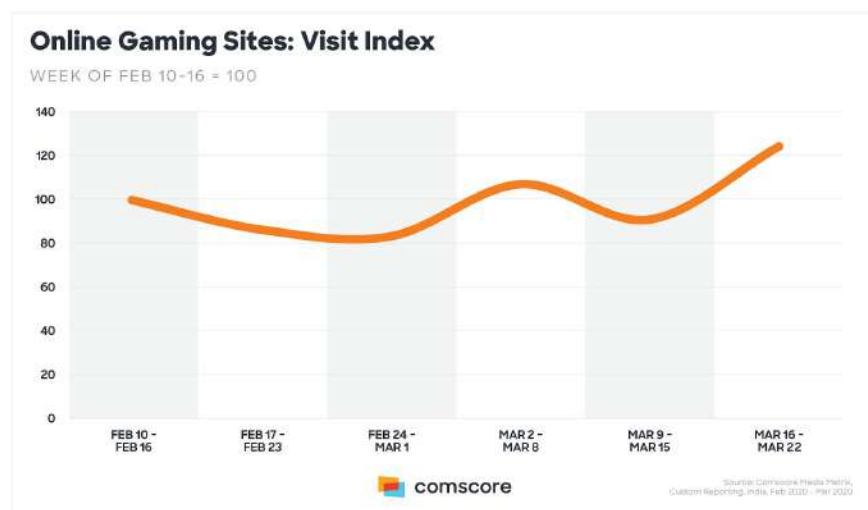


As news about the impact of the virus spread and consumers braced themselves for a possible lockdown, they also showed greater interest in healthcare retail sites. Visitation to “Healthcare Retail Sites” increased by 146% from Feb. 10-16 to March 16-22, 2020.



Online Gaming

Devoid of sports, travel and any social activities, many have turned to online games. Between the weeks of Feb. 10-16, 2020 and March 16-22; 2020, visits to online gaming websites or apps increased by 24%. Engagement, as measured by time spent on gaming sites or apps, increased by 21% during the same time period.



These are some of the sectors of Digital Media Industry. For more information, one can visit Comscore by the link provided below.

The Bottom Line :

It can clearly be seen that Digital and the Digital Media Industry, as a whole have grown since their birth. Sometimes, the growth was slow, and sometimes it was exponential. Today, a lot of companies are shifting their workforce to work from home. This could decrease enormous expenses like office maintenance, travel expenses and time.

But, at the same time, this industry has snatched a lot of opportunities from different industries. Some smart companies, from different sectors, instead of complaining about going Digital, played smart and came Digital. And such companies have seen a huge rise in their business.

The Digital and Digital Media Industry is the future.

"If your business is not on the internet, then soon your business will be out of business"

- Sir Bill Gates

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