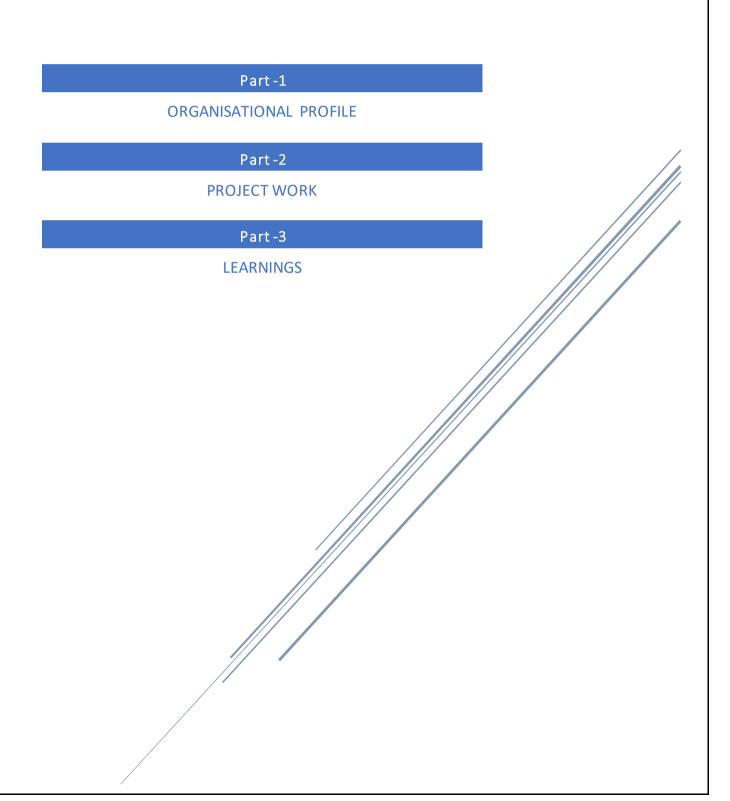
SUMMER INTERNSHIP PROJECT -2020

PHASE – 2 (Report)

Jagdish Hirani & Associates





SUMMER INTERNSHIP PROGRAMME 2020

Report on

Project: Impact analysis of COVID-19 on Indian Economy and its various sectors

Company: Jagdish Hirani & Associates





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MBA(FT) 2019-2021

Dated: 5th July 2020 Submitted To:

Purpose: Academic Prof. Praneti Shah

Acknowledgment

I wish to express my sincere gratitude to Mr. Parth Hirani, Director, Jagdish Hirani & Associates who is also my Organizational guide for providing me with an opportunity to do my internship and project work in his esteemed organization. He rendered me immense help during this internship and provided me valuable insights to carry out the project.

I sincerely thank Prof. Praneti Shah my Faculty Mentor at the Institute of Management, Nirma University for providing me encouragement and guidance throughout the period of this internship.

I would also like to thank the Institute of Management, Nirma University, CRC, and the Placement Committee for providing me the opportunity to embark on this project.

I am yet to receive the internship completion certificate. I will attach it as soon			
as I receive it.			

Executive Summary

The report is the market research and client-based research study of the various industries of the Indian economy as well as the macroeconomic parameter of the Indian economy. We have conducted the primary as well as secondary research to understand the impact of COVID-19 on the sectors and the changing consumer behavior. The report also highlights the tasks performed in the internship period and the findings and outcomes of each task. There are parts in the project with supporting details in annexure for reference. The learning and conclusion part shows the output of the project and the knowledge gained from it.

Part-1

Organizational profile

About the Organisation

Jagdish Hirani and associates, founded in 1998 has been evolving since then with its methods, services, and exposure. They have found their niche and a strong connection with the organization which is led by heart and is looking to have alignment, effectiveness and create tat example of themselves in their market. Till today they have served over 100 organizations and helped them transform their journey and lead their growth over the years. The vision of Jagdish Hirani and associates has been to create an organization that is a benchmark, faster, and fit. The organization believes that there are opportunities available everywhere, but only a few find and are prepared well enough to make the best out of those opportunities. The prime goal of Jagdish Hirani and associates has been to prepare the organization to make the best out of opportunities presented in front of them. Jagdish Hirani and associates help their clients in harnessing these opportunities and generate true benefit out of it.

Products/Services

Jagdish Hirani and associates offer a wide variety of services to its client for developing the optimum growth and expansion strategies for the companies. A list of services offered by them can be seen below:

- Strategy Mapping
- Enterprise Risk Management
- Balanced Score Card
- Employee Score Card
- Profit Improvement Programme
- Business Continuity Planning
- Business Process Maturity Model
- IT Governance
- Financial Advisory
 - Joint Ventures/Associations
 - Mergers/Acquisitions
 - Business Restructuring Services

• Financing

• Private Equity

Corporate Governance

• Aligning Human Capital

• Certification & Audit Services

Training Programs Offered

The vision of JAGDISH HIRANI & ASSOCIATES

"Develop a global strategic advisory team by establishing splendid levels of quality,

professionalism, and reliability in service"

The mission of JAGDISH HIRANI & ASSOCIATES

"We being innovative business designers and financial modelers. Aspire to be the growth

partners of our clients by providing excellent counsels with strong ethics and project

management."

Details of the mentor

Parth Hirani

Director

Jagdish Hirani & Associates

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Phone no: 9825048932

Parth has a wide experience in the area of strategic consultancy covering small, medium to

fortune 500 organizations in India, the USA, Europe, and the Middle East. He has managed

governance and compliance practices for fortune 500 organizations covering over 250 entities

across the Globe.

In the Role of a leader to Jagdish Hirani & Associates Team since 2009, he has provided

advisory services to more than 80 organizations from various sectors like Engineering,

Textile, Plastics, Biotechnology, Education, IT, Banks, Hospitality, Food, Diamond, Traders,

and Service Organizations.

7's Framework

The following is the analysis of Jagdish Hirani & Associates' 7S framework:

1. Strategy

Jagdish Hirani & Associates has certain strategies laid down to leverage their competitive strength and grow their business. These are:

- 1) Strong industry knowledge
- 2) Clean slate approach
- 3) Structured delivery methodology
- 4) Strong people skills
- 5) Strong project management
- 6) Long term association.



All of the above-mentioned strategies are in line with the processes carried out by the company.

2. Structure

The company has a well-structured mix of hierarchical and flat organizational structure. Which gives the organization flexibility and agility while serving their clients. The structure also helps with a smooth flow of communication and employees adhering to the company's guidelines, vision, and mission. The top management holds the ultimate decision-making powers while the lower-level employees have been given autonomy too. As they are dealing with clients all the time because they are involved in the service industry. Hence this autonomy given to the lower level of employees has given them the power to make the quick decision required for the growth of their clients. This also helps in saving time and energy making the overall working of the company more efficient.

3. Systems

The company is in the industry of management consulting services. JAGDISH HIRANI & ASSOCIATES focuses on creating organizations which set a benchmark in the market (by building resilient strategies and partner their execution), JAGDISH HIRANI & ASSOCIATES

helps the organization to become faster and more agile in term of their working (by imbibing a goal-oriented culture) and JAGDISH HIRANI & ASSOCIATES also help the organization become more fit for the market(by practicing effective and efficient operations).

4. Shared Values

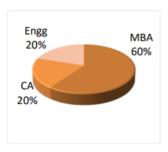
The core values of the organization can be mentioned as below:

- 1) Developing entrepreneurship within all team members.
- 2) Be accountable for the growth of our clients.
- 3) Effective communication, dignity, trust, and integrity.
- 4) Service excellence, trust, and integrity
- 5) Innovation, passion
- 6) Transparency confidentiality.

The core values of the company have never been compromised. Besides growing their business, the founders have been sensitive towards maintaining the goodwill of the brand. The main motto of the brand has remained to serve its clients the best and have a long-term relationship with them.

5. Skills

The management of the firm is well educated and well trained and hail from different backgrounds. This helps in developing a strong vision for the firm and the employees can also align their skills with the goal of the organization. The employees hired at JAGDISH HIRANI & ASSOCIATES undergo various training and induction programs before being deployed at the Office. Their skills are also monitored and assessed for performance appraisal. Corrective actions are suggested to employees if there is a gap between their input and desired goals.



Diversity of background of employees.

6. Staff

Efficient manpower is the key to a successful business. JAGDISH HIRANI & ASSOCIATES acknowledges the contributions made by their employees and focuses on attracting and

retaining the best talent. Being in specialized business and a niche, the company looks for specific skill-sets, interests, and backgrounds that can be an asset to the business.

In case of any gap between the potential of an employee and the goals of the organization, the person is trained and motivated to reach their maximum potential.

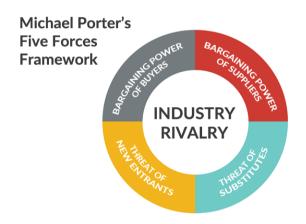
The methodology of employee scorecard is used in the organization to assess the performance from time to time.

7. Style

The company follows a leadership style of participation. This style is adopted by most of the companies because the employees have to be treated as an asset, who are working for the company. Helping, motivating, and resolving employee workplace issues tends to make employees more cooperative. Another important aspect of this style is that it ensures that the teams work to produce real results and not just superficial efforts.

Competitive Position in the Industry

Porter Five Forces Analysis is a **strategic management tool** to analyze the industry and understand the underlying levers of profitability in a given industry.



Threats of New Entrants-New Consultancies

Each industry that shows incredible potential for benefit will draw in different organizations who need to pick up the excess that exists. There are in every case new participants that can compromise the inflexible stance's and upper hand in the business. The more boundaries there are for entering the market, the to a lesser degree a danger new contestants will be. In the administration counseling industry, there are three of Porter's six likely hindrances for new participants that we consider generally important. The other three are economies of scale, capital necessities, and government arrangements. For economies of scale, we accept that this obstruction isn't as applicable for our investigation. Indeed, there is a feeling of cutting expense

by recruiting experienced specialists who can carry out the responsibility at a quicker time than a lesser advisor anyway economies of scale vary contingent upon the point you decide to concentrate on. We don't treat this factor in our examination and along these lines we have chosen to bar it from our hypothesis. We see the equivalent for capital prerequisites just as we accept that for this situation it is a well established certainty and doesn't represent any new fascinating perception for our examination. Government approaches have not been treated in our examination and will in this way not be of significance to remember for our hypothesis. 14 Product/administration separation This spotlights on encouraging the brand name and making a character in the business, which will involve extraordinary expenses for the new contestant. This is the thing that most consultancies blossom with. A decent brand name is significant for their validity and business. To increase new clients isn't modest and consultancies take a stab at keeping a decent notoriety around their name. The sort of administrations they give has additionally an impact on their prosperity available. Administration organizations must separate their administrations from others despite the fact that it is a similar sort of administration. They have to show what their administration gives and what the customer gains from employing them. Cost detriments free of size and access to circulation channels We consider that these two hindrances go connected at the hip inside the administration counseling industry. Particularly when taking a gander at connections that these consultancies have in the market. Having a decent relationship is access to dispersion channels and can likewise be a cost impediment autonomous of size. Now and then unique connections or associations are important to increase great costs and items inside the business. The vast majority of these connections or associations are utilized by existing organizations. Either an organization needs to get through and increase new merchants or make their dissemination in the board counseling that would be the customer relationship that exists or should be assembled. Different points of interest could be area, information (experience bend; know-hows), or lawful, for example, licenses. This makes hindrances that an organization can't control. As an administration consultancy, their quality is their ability. Specialists offer information and experience of methodologies, issues, frameworks, and so on that organizations don't have. Associations with organizations are generally solid and it is difficult for different consultancies to increase such a relationship with those organizations except if they offer something that the other consultancy doesn't have. Most consultancies don't enter a market except if they have some kind of relationship or system in that showcase. They ordinarily gain their business through referrals from previous customers. In any case, it is important that occasions change just as circumstances available which could prompt a weakness or a preferred position for the

organization. Certain key choices that could influence a greater piece of the business could change the image of the danger of new participants.

Parameters	Score (Out of 5)
Economies of Scale	4
Product Differentiation	3
Brand Identity	3
Switching Cost	3
Capital Requirement	2
Technology	3

Average Score: 3

Bargaining Power of Suppliers-Consultants

For each organization, providers are one significant piece of their worth chain that requirements center. Without providers, the organization has nothing to offer whether it is an item or administration. Providers in the board consultancies are simply the specialists which can affect the nature of items or administrations. Watchman specifies five factors that influence the providers' effect on the organization. Be that as it may, these are more defined for assembling organizations and in this way we decided to do a translation explicitly for the administration advisor industry and sum up his focuses more custom fitted for the administration counseling industry. To begin with, the nature of the provider is significant for both the picture and nature of the administration. The executives consultancies endeavor to select the top abilities for their business. This can now and then be an issue if the flexibly of such individuals is thin. Second, it is enticing for most specialists to work at a firm and afterward leave it to go into business or join an organization that they met through work. The executives counseling is about the information base and experience that exists in the organization to carry out their responsibility appropriately. In the event that their advisors leave the organization, they lose that information and experience. They have to make the activity appealing and severe enough that the individuals won't leave it, for example, having great advantages and an exacting leaving strategy where the expert can't carry their customers with them when they leave. Third, the consultancy probably won't be a significant player, and specialists are not subject to them to endure.

Parameters	Score (Out of 5)
Number of Suppliers	4
Availability of Substitutes	4
Switching Cost	2
Industry's importance to suppliers	3

Industry average – 3.25

Bargaining Power of Buyers-Clients

Like providers, clients can impact costs and requests of items. Watchman makes reference to seven factors that could make the purchaser amazing. Six of them are most important while talking about the administration specialist industry. In the first place, when they buy more noteworthy volumes of administrations. They become an extraordinary client and in the midst of downturn, these dedicated customers are a need. Second, administrations are standard or undifferentiated consequently they can discover other people who can carry out the responsibility. Third, the administration is a basic part in their business and will most likely search at positive costs if the administration is a major expense for the purchaser. Fourth, the purchaser doesn't have a high benefit and along these lines can't stand to buy at significant expenses. Fifth, when 16 the item or administration quality is a higher priority than reducing expenses. 6th, if the purchaser turns into the specialist as in having their creation of the administration (in reverse coordination). Doorman guarantees that this power is imperative to consider because of substitutes prompting consultancies leaving business on the off chance that they can't adjust their administrations to the evolving patterns.

Parameters	Score (Out of 5)
Number of Buyers	4
Availability of Substitutes	4
Switching Cost	3
Backward Integration	1
Buyer's Profitability	3

Contribution to quality	4

Industry average – 3.16

Threats of Substitute Products or Services-Companies, Competence, Knowledge

In the event that there are substitute items available, they can confine the organization's benefit. There are two interesting points here when settling on key choices:

- a) When substitutes' value execution is improved because of patterns.
- b) When substitutes are delivered in businesses that have an abrupt difference in circumstance where the opposition is more noteworthy and costs are dropped.

In the administration consultancy industry, it will be founded on:

- a) What administrations organizations are requesting? Is your organization inside that field and offer such types of assistance?
- b) There may be a few consultancies that offer a similar assistance that the organizations see a similar quality and incentive in and along these lines turns into a delicate procedure among consultancies and organizations.

Parameters	Score (Out of 5)
Availability of Substitutes	0
Substitute Price Value	4
Profitability of producers	3

Industry Average – 2.3

Rivalry among the Existing Competitors(consultancies)

Porter names this as "maneuvering for position" — utilizing strategies to increase an ideal situation against the opponents. There are six components here that current contention in an industry. Initially, there are numerous contenders available or they are largely fundamentally the same as. Second, the development of the business is moderate. Third, the items or administrations are not separated nor is there an exchanging cost (the expense for evolving provider; expert for instance). Fourth, high fixed expenses or transitory items lead to organizations endeavoring to cut costs when request is low. Fifth, overcapacity disturbs the flexibly request equalization and prompts value decreases. 6th, the leave obstructions are high and no organization leaves the business or market. Seventh, rivals are extraordinary and act in an unexpected way. Rather than moving around their rival they regularly go head-on which doesn't unravel anything.

Parameters	Score (Out of 5)
No. of Competitors	4
Industry Growth	3
Differentiation	3
Switching Cost	2
Strategic Stakes	3

Industry Average -3

Swot analysis

Strengths:

- 1. Qualified trained professional staff
- 2. Strategic organization
- 3. Vertically enhanced business
- 4. Centralized activities
- 5. Pre-created resource for interns
- 6. Multi resource class
- 7. Easily accessible information
- 8. Niche market.

Weaknesses:

- 1. Less brand acknowledgment
- 2. A lower degree of expansion

3. The small size of the firm

Opportunities:

- 1. High extent of expansion.
- 2. Leveraging digitalization.
- 3. Increased demand for strategic consultancy.
- 4. Diversification of the client base.
- 5. Working in a niche.

Threats:

- 1. The situation of Financial & Economic crisis.
- 2. The threat of rivalry from bigger giants of the industry.
- 3. An increasing number of boutique consulting firms.

<u>Part- 2</u>

Project work

Introduction

Nature of problem: The research problem which underlies here and is being studied is the impact analysis of the financial and economic impact of COVID-19 over various sectors of the Indian economy. Also taking a deeper dive into India's Chemical, IT & ITes and Automobile sector to gain insights about the challenges faced due to the COVID-19 situation, Disruption is their working models due to it and the opportunities being presented by this situation.

The study can be further classified as follows

- 1. An outlook of the Indian economy amidst the COVID-19 crisis.
- 2. Silver lining amidst the obscurity mist of COVID-19 (an analysis of opportunities presented for few sectors of the Indian economy due to this situation of crisis and how there could be a potential shift in the drivers of nation's economy)
- 3. Impact of COVID-19 & imperative of transformation for various sectors of the economy.
- 4. India's Chemical industry: A consistent value creator, the impact of COVID-19 on the sector, and imperative of transformation for different organizations working under this sector.
- 5. India's Automobile industry: Reinventing the wheel, impact of COVID-19 on the sector, and imperative of transformation for different organizations working under this sector.
- 6. India's IT&ITes industry: The bull driving the Indian economy, the impact of COVID-19 on the sector, and imperative of transformation for different organizations working under this sector.
- 7. The need for Metamorphosis in the IT&ITeS sector: Imperative of a new working model for the industry as the older one is becoming obsolete.

<u>The objective of the study</u>: The primary objective of the study is to gain deeper insights into the scenario at present and the possible scenario of the future. In turn, it will help the firm to devise the strategies accordingly for their clients and help them in quick recovery from this

setback to once again get back on the path of year on year positive growth. The secondary objective includes the enhancement of research and analytical skillset of the person undertaking the project, this in turn would also help the person in obtaining immense knowledge of the market scenario.

<u>The utility of the study</u>: The research is going to act as the backbone of all the future strategic formulation for the clients of Jagdish Hirani & associates. By adopting the strategies which are in line with the demand of the market the clients will be hugely benefited from it.

2. Methodology

Approach: the primary research approach is Quantitative as it involves an in-depth study of secondary data from various industry reports and extracts an analysis from it which is in line with the requirement of the firm. To validate our findings of the primary research approach we have adopted a Qualitative research approach as our secondary method, the findings of our research work has been discussed extensively with industry experts and their input has been taken to make the necessary changes into the reports.

Sources of Data: Various data sources have been used for the collection of data, IBEF, Invest-India, Mckinsey Insights, KPMG reports, Deloitte reports, Moody's reports, Department of chemicals and fertilizers (MoC&F), Ministry of electronics and information technology, and department of heavy industry are some of the primary sources of data which have been used extensively for data collection.

<u>Method of data collection</u>: Method which has been used for the collection of data is through the collection of various report and surveys provided by the government as well as non-government organizations. The data collection methodology used can be explained as below:

- Literature sources: in this method of data collection the data was collected from the already published text available of various government and non-government domains.
 The various literature sources used were-textbooks, government or private companies' reports, newspapers, online published papers and articles
- 2) Surveys: it is another method of data collection that was used to complete the summer internship project at Jagdish Hirani and associates. Google form survey was floated to get a wider and better understanding of the situation.

3) Interviews: This method falls under the qualitative method of data collection our research work was shared with few of the industry experts firstly and then we had a one on one interview with them to get their viewpoint and suggestions.

Method of data analysis: The data thus collected from various research and survey reports was then compiled and analyzed using various analytical tools to get the desired information and projections from the data. Various methods of data analytics were used some of them are mentioned below:

- I. Qualitative Analysis: This approach was mainly used to answer questions like 'why,' 'what' or 'how'. To address each of these questions applicable in different places of the research various quantitative techniques such as questionnaires, attitude scaling, standard outcomes, and more were used during the summer internship project.
- II. Quotative analysis: this analysis method was used whenever we had to deal with numbers. Whenever the data present was in terms of measurement scales and needed further analysis the method was extensively used during the work of the summer internship project.
- III. Text analysis: This method was used wherever there was a need to analyze the text to extract more information out of it. This method of analysis was also used when it was required to create structured data out of free and unstructured content. The process of analysis by using this form of data analysis method involves slicing and dicing heaps of unstructured, heterogeneous files into easy-to-read, manage and interpret data pieces.
- IV. Statistical analysis: This method of data analysis was extensively used whenever it was required to collect the data to interpret the data and then validate it. The statistical analysis involves performing several statistical operations to quantify the data and apply statistical analysis.
- V. Diagnostic analysis: in many of the cases once the statistical analysis was done there was the further requirement of a more in-depth analysis. The methodology of diagnostic analysis was used in such situations. The methodology of diagnostics analysis includes processes like data discovery, mining, and drill down and drill through. The function of this methodology can be classified majorly into three categories which are as under:
 - 1. Identify anomalies
 - 2. Drill into the Analytics (discovery)

3. Determine Causal Relationships

VI. Predictive analysis: This method of data analysis was used whenever there was a need to find critical patterns and trends in the data. The model is applied to current data to predict what would be the future scenario. This methodology has helped us extensively in scenario mapping for the future of the Indian economy as well as its various sectors which were studied in detail. These future predictions are going to form the backbone of the managerial decisions which will be taken to prepare for the future which in turn will help in better performance of the firms.

Context of industry problem:

The market scenario has been completely disrupted by the ongoing COVID-19 situation hence it has changed how the companies used to work earlier. The approach to the present and future is completely different for the industries and nations right now than what it had been in the past. Jagdish Hirani and associates being a management consulting firm need to understand these changes faster and better to have an edge over its competitors. Hence a detailed study of the changing macroeconomic parameters of our nation's economy and their implication onto various industries is the need of the hour for the company. During the 8 weeks of my summer internship project, I have worked extensively to prepare reports about how the market is changing and how the nation's economy might shape up in the future scenario. This detailed research in turn has helped the consultants of Jagdish Hirani and associates to make better decisions for their clients. As the company has invested the resources in understanding the scenario before jumping into it that gives them a lot of advantage over its competitors. This advantage over other players of the market is visible in the business as well while all the companies are facing a slowdown and financial crunch Jagdish Hirani and associates have adapted well to the situation and working as normally as it used to. These studies were further shared by old clients of Jagdish Hirani and associates and such detailed understanding has led to clients coming back to the firm to do business with them. Also, the research design for scenario mapping was quite beautifully designed, our first and foremost focus was to understand the economy of our nation and the past performance of the nation. Then the next focus was to understand the Indian economy and its performance just before the COVID-19 crisis has hit it. Once the background picture was clear then the research jumped over to the present situation of a financial crisis that has been put upon all industries and our nation due to

the ongoing COVID-19 pandemic. While understanding the current scenario the focus was to identify what has been the impact on the economy and which are the industries which has been bought to a standstill by the current situation

The research work conducted during the course of 8 weeks of SIP has been attached below:

1. The outlook of the Indian economy amidst COVID-19

Indian economy

India is the quickest developing trillion-dollar economy on the planet and the fifth-largest overall, with a GDP of \$2.94 trillion. India has become the fifth-biggest economy in 2019, overwhelming the United Kingdom and France. The nation positions third when GDP is analyzed concerning purchasing power parity at \$11.33 trillion. With regards to computing GDP per capita, India's high populace hauls its nominal GDP per capita down to \$2,170. The Indian economy was at \$189.438 billion in 1980, positioning thirteenth on the list globally. India's growth rate was relied upon to ascend from 7.3% in 2018 to 7.5% in 2019 as hauls from the currency exchange initiative and the introduction of the goods and services tax fade.

India's post-freedom journey started as an agrarian country; be that as it may, throughout the years the manufacturing and service sector has risen unequivocally. Today, its service sector is the quickest developing segment on the globe, adding to over 60% of its economy and representing 28% of employment. Manufacturing stays as one of its significant sectors and is being given the due push through the government's initiatives, for example, "Make in India." Although the contribution of its agrarian sector has declined to around 17%, despite everything it is way higher in contrast with the western countries. The economy's strength lies in a constrained reliance on exports, high saving rates, positive socioeconomics, and a rising middle class.

Indian economy in 2020

It has been for the first time in seven years that Indian GDP has grown with a rate of less than six percent year over year for two consecutive quarters. The second and the third quarter of the FY2019-20 reported YoY growth of real GDP at 5.1% and 4.7% respectively. The slowdown visible in the Indian economy is because three out of four pillars – private consumption, private

investment, and exports- have slowed down significantly. The Q1 figures for Private consumption depict us that the biggest contributor to the economic growth of the nation has been at a level which is lowest for the last 18 quarters. This figure of private consumption tells us that the purchasing ability of the consumer and the sentiments are in a bad shape. Other parameters of the economy like investment and exports remained similar, owing to the global uncertainties around trade and investment and geopolitical tensions. The fourth pillar of the economy which is currently holding it all together is also running out of steam, as the hands of the government are also tied up. Hence counter-cyclical measures from the government are unlikely because of high-pressure mounting on the budget deficit.

The low demand for goods and services could be accounted for several factors like stagnating rural wages, tightening lending conditions, and rising levels of unemployment. Also, with these factors the changing consumer preferences due to which the demand patterns are transforming.

Looking at the economy from the perspective of supply-side we can see a decline in hiring and the investment in production facilities due to problems with idle production capacity, weakening corporate profiles, and infrastructure bottlenecks.

If we look at the global economy too then we don't find any positive sign there, growth is slowing down across the globe and the predictions from the International monetary fund are showing a decline in the growth rate of the world economy. Due to the uncertainties roaming around the trade policies there has been a constant drop in the global trade volume growth since 2018. Owning to policy uncertainties and geopolitical events around the globe the export growth and the investment in business are going to be affected areas of the Indian economy.



Macroeconomic parameters

Weakest growth of GDP in last seven years. IMF revised the GDP forecast to 6.1% down by 0.9% from previous estimate of 7%

A rise in the government security yields resulting in rise of financing cost for private sector borrowers.

Inflation concerns are very much in check. As the consumer price index remains below the RBI's target levels

Factors such as slowdown in economic growth, capital outflows, and global trade wars have lead to – INR:USD::72(+):1



Fiscal deficit keeps on growing. As capital expenditure contracts and tax revenues are going to be lower than expected the pressure of deficit will increase. India's fiscal deficit can be seen at 5.5 percent of GDP for fiscal 2020.

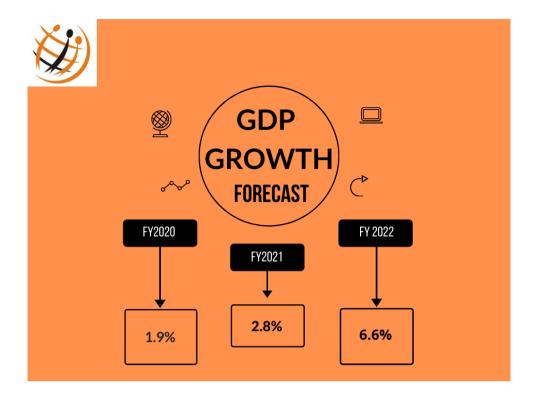
Vulnerability can be seen in FPI, while FDI shows positive figures. But the global economic slowdown and uncertainties are going to have negative impact on capital flows.

Liquidity concerns arise because of weak bank balance sheets, rising NPAs, and slowing informal sector lending which in turn impact the borrowing conditions. The credit growth also suffers.

Impact of COVID-19 crisis on Indian economy

The Indian economy before the COVID financial crisis was already treading on thin ice because of many factors like the slowdown in the growth of GDP, changing consumer sentiments leading to falling demand, geopolitical situations, and uncertainties at the global level. Unlike the previous financial crisis, India is entering into the COVID financial crisis with an already trembling economic situation. The figures represent that the economic situation of India isn't strong at all at this moment. The only positive thing that India can look upon while entering this crisis is its FOREX reserve.

Various estimates of the economic growth of the Indian economy show a sharp decline, according to World Bank estimates the growth is going to fall at 5% for FY2020. In FY2021 the estimated growth rate for the Indian economy is projected at a rate of 2.8%



These are just initial estimates the situation can get worse if the lockdown is prolonged in the nation.

The impact of COVID-19 on the economy can be broadly categorized into three major categories:

Demand shock: Reasons like movement restriction and fear of falling sick are going to affect consumer spending negatively. Along with this, the quarantine restriction leading to the closure of school/factories/businesses is going to impact the demand for goods and services. Another factor for the reduced demand in the market is going to be loss of employment especially in the informal sector and for contractual workers which in turn might lead to reduced consumer spending. The demand is not only going to drop within India but also on the export side too as European countries, USA, and China, which are some of the worst-hit countries by this pandemic account for about 40% of India's export.

Supply shock: This situation of the crisis has disrupted the supply chains. Factories present in the affected areas which accounted for the supply of raw materials are closed or aren't able to supply their products because of the restrictions imposed. This delay in the procurement of raw materials is leading to uncertainty which in turn would lead to low investments. Also, the COVID situation is leading to higher input prices and reduced profitability resulting in a

decline in capacity building. Although supply-side shock might not be that prolonged as the supply of materials may start normally as soon as the situation improves.

Financial market shock: As the COVID situation has caused a steep decline in demand for commodities as well as oil. The prices of commodities/oil have been low. The prices in this phase are volatile too. Due to an increase in unemployment banks are going to face an increase in the number of consumer loan defaults. Also, there would be high stress on banks to impact credit growth in this situation. The capital market is also highly impacted by this situation of crisis a decline of 30% has been observed since the pandemic started spreading across the globe. A sharp depreciation of rupee against dollar has been observed which worsens trade deficit as in India's situation the contribution of exports is lower to the GDP of India. The bank margins are also going to reduce as the rise in bond yields is going to make borrowing more expensive.

Transforming sectors - Shaping the economy amidst COVID-19

The effect of the COVID-19 pandemic is visible on the world economy as well as the economy of India. In this situation where the economic crisis is looming over the Indian economy, one can infer that the contribution of the sectors to our economy can possibly transform. The sectors which once used to be the drivers of the Indian economy may face a slowdown. The sectors which used to be in the background whenever we talked about the Indian economy may become the drivers of the Indian economy now. This transformation is going to be imminent when we look at the economy going into a situation of crisis because of the widespread of the coronavirus disease. The spread of coronavirus has left our economy in a bad situation but it also opens up many opportunities on which if India can capitalize then it might help the economy bounce back even stronger. Many countries have decided that they don't want to be reliant on just one country for the supply of raw materials or finished products. This opens up an opportunity for India to capture a share of the global market in various sectors, which in turn will help India improve its export figures. Also, many of the industrial sectors have been reliant on china for the supply of raw materials either partially or fully, the restriction of movement of goods has led these industries to look for an option of a local source for their raw materials. This, in turn, builds opportunities in the Indian market which in turn could lead to the growth of new business and employment. Capitalizing this opportunity is in line with the make in India campaign that the Indian government has been promoting since long.

A brief overview of what role different industries are going to play in stabilizing and getting the Indian economy back on the right track can potentially look like the chart below



Spectators: These are the industries that have been highly affected by the ongoing situation of the COVID-19 crisis. These industries aren't left with any move they can make and may be forced to sit around waiting for things to become normal and the economy to get back on the right track without contributing anything significant to the recovery of the Indian economy.

Survivors: The industries in this category aren't going to play a major role in the recovery of the Indian economy but throughout the way, they are going to keep on doing their business. There would be a negative impact on them as well as the ongoing situation. But they are going to survive through it and also help the economy keep afloat.

Influencers: The industries which are going to drive the Indian economy towards the light are put under this category. Further looking deeper into these sets of industries we can see that some out of these are going to act as the backbone of the Indian economy keeping the things in place and constantly pushing the economy towards a positive side. Another group of companies in this category is going to be the ones which will be presented huge opportunities

in front of them at global as well as local level. If the industry players succeed in capitalizing on these opportunities then they could just provide the boost required by the Indian economy to get back on the track of growth year on year. It could lead India to become one of the giant players of the global economy.

The road ahead is a tough one, but if navigated with proper directions it could lead to great results for the Indian economy.

2. Silver lining amidst the Obscurity mis of COVID-19

Obscurity mist

The world keeps on pursuing its fight against COVID-19. As countries clear down their lanes with different types of limitations and lockdowns, the slowdown in the growth of the worldwide economy feels more articulated than any other time in recent memory. This epic strain – named SARS-CoV2 – that started from Wuhan, took the world by a tempest. For India, despite a slower curve of infection, the effect has been merciless from various perspectives. The nationwide lockdown has been assessed to cost around USD 4.5 billion every day. Most of the organizations of the nation are facing the negative impact of the pandemic, and the supply chains have succumbed to it.

A trajectory of silver lining.

There appears to be a silver lining in obscurity mists. Throughout these times of crisis, few variables might turn out as ideal for India to turn up as a significant trade and commerce player in the world. The possibility of India emerging as a trade hub opens up various opportunities for the existing as well as new businesses in India. The opportunities can be looked upon as follows:

- 1) Outsourcing hub: The implications of the global economic slowdown might be that the first world economies such as the US might be looking out for low-cost outsourcing solutions. This might open up opportunities in various fields like IT, Finance, or non-core items. If India can rise to the challenge and grab the chance it may help boost various sectors and generate employment.
- 2) Source of supply: The situation of the Covid-19 crisis has shown the mirror to various countries and now they have started to realize that all this time they have been too dependent on just one nation for the supply. This realization of the truth has made countries and organizations to look for alternatives which can be beneficial for India to

enter multiple trade channels as a supplier of raw materials and good. This possible increase in demand for the supply of raw material and manufactured goods from the Indian market might again present new opportunities and a boost to the organizations as well as the manufacturing sector generating revenue and employment. The table below shows the export and import figures of the worlds top three nation in terms of trade:

Countries	Import (Millions \$)	% of Global Imports	Export (Millions \$)	% of Global Exports
China	2,134,982	11.37	2,494,230	13.45
US	2,611,432	13.92	1,665,302	8.98
Germany	1,292,726	6.69	1,562,418	8.43

Source: UN Comtrade

While on contrary **India's share in global** trade (merchandise and services) was 2.1% (481.74 USD billion out of total 23,044 USD billion) for **exports** and 2.6% (600.62 USD billion out of total 23,112 USD billion) for imports. This data shows how far behind we are from the leaders of trade and the size of the opportunity which is present in front of us. The situation of COVID-19 is going to affect the % of global exports of China significantly which right now stands strong at 13.45% of the global export volume. If India can increase its share by merely 1% that too will give a huge boost to the economy and the sectors and would lead to the generation of revenues and job creation in the nation.

3) A shift of manufacturing units: Many of the foreign manufactures find India a good alternative to china. As the companies are thinking of either shifting or splitting their manufacturing facilities to other nations than China. According to some reports around 300 companies are already in talks with the Indian government for production in various sectors like textile, pharmaceuticals, and electronics. If India can capitalize on this, Then, in turn, this would lead to the development of infrastructure of manufacturing facilities around India and also boost employment.

4) Being autonomous: For quite a while many of the Indian industries have been overly dependent on foreign nations for the supply of raw material or finished goods. The disruption of supply chains caused by the pandemic has got organizations thinking about the possibilities of localization of the supply chain. Many of the organizations are thinking about backward and forward integrations of their supply chains. This also presents opportunities for new businesses to set up their facilities to substitute the raw materials and finished goods which were until now imported from foreign countries.



A Positive Outlook

Possibilities

It can raise India's export market share by approx. 4% by 2025 and approx. 7% by 2030.

- It could create 4 crore well paid
 Network products(NP). jobs by 2025, and 8 crores by
- India's export market could stand strong at 343.28 Billion USD by 2025, and 353.18 billion • IT& Fintech services USD by 2030.

Sectors

- Textile, clothing, footwear.
- Pharmaceuticals.
- Consumer durables.
- Steel and Iron.
- Renewable Energy.
- Chemical&Petrochemical

The way forward

- Strengthening exports in NP
- Large scale expansion of assembly activities
- Boost to domestic production
- Raising India's export market share
- A low level of service link costs.
- · Creating an ecosystem for specialization.
- Promotion of local brands on national and international level

The past data shows us that by a boost of exports between 1999-2011 a total of 8,00,000 jobs were created in the formal and informal sector, while around 2.62 crore new jobs were created in rural and urban areas between 2011-12 and 2017-18 among regular wage and salaried employees. For these possibilities to come true Indian government and different sectors will have to work under harmony and overcome all the obstacles which are in the way. This could lead to another golden era for the nation of India in terms of employment and revenue generation.

Future anyway is hard to foresee, however envisioning where a solitary seed can be planted to bear a massive bearing tree is a thing that we have to do.

3. Impact of COVID-19 and imperative for transformation.

COVID-19: Disruption of Industries

Here we all sit at home, hunkering down as we hold out COVID-19 industry disruption. That is somewhat simplistic, the healthcare professional and service folks — grocery stores, municipal workers, food, construction, etc. — are still working diligently keeping us solid, took care of, and safe. Salute to every one of you. Back to the prompt subject, however—this is what industry disruption resembles. Every industry disruption occasion develops the gap between those that have found a way to change their business and those that have found a way to reconsider their organizations. The more noteworthy the disruption, the more extensive the gap. In taking a gander at COVID-19 industry disruption, those same leaders additionally appear to attempt a comparative advance. Leaders in digital transformation have unmistakably comprehended that when confronted with industrial disruption of this greatness, overhauled objective setting notwithstanding change is basic.

COVID-19 industry disruption is an activity in change management, enhanced by being quick and with not a single perceptible end to be seen. All the negative elements related to change management—shock, denial, frustration, and depression—are present yet additionally happen rapidly. In any case, there is next to zero time to easily use the orders and procedures expected to proactively meet the hierarchical disturbance.

In these uncommon circumstances, organizations that have invested the effort realized what they expected to, and drove themselves to change can all the more likely explore the disruption. They comprehend that the objectives they had initially decided to accomplish should be resifted. At the end of the day, they rapidly re-evaluate what the same old thing resembles when business is irregular.

The organization amidst the disruption needs to evaluate the impact of the COVID-19 on their industry and the transformation or the disruption in the working model which might be the next normal for an industry. A long-term view of this would help organizations work in the same direction and rethink and start restructuring themselves in line with the assessment of the impact of COVID-19 on its people, processes, profits, and partnerships. This will include organizations to analyze, think, design, and restructure their ways of operation. The change would be felt in all the departments of the organization whether it is HR, Finance, Marketing or operations. It doesn't matter which sector you belong to or the size of your organization; a change is inevitable.

Impact of Covid-19 vs Disruption of Industries

Our analysis of the impact on various industries and the disruption levels that the company is going to see in the future helps us place the industries in 6 major categories:

- 1) Neutral/Evolve: The industries which are falling under this category are the one who isn't having a major impact of COVID-19 onto. In the future, these industries might evolve up to some extent to adapt to the adverse situation of the market presented against them. Although the impact assessment of the industries gives us an idea that in the future, industries falling under this category might not be affected severely but the minor negative or positive impact is expected in these industries.
- 2) **Positive/Evolve:** This category of our matrix consists of the industries which are supposed to be impacted positively in the future past the COVID-19 crisis. The degree of transformation is again going to be in the same range as our previous category of the matrix, we expect some form of evolution in these industries for the adaption but there is no major disruption expected in the working model of these industries.
- 3) Negative/Evolve: Industries in this category of our matrix are going to be adversely affected by the COVID-19 situation. They are going to be the ones who are going to face major losses and have to fight to survive. In the quest for their survival, they are also expected to undergo some sort of evolution in their models. But no major disruption is expected here. Also, they need to brace themselves for the impact.
- 4) Neutral/Disruption: The change is expected to be imminent for these industries. The disruption of the working model with either a slight effect of COVID-19 either positive or negative. But in any case, these companies might not only need to evolve and adapt; they might have to rethink and reshape themselves.
- 5) Positive/Disruption: The industries with the silver lining in the situation of crisis. These industries might be standing in a positive situation with the crisis helping their growth and providing them with a positive outlook. But to grab these opportunities they are expected to get in line with the need of the hour and to address this call they might need to restructure themselves.
- 6) Negative/Disruption: The category of the matrix is as tricky as the situation in which some of the industries might fall once the COVID crisis fades away. The industries are expected to be impacted by the crisis negatively. To stop themselves from dying out they may need to restructure themselves too. Difficult times lie ahead for these industries, the need for disruption with the negative impact will be hard to cope with.

Neutral/Evolution. Positive/Evolution. Negative/Evolution. Neutral/Disruption. Positive/Disruption. Negative/Disruption. **IMPACT & TRANSFORMATION** ◆ Airlines, Tourism & Hospitality Automobile and Auto components ▲ Construction and Real estate **▼** Textiles ★ Freight and Logistics Metals and Mining + Oil and Gas - Power - Consumer and Retail Chemicals ■ Agriculture ▲ IT Servces ■ Pharmaceuticals **X** Telecommunicaations Healthcare **MSME** Banking, NBFC and Insurance - Education and training ◆ Ecommerce 5 4.5 4 Education and training Banking, NBFC and ___ 3.5 Pharmaceuticals 3 MSME # Metals and Mining ◆ Ecommerce TRANSFORMATION 2.5 Telecommunicaations 2 Construction and Real Consumer and Retail Airlines, Tourism & 1.5 Hospitality Power -+ 1 Automobile and Auto X Textiles Oil and Gas components 0.5 Freight and Logistics griculture

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How things turn up in the future is a thing that we still need to see. But one thing can be said for sure that post-crisis the tables are going to turn around, transformation in how work used to be done in the era before COVID-19 crisis are going to happen.

We would not be wrong if we say that it's the beginning of a new age which demands certain measures from the industries. The industries need to have a look at the broader picture of the industry and need to make a quick move for the transformation to make the best out of this situation.

4. India's IT&ITeS sector and impact of COVID-19.

India's IT-BPM sector

India is the world's largest sourcing destination, accounting for approximately 55 percent of the US\$ 185-190 billion markets in 2017-18. India's highly qualified talent pool of technical graduates is one of the largest in the world and the country has a low-cost advantage by being 5-6 times inexpensive than the US. India is the second-fastest digitizing economy amongst 17 leading economies of the world.

The cloud market in India is expected to grow three-fold to Rs 49,621 crore (US\$ 7.1 billion) by 2022 with the help of Growing adoption of Big Data, analytics, artificial intelligence, and the Internet of Things (IoT), according to Cloud Next Wave of Growth in India report.

India's IT industry contributed around 7.7 percent to the country's GDP and is expected to contribute 10 percent of India's GDP by 2025.

The IT-BPM sector in India stood at US\$177 billion in 2019 witnessing a growth of 6.1 percent year-on-year and is estimated that the size of the industry will grow to US\$ 350 billion by 2025. Moreover, revenue from the digital segment is expected to form 38 percent of the total industry revenue by 2025 whereas, the digital economy is estimated to reach Rs 69,89,000 crore (US\$ 1 trillion) by 2025. The total export revenue of the industry is expected to grow 8.3 percent year-on-year to US\$ 136 billion in FY19. Spending on Information Technology in India was estimated to be around US\$ 90 billion in 2019.

IT industry employs nearly 3.97 million people in India of which 105,000 were added in FY18. the industry has added over 0.873 million jobs over the last five years itself. The export sector crossed Rs 9,57,493 crore (US\$ 137 billion) of revenues and marginally grew at the rate of 7-9 percent in FY19.

The computer software and hardware sector in India attracted cumulative Foreign Direct Investment (FDI) inflows worth US\$ 43.58 billion between April 2000 and December 2019 and ranks second in the inflow of FDI, as per data released by the Department for Promotion of Industry and Internal Trade (DPIIT).

PE investments in the sector stood at US\$ 11.8 billion across 493 deals in 2019. Venture Capital (VC) investments in the IT & ITeS sector stood at US\$ 67.0 million during Q3 2019.

The Government of India has extended tax holidays to the IT sector for software technology parks of India (STPI) and Special Economic Zones (SEZs). As of November 2019, there were 417 approved SEZs across the country where 274 are of IT & ITeS and 143 are exporting SEZs.

Further, the country is providing procedural ease and single window clearance for setting up facilities. In May 2019, the Ministry of Electronics and Information Technology (MeitY) launched the MeitY Startup Hub (MSH) portal.

Also, the government has identified information technology as one of the 12 champion service sectors for which an action plan is being developed. It is setting up a Rs 5,000 crore (US\$ 745.82 million) fund for realizing the potential of these champion service sectors

COVID-19: IT industry comes to a standstill

The first quarter of the year has been inauspicious for the economy with the rest of the year only appearing even more catastrophic. The COVID -19 pandemic has created havoc in almost every country, business sector, and human behavior, giving rise to a situation no less than a global war or an economic recession. From significant researches, it could be inferred that the Indian IT industry whose size is as big as USD 181 billion is going to witness a significant slowdown during the financial year.

Lockdown leads to revenue meltdown: the technology spending in many regions like the US and Europe is going to affect the revenue of top IT companies. According to some estimates, the global IT industry is expected to see an overall decline of about 3-4% due to the pandemic. This slowdown in the IT expenditure across the globe might lead to a loss of billions of dollars to India's IT industry, according to some rough estimates the loss is expected to be around USD 5 Bn in IT services export. The hardware business is expected to be more affected than the software and services business.

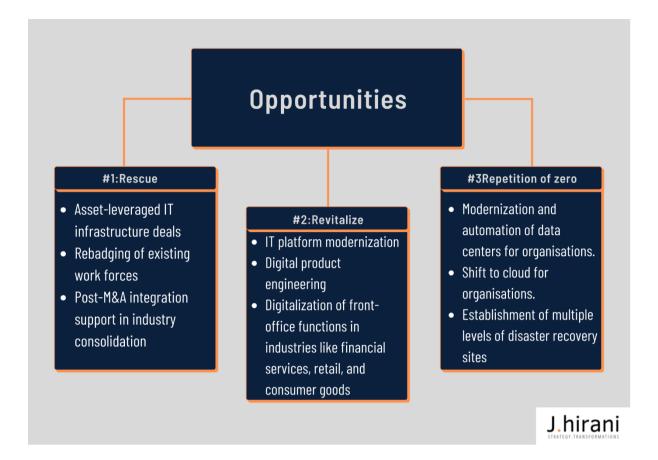
The travel restriction imposed around the country to control the spread of the virus is leading to delayed project execution. The closure of air travel and road travel has led to the cancellation of projects which were going to be finalized soon, not just old projects, the procurement of new projects is also affected. The travel restrictions have also taken a hit on the execution of the ongoing projects in the firms. The concept of work from home is still a new one for the Indian techies even and they are adapting and trying to cope up with the difficulties it places in front of the IT workers. Continuous efforts are made by the firms to engage with their clients on a digital platform. They are also trying to ensure that their workforce is adapted to the new work from home concept.

This slowdown is causing massive layoff and pay cuts, some estimates tell us that approximately 2 lakh employees of India's IT industry might lose their jobs. The smaller IT firms are going to be even worse affected than the big giants. The statistics reveal that the smaller firms' employ around 1-1.2 Million people while the top 5 giants' employees around 1 million people. The total employment provided by the IT industry is close to around 4.5 Million.

The present situation, however, is full of ambiguity. And with alarming projections showing what it may cost the world in the long run, it needs to be seen how India's IT industry is going to survive and evolve amidst this crisis.

Post COVID-19; Potential opportunities for India's IT&BPM sector

A situation of crisis presents both difficulties as well as opportunities. This situation of the COVID-19 crisis isn't any different in this aspect. We believe that, while the world will no doubt face economic challenges, the post-COVID-19 world will also offer three sets of interesting opportunities for IT service providers.



Opportunity #1: Rescue

Enterprises that have borne the frontal assault of the pandemic will need significant help to recover. They will look for an infusion of cash and engage in deep cost-cutting. Further, as governments across the world ease liquidity and lower the cost of capital, enterprises will seek financial engineering solutions from their IT and BPO providers.

Key opportunities will include asset-leveraged IT infrastructure deals, rebadging of existing workforces(Re-badging by a company is having their employees continue to do work for the company, but not as its employees, but instead as employees of another company with which the original employer has a re-badging contract), and post-M&A integration support in industry consolidation scenarios. We expect these opportunities to come up in the travel, transport, and hospitality industries.

Opportunity #2: Revitalize

The disruptive phenomenon of COVID-19 will underscore the need to move to alternate, digital-friendly business models for many industries. Sophisticated enterprises will want to accelerate their digital transformation initiatives for a variety of reasons – to recover lost time, to lower the cost of customer service, and to de-risk their traditional business models. Digital

disruptors will sense weakness in their competitors and will seek to accelerate their expansion plans.

We anticipate key opportunities in the shape of IT platform modernization, digital product engineering, and digitalization of front-office functions in industries like financial services, retail, and consumer goods. These were initiatives that most enterprises were already seeking to scale. As they go after them with renewed vigor, service providers must find ways to construct self-funding, agile journeys instead of big bang transformation. There will be little appetite for the latter.

Opportunity #3: Repetition of zero

COVID-19 has fundamentally altered risk perception in the global services industry. Delivery models will need to be re-evaluated for their resilience to risks that were hitherto relegated to the "it can't happen to us" category. Cost-conscious enterprises that stayed clear of initiatives like BYOD, VDI, and cloud-based collaboration systems now have a clear business case, albeit one they didn't want or foresee. Key opportunities: Enterprises will need to modernize and secure their networks to enable remote working at scale, modernize and automate their datacentres, move to the cloud, and establish multiple levels of disaster recovery sites. There might even be opportunities to set up enterprise-class home/small offices for mission-critical workers analogous to how remote and branch office infrastructure has been managed. Global delivery frameworks will be scrutinized for location concentration risks, and secure ODCs will need new operating procedures. We expect almost every enterprise to be dealing with their version of derisking.

What should be the approach of service providers moving ahead:

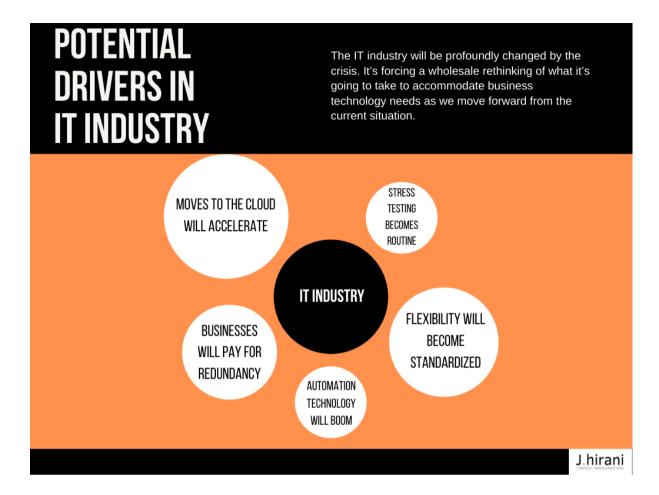
Togetherness is the key: Just the way everything seems uncertain for the moment and you are stressed, the same way you customers are stressed too. They require all the help and support they can get right now. They likewise comprehend that the world is flawed at present and will excuse the odd niggle. Be that as it may, they won't excuse bureaucracy, dull change control strategies, and an absence of adaptability.

Own the moment of transformation: there are going to be a lot of uncertainties and confusion around us. But every enterprise customer will need their version of the way ahead they need to walk the path with a clear to the point customer-specific tailored plan. The plan which is most pragmatic and comprehensive of all shall win the show.

Floating the bend: At the point when race vehicle drivers approach a twist on the track, dissimilar to normal humans who slow down, they quicken. This is known as "floating the bend." Service suppliers that keep on making insightful ventures through the inescapable demand deceleration will develop more grounded and better situated to serve the core demand themes of digitalization and IT modernization. Automatic cost control responses are a snare. They will just smother advancement and push specialist co-ops further down the hierarchy. Most importantly, service providers need level headed leadership—it would be an immature board that passes judgment on the executive team on a post-COVID-19 downturn. Remember: it's not about the fall, it's how you ricochet back.

Potential Drivers & disruptions in IT&BPM industry post COVID-19

The IT industry will be profoundly changed by the crisis. It's forcing a wholesale rethinking of what it's going to take to accommodate business technology needs as we move forward from the current situation. With that in mind, here are the five most important ways the IT industry is likely to change as a result of the coronavirus crisis.



1. Stress Testing Becomes Routine

For a long time, IT professionals and IT service providers have made sure to conduct regular stress testing of business systems deemed critical to daily operations. Still, it's a safe bet that the majority of VPN systems and remote access solutions were never a part of those tests. They simply weren't used by a large enough portion of the workforce to rate regular testing. If the coronavirus crisis will change anything, it will be the way that IT providers classify technology as "mission-critical".

For that reason, it's easy to predict that network-wide stress testing will become standard operating procedure for the majority of businesses and the IT professionals that manage their networks. It's going to become necessary to make sure that WAN-side services can handle a complete traffic reversal like the one that many businesses have now been forced to accommodate. It's a scenario that many never planned for, and the cost of failure in a situation such as this one could deal a death blow to many businesses.

2. Moves to the Cloud will Accelerate

Before the coronavirus crisis, global businesses had been gradually shifting computing workloads from on-premises hardware into the cloud. Still, for all the progress that had been made, data from some reports have indicated that most businesses had only shifted about 20% of their workloads into the cloud — with the remaining 80% remaining within on-premises legacy solutions. Needless to say, that has hampered the ability of many organizations to reallocate resources to support workers who are not forced to work outside of their offices.

It shouldn't take long after businesses start getting back to normal to see many accelerating their plans to move additional workloads to the cloud. It's the smartest way for them to gain the flexibility needed to handle any eventuality, as well as to decrease technology operating expenses going forward. It should also prompt many businesses that hadn't considered a shift to the cloud to do so, now that the many advantages of modern cloud solutions have been on very public display in recent days.

3. Businesses will Pay for Redundancy

For most enterprises, having redundant technology solutions has always been a core operating principle to maintain business continuity. For that reason, network load balancing and standby systems are common in large network deployments. That kind of network redundancy hasn't been adopted in the vast majority of small to midsize business networks to date, however.

Going forward, all kinds of businesses, both large and small, will be willing to pay for the kind of redundancy that used to be reserved for enterprises. That should also fuel a boom in the IT sector for companies to develop network technologies to support that demand, driving the price down to a level where even small businesses can afford to adopt redundancy.

4. Flexibility will Become Standardized

Even before the coronavirus crisis, businesses of all kinds had started to embrace things like flexible work schedules and remote work policies to provide a better employee experience. That's even why so many businesses had turned to coworking spaces in place of permanent office space over the past few years. Businesses that did so also tended to embrace IT concepts like bring-your-own-device (BYOD) to help support their nomadic workforces.

After the coronavirus crisis passes, more businesses will rush to adopt standardized IT solutions to support BYOD and other flexible technology initiatives. Instead of spending their IT budgets on company-owned devices, they'll start spending it on a management infrastructure to enforce company technology policy on employee devices instead. In the end, it may bring about the true end of the PC era that experts have forecasted for some time.

5. Automation Technology will Boom

Recent advances in artificial intelligence (AI) and robotic process automation (RPI) have slowly started to work their way into businesses around the world. In many cases, the first exposure that companies have had to the technology has been in the form of marketing automation software. Larger organizations have even started the process of automating routine day-to-day tasks wherever possible.

In a post-coronavirus environment, it's almost a certainty that businesses will begin adopting automation wherever it is currently possible and will continue to invest in such technologies going forward. They'll do so because it's the surest way to minimize future business disruptions like the one they're dealing with now. After all, computers aren't affected by global pandemics, and automated systems tend to require only minimal maintenance and human intervention in most cases.

Potential Disruptions in the sector:

- 1) **Redundancy:** redundancy was already on a spike in the Indian industry due to the automation technology, the COVID-19 crisis has just worsened the situation in this aspect. The first and foremost step for all the IT&ITeS firms is going to be the measure of redundancy. according to the estimate of a few reports, it is expected that 1.5 lakh to 2.5 lakh people might lose their jobs.
- 2) **Remote working:** WFH is going to be the new normal for the IT industry, To comply with the social distancing norms and to reduce the overheads. IT firms are going to be looking forward to a permanent shift to WFH culture.
- 3) **Security a top priority:** Due to the shift to WFH culture data security and data storage over the cloud will be a new challenge for the industry. To achieve these IT firms are expected to increase their spending on a more secure network and stronger firewalls which are hard to breach.
- 4) **Stress testing:** The stress testing measure is going to be more frequent than ever and is going to be more in-depth. To enable smooth functioning without any major

breakdown, companies will have to ensure time to time the stability of their system which is in place. This in turn will also increase the credibility of the firm in the eyes of its customers as a reliable source.

5) **Flexibility**: The above-mentioned measure is going to provide flexibility and agility to the IT firms which are going to be the need of the hour in this changing environment presented in front of the firms.

A whole new IT industry: The changes to the IT landscape mentioned here won't be the only things that will happen to the industry as a result of the coronavirus pandemic. They're just the most obvious outcomes that are easy to foresee. Likely, the overall effects the current crisis will have on the IT industry will be even more far-reaching than anyone can now imagine, with long-term ramifications that nobody would expect.

As we move forward, it's going to be critical for all of the members of the IT community to work in concert with the businesses they support to devise more specific long-term plans and strategies to handle an uncertain future. Many of those plans will include the points listed here. Most will have to go a whole lot further. What's certain is that all of those plans will result in an IT environment that will bear little resemblance to the one it's replacing.

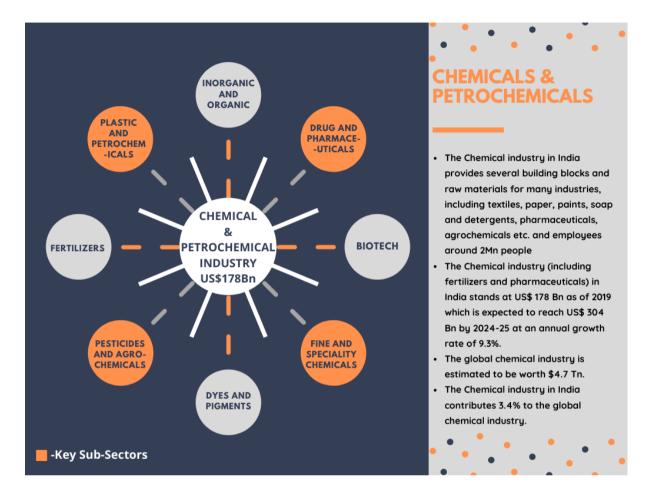
5. Indian Chemical Industry and impact of COVID-19

India's chemical industry: A consistent value creator

India's chemical story is one of outperformance and promise. A consistent worth maker, the chemical industry stays an alluring center point of opportunities even in a situation of worldwide uncertainty. Overall patterns influencing the worldwide chemical industry could prompt close term open doors for chemical organizations in India. How chemical players organize and tap this worth making potential could shape the eventual fate of the industry in India just as the nation's trade performance.

India's chemical industry is a worldwide outperformer in returns to investors and stays an appealing center for chemical companies. This outperformance has brought about exclusive standards for supported, consistent development of the business' top line and bottom line. The full-scale point of view on India demonstrates that while the short-term outlook is testing, the nation's long-term growth story stays positive. Also, the Indian chemical industry has been an outperformer in the tough times too, between 2016 and 2019, when the Indian economy wasn't faring well, the chemical industry maintained a CAGR of 17 percent.

Snapshot of the Indian Chemical industry



The growth curve Is expected to have a positive slope

Notwithstanding financial difficulties that caused India's GDP growth rate to drop to 4.5 percent in the second from the last quarter of 2019, a long-term point of view shows that India has averaged yearly GDP growth of 7 percent throughout the previous 30 years. The nation is likewise chipping away at turning into a USD 5 trillion-dollar economy. This long-term hopeful situation looks good for chemical organizations, particularly considering a long investment cycle. Chemical organizations can likewise profit by rising local demand in chemical end-use sectors, India's engaging quality as a manufacturing hub, and its improved ease of doing business ranking.

COVID-19 crisis: Chemical industry faring better than most

Analyzing the impact of COVID -19 on various industries of the Indian economy, if we say that the chemical sector is faring better than the others then we would not be wrong. The constant demand for chemicals in the market whether it is the agrochemicals or specialty

chemicals has kept the chemical sector up and running constantly through this situation of crisis. Firms are expected to show a positive revenue generation in the first quarter at least as the situation of crisis escalated in India at the end of March. The chemical industries supplying fertilizers for agriculture and raw materials like APIs to pharmaceutical industries has been running at a good capacity even in the lockdown period. One of the sub-sectors on the Indian chemical industry which has been soda ash manufacturers (like Tata Chemicals) is expected to report a drop in volume YoY due to the shutdown in domestic operations and lower prices throughout the March quarter. However, the drop in power costs should provide some relief from the negative impact of lower soda ash prices. That been said, the chemical industry has not been completely out of the zone of impact of the COVID-19 crisis. The slowdown of demand in the Q2, Q3, and Q4 of FY2020-21 would be seen in both domestic and exports market which in turn might lead to factories being shutdown which may impact capacity utilisations in FY21E and negatively impact operating leverage.

Post COVID: Opportunities for India's Chemical industry



The performance of the sector has been fair and square up until now under the situation of crisis presented by COVID-19. The interesting part lies in the post COVID era of the industry each

industry will be presented with opportunities that they need to grab on. Foreseeing the upcoming opportunities Capturing them in the near term could make a positive difference to Indian chemical companies and the industry overall.

- Loss of China (25 percent share) as a reliable partner and continued shifts from EU/Japan (17 per cent/7 percent share) mean share of India (3 percent) will rise meaningfully. The availability of talent in chemistry and engineering will act to India's advantage.
- India could build self-sufficiency in petrochemicals to plug the domestic shortfall of 52% (by volume) in petrochemical intermediates. An opportunity of worth USD 11bn is present by just six of the value chains which make up around 77% of this shortfall.
- Specialty chemical sector presents a huge opportunity on the global level, ramping up efforts to increase exports in this subsector will help India gain a significant share in the global exports.
- Many of the major oil and gas companies of the world are moving their heads on downstream chemical opportunities. This shift of focus can, in turn, be profitable for petrochemicals in India, and can open doors for higher investment in the sector which in turn would ease feedstock challenges and lift independence.
- There have been a lot of changes in the structure of the Chinese chemical industry due to stricter environment norms, tighter financing, and consolidation. The change in norms helps some of the large players of the industry, on the other hand, it could be a major cause of uncertainty for international layers who are dependent on China for sourcing their supply of chemicals. This shift in the global picture, in turn, would help Indian chemical companies to enter in certain value chains and segments, especially in short term
- Trade wars are erupting around the globe, especially among China, the united states, and western Europe. These trade wars have led to a shift in global supply chains, affecting bilateral trade between China and the united states. Large chemical markets that are still open in this scenario present opportunities for Indian chemical companies.
- To achieve the advantage of a greater scale a sense of prioritization of core business and consolidation can be observed in the industry mostly in the form of big-ticket mergers and

acquisitions. The large-scale matters even more to the Indian players of the industry as it helps them in fortifying their competitive advantage over others.

- Sustainable development is the new imperative and not just hype around the world. Chemical companies could move forward keeping the imperative in their vision. This, in turn, would help them protect long-term shareholder value while continuing to comply with local regulations.
- Digitization is the new hot topic of the industry, as it helps companies improve on efficiency and productivity. A lot of companies globally are exploring digital's potential; Indian companies could also walk on the same path to increase their profit margins.

The industries need to start transforming themselves from now itself. So that they are prepared to grab the opportunity and make the best out of it.

Post-COVID: Potential Disruptions in the chemical industry

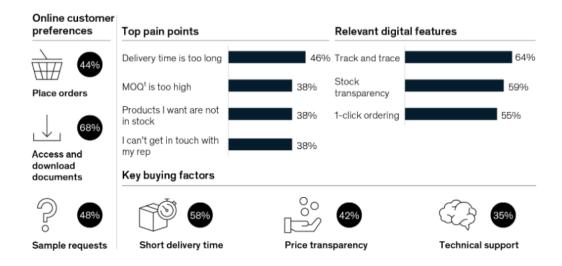
Disruption of the chemical industries would welcome a new era in the history of the chemical industry while all the firms have advanced with time and are making use of more contemporary technologies, the chemical industry is still dependent on the traditional model and technologies. The post-COVID-19 era is going o bring upon a digitalized manufacturing as well as the operation of India's chemical industry. A few of the major possible disruptions can be mentioned as below.

- Use of quantum computing in the chemical industry: quantum computing can have many applications in the chemical industry right from the designing of the which is the first stage of manufacturing of chemicals to the marketing of the products which is the last stage of the chain. Quantum computing has the potential to enable chemical companies to make better products at a lower cost in less time. While the chemical industry has not been disrupted yet by digital advances, that has taken other industries by a storm. In these demanding times of COVID-19 crisis where the demand for digital advances has been higher than ever for all the industries. It might just be the right time for the chemical industry to jump onto digital advances which can deliver the right competitive advantage to the firms. A brief overview of how quantum computing can be applied to different stages of chemical industry can be seen by the table below:

POSSIBLE APPLICATIONS High High Medium High Medium High Medium	Application of Quantum computing in chemical industry						
Design molecules and solid materials with required properties, reducing lab work Discover more effective formulations by modelling how ingredients affect processes or proteins to make better active ingredients ingredients ingredients affect processes or how complex better active ingredients ingredients and mass transport Discover more effective formulations by modelling how ingredients affect processes or how complex better active ingredients in heat and mass transport Use quantum computing to optimize supply chains and logistics and to reduce cost Use quantum Al to help handle B2B and B2C customer relations	STEPS	1-DESIGN OF CHEMICALS	2-DESIGN OF PRODUCTS	3-SUPPLY CHAIN	4-PRODUCTION	5-MARKETING	
POSSIBLE APPLICATIONS Solid materials with required properties, reducing lab work Use computers to define the shape of proteins to make better active ingredients affect proteins to make better active ingredients and mass transport Solid materials with required properties, reducing lab work Improvedients affect processes or how complex better active ingredients and logistics and to reduce cost Solid materials with required properties, reducing lab work Solid materials with required properties, lab work Solid materials with reducing and finding of reactions and finding new catalysts. Solid materials with required properties, lab work lab better active understanding of reactions and finding new catalysts. Solid materials with reducing positions and logistics and to reduce cost with a supply catalysts. Solid materials with reducing positions and logistics and to reduce cost with a supply catalysts. Solid materials with reducing positions and logistics and to reduce cost with a supply catalysts. Solid materials with reducing positions and logistics and to reduce cost with a supply cat	IMPACT POTENTIAL	High	High	Medium	High	Medium	
5011010	POSSIBLE APPLICATIONS	solid materials with required properties, reducing lab work Use computers to define the shape of proteins to make better active	more effective formulations by modelling how ingredients affect processes or how complex mixtures	computing to optimize supply chains and logistics and to reduce	suppress by-product generation through a better understanding of reactions and finding new catalysts. Use quantum algorithms to solve complex optimization problems in heat	quantum AI to help handle B2B and B2C customer	

Direct commercial interfaces or digital platforms: these modes of buying and selling are increasingly preferred by B2B buyers of the chemical industries. The companies who want to take advantage of it need to move fast into this space. Recent studies show that around 85% of the buyers of B2B marketers prefer to purchase a known product over a digital platform instead of placing the order over a phone or an email. The above preferences could be better understood from the snapshot of customer buying preferences of the B2B market:

Digital solutions can improve B2B customers' buying experiences.



But to successfully adopt digital platforms the chemical industry will have to take care of the following three aspects:

- 1. Transparency of product prices
- 2. Increased inefficiency (a platform could make selling leaner and leverage benefits of scale).
- 3. Decoupling of the manufacturing and market matching (the manufacturer isn't necessarily the one that sells the product.

The above reasons make adopting the digital platforms on their own difficult for chemical companies. But in collaboration with other players which could provide them with the advantage of scale or with eCommerce incorporation. The chemical production firm might be able to have the speed and agility required for a successful move towards digital platforms. Its time for chemical companies to make a fast move in this direction especially in this situation in which a lot of restriction is in position due to the COVID-19 crisis. This move will demand disruptions in the operating model of the firms. They need to be more agile and need to have an equilibrium between the fast demand and supply. To achieve that equilibrium, firms will have to develop a dynamic ecosystem.

- Technology-enabled procurement for chemical companies: New digital procurement techniques are the adaption that the chemical companies could incorporate. This step could reduce the overall spending of industries by 8-12% in just about a period of 2-5 years. A successful strategy of digital procurement takes about 12 months to show its tangible impact. Going digital in the procurement process can provide the chemical organizations with agility and flexibility and help in the reduction of the cost. Digital tools are part of a broader set of procurement best practices, not an addition to or replacement for them. One of the examples of digital technology being implemented in the process of procurement is the use of the supplier portal. The advantages of the supplier portal can be seen as below:

The supplier portal helps manage orders and encourages suppliers to respond more quickly.



. Access to the portal Supplier connects to the portal using Windows credentials



2. View of ongoing requests for proposals Supplier can access all current requests for quotes and can apply via the portal



3. View of orders
Supplier can look
at status of orders
and can access
historical data on
closed ones



Real-time access
 to operational
 details
 Supplier can
 navigate through
 relevant reports



5. Notifications
Supplier receives
notifications when
the status of an
order or request for
quote has changed

As you can see in the above image that how the use of digital advances in the procurement techniques streamlines the process of procurement and gives more transparency to both supplier and receiver making the process more agile and quick which is the demand of the hour for the factories in the post COVID era.

6. Indian automobile industry and Impact of COVID-19

Automobile industry and the bumpy drive ahead

India became the fourth largest auto market in 2018 with sales increasing 8.3 percent year-on-year to 3.99 million units. It was the seventh-biggest producer of commercial vehicles in 2018. The Two Wheelers section rules the market as far as volume inferable from a developing middle class and a youthful populace. Additionally, the developing enthusiasm of the organizations in investigating the rural market further helped the development of the segment. India is likewise a noticeable auto exporter and has solid export growth expectations for the not so distant future. Automobile exports grew 14.50 percent during FY19. It is expected to grow at a CAGR of 3.05 percent during 2016-2026.

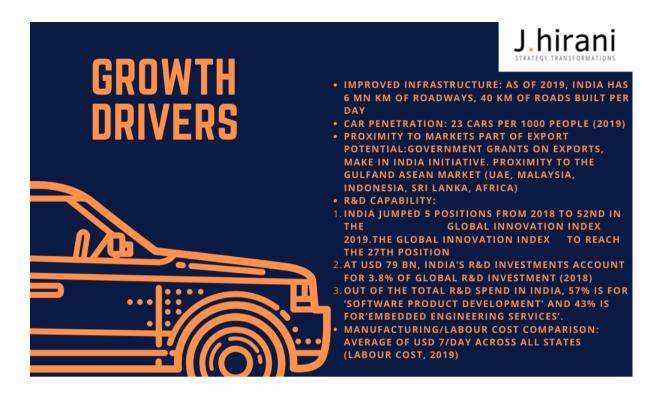


- 4th largest automotive market in the world after China, USA and Japan (2019)
- Auto exports grew by 14.5% to USD 15.5 Bn (2019)
- 5th largest auto-producing nation after China, USA, Japan and Germany (2019)
- Auto in India is a USD 118 Bn industry and accounts for 7.1% of the country's GDP (
- Auto accounts for 49% of the country's manufacturing GDP (2018)
- Auto industry employs 37 Mn people directly & indirectly (2018)
- Attracted USD 23.5 Bn FDl during April 2000 Sept 2019 Attracted 5% of total FDl inflows
- Industry contributes towards 18% to the manufacturing GDP and 2.5% to the national GDP (2018)
- Direct employment to 1.5 Mn people (estimated), 2018
- Auto component industry turnover: USD 57 Bn (FY 2018-19): Growth rate of 14.5% - Exports market size: USD 15.2 Bn
- [FY 2018-19]



Market Size

Overall domestic automobiles sales increased at 6.71 percent CAGR between FY13-19 with 26.27 million vehicles getting sold in FY19. Domestic automobile production increased at 6.96 percent CAGR between FY13-19 with 30.92 million vehicles manufactured within the country in FY19. In FY19, year-on-year growth in domestic sales among all the categories was recorded in commercial vehicles at 17.55 percent followed by 10.27 percent year-on-year growth in the sales of three-wheelers. Automobile exports grew 14.50 percent year-on-year during FY19, while during April-December 2019, overall export increased by 3.9 percent. Premium motorbike sales in India recorded a seven-fold jump in domestic sales reaching 13,982 units during April-September 2019. The sale of luxury cars stood between 15,000 to 17,000 in the first six months of 2019. Sales of electric two-wheelers are estimated to have surpassed 55,000 vehicles in 2017-18



The automobile industry is supported by various factors such as availability of skilled labor at low cost, robust R&D centers, and low-cost steel production. The industry also provides great opportunities for investment and direct and indirect employment to skilled and unskilled labor. Indian automotive industry (including component manufacturing) is anticipated to achieve Rs 16.16-18.18 trillion (US\$ 251.4-282.8 billion) by 2026.

Impact of COVID-19 on the sector

The COVID-19 pandemic has pushed humanity and the global economy into a crisis not seen since The Great Depression. In their effort to curb this pandemic, the Indian government, like many others, has enforced a national lockdown. While the lockdown may have helped limit the spread of the virus, it has severely affected the economy, disrupting entire value -chains of most major industries in India. The automotive industry is no different.

The auto sector had just experienced a considerable slowdown in the course of the last 12-18 months. Confronted with declining sales, worldwide political vulnerability, CO2 penalties, and quickly changing customer demand, most vehicle producers have been confronting an ide al tempest of difficulties since 2019—which are mainly driven by Connected, Electric mobility, Shared, and Autonomous. These circumstances have only been exacerbated by the onset of COVID-19, a global pandemic that is affecting every aspect of the automotive sector —from

parts suppliers to dealers. A prolonged truncation of consumer demand due to the lockdown is seen significantly affecting revenues and cash flows in the auto sector.

J.hirani **Impact of COVID-19 Suppliers** Dealers/Distributors **OEMs** Short term Short term Short term Decline in production, especially BS coming up but supply chain bottleneck in global supply chain. Medium term Medium term Medium term Potential extended waiting times for new models (incl. BS VI versions) due to disruption in Possible increase in Make in India as global & indian supply chains Possible decrease in exports as

Challenges brought on by COVID-19

COVID-19 is disrupting the global automotive value chain. Here are a few of the key challenges facing the industry, as well as suggestions that can help quickly address them:



1. Supply chain disruption

Since OEMs depend intensely on just in time production, their supply chains were quickly upset. In China, right around 66% of auto-production was legitimately influenced by the nation's industrial shutdown, which largely affected their providers also. Moreover, the lack of Chinese-made parts has heavily affected global production.

How to manage now:

- Evaluate the risks and create full transparency by using big data, intelligent systems, and connected ecosystems. This communicates shortages or other challenges to all points along the supply chain so they can prepare, adapt, or adjust accordingly.
- Mobilize a command center to orchestrate the response and configure the risk response.
 And all the while, operate with agility.
- After the crisis, operate risk mitigation as usual: integrate risk mitigation workflows, scenarios, and (response) protocols into daily operations to quickly switch from normal to disruption response if needed.

2. Manufacturing comes to a standstill.

While the situation in China is starting to stabilize⁵, most of the US and European car manufacturing is under huge uncertainty on when plants will resume normal production. At an equivalent time, OEMs are beginning to shift engineering, assembly, and even procurement capacities to supply and source medical equipment. Regardless of whether the halts are required by health and safety enforcement, legislative inaction, declining demand or a lack of parts in the supply chain, the consequences remain the same: job losses, an anticipated drop of 16 percent for the car creation and henceforth, an extreme effect on GDP.

How to manage now:

- Keep in close contact with your suppliers to ensure a quick ramp-up can occur when the market begins to recover and adjust your production levels and schedule accordingly.
- Consider increasing precautions to ensure workers' safety, allowing for physical distancing, and hiring specialized cleaning companies.
- Embrace Industrial-IoT-concepts to increase efficiency and prepare (future) shock protocols.
- Establish manufacturing resilience to accelerate the shift when 'emergency mode' needs to be activated.

3. Liquidity and working capital crunch

Money is the best—and it turns out to be much increasingly basic during occasions such as these. Some OEMs have low liquidity, and with insignificant working incomes, the rest of the money saves are on normal drained in under two months. This has driven different OEMs to arrange higher credit lines. Besides, the huge drop in showcase capitalization will probably quicken industry combination. What's more, without making sure about extra financing, a few players chances to leave the business. This budgetary test will affect transformational ventures into associated, self-sufficient, shared, and electric versatility, which is probably going to be conceded.

How to manage now:

- Stay in close contact with major banks (e.g. verify credit lines) and establish a workingcapital crisis mode that prioritizes payment obligations.
- Enter a stage of fixed-costs emergency mode. And consider the usage of AI in treasury management to set up real-time cash flow overview and forecasts.
- Furthermore, pay attention to the financial health of suppliers and dealers, as well as partners in general. They are also under financial distress.

4. A decrease in sales volume

China is as yet the world's biggest market for light vehicles. The business drop in February 2020 of more than 80 percent in contrast with January is a solid marker of the bearing the worldwide market is going, and the effect is as of now obvious. Figures for worldwide light-vehicle sales in every single significant area anticipate that the market will drop by around 12 percent in 2020, and it is impossible that these conditions will change soon. Sales figures for the US gauge a decrease of 9 percent every year that customers are not buying new vehicles because of the pandemic. Changes in customer behavior in light of being on "lockdown, for example, not so much mobility but rather more online shopping, may stay after the emergency passes.

How to manage now:

- Stay connected with customers via online and mobile channels.
- Focus efforts on generating leads through online car customization tools employed by prospective buyers and consider utilizing virtual event platforms to catch up on canceled trade shows.
- Consider implementing a contactless sales process to meet health and hygiene safety requirements.
- Rethink your sales model for the longer term, embracing digital channels, also as considering direct sales models.
- In the post-crisis phase, prices are likely to return under significant pressure as long as dealers will be got to reduce their inventories. But evaluate discount policies to balance volume and market share, profitability, and brand image.

Path to recovery



There is still a lot of uncertainty about whether the automobile industry is going to follow U-Shape or L-shape recovery. But whatever might be the course of recovery the automobile companies need to start preparing for the long-term now. The new normal of the automotive industry will require the companies to rethink their strategies from product offerings to acquisitions, and redesigning operating models to shift priorities, enhance customer relationships, and adapt to new supply chains. We have tried to summarise a few steps that the automobile companies could act upon to prepare themselves for the long-term and the new normal post-COVID-19:

- Plan activities to underwrite the potential repugnance for shared mobility and public transport ('push' marketing for 2W, entry-level 4Ws and used vehicles, 'in-market' demo vehicles to support test-drives)
- Prepare for the spike in after-sales (service on wheels camps for scheduled services)
- Re-asses up and coming launches and financing offerings (financing plans to handle liquidity crunch)
- Assess and de-risk supply chain dependencies (indigenization of significant segments;
 trigger-based emergency courses of action for the whole system)
- Prepare for an omnichannel sales experience (virtual deals advisors; online deals and advanced documentation)
- Adopt cleanliness driven procedure and configuration changes (cleansing/fumigation of the vehicle as a feature of workshop administrations and test-drive; plan no-contact client ventures)
- Explore interchange income choices (prioritize allied products and services accessories, concierge services)
- Capture chance to combine activities (partnership/acquisitions to acknowledge collaborations; new wellsprings of funding)

Disturbances

The present situation of the COVID-19 crisis is going to bring some new perspectives into the minds of players of the automotive industry as well as the consumers. These shifts are going to bring the change in the automotive industry. A rise in demand for EVs, Development and use of digital features, Autonomous technologies marking their presence, Change in consumer behavior, and mobility trends. The above-mentioned shift in the perspectives is going to bring in the change. Some of the changes which could be seen in the near future of the automotive industry can be seen as below:

- Plan for shifting mobility inclinations of the purchaser (review alliances to concentrate on patterns like alternate assets ownership models)
- Adopt digitalization of buyer touchpoints (start to finish digitalization of client venture for both sales and services)
- Explore contributions around the hyper-local delivery model (item and client technique adjusted to the developing interest for home delivery)
- Redesign procedures to get lean and responsive (low fixed cost plans of action; analytics
 use to all the more likely structure momentary reaction systems)

7. Potential metamorphosis in the IT&ITeS sector post COVID-19

The need for Metamorphosis in IT&ITeS sector

The COVID -19 pandemic has made the IT&ITeS organizations ground to a halt and reconsider their strategies. Attempting to re-evaluate their procedures now the IT&ITeS organizations must understand that they have to change their working models and the structures to support and be set up for what's to come. The conventional model they have been working from the start is turning out to be out of date now and is loaded up with blemishes. The customary methodology and the attitude of the IT&ITeS industry have been to continually extend in one spot only. Be that as it may, this model and perspective of growth is old school now and have numerous blemishes some of them can be recorded as beneath.

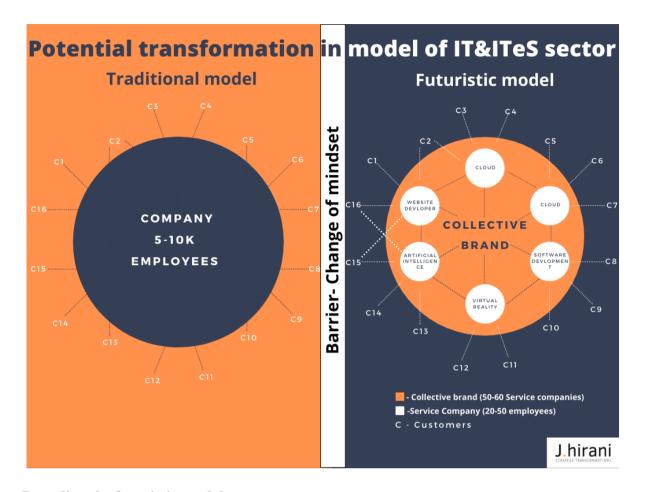
1.Huge investmemt in infrastructure development

- 2. High operational cost
- 3. Too big to be agile.
- 4. High structural complexicity
- 5.So many lost competencies.

J.hirani

IT&ITES Contemporary Working Model & it's flaws

The imperative of a new working model for IT&ITeS organizations is like never before. The cutback caused because of the COVID-19 is going to add lamp fuel to the previously consuming fire of the start-up culture of the IT&ITeS sector. These start-ups won't just give an intense rivalry to the greater giants of the business yet will prompt a different model of working. A model of working that is spry, flexible with a lower operational expense. These characters of this new working model will shape the foundation of any organization. This new model won't just be invited by these new businesses however even the greater giants need to give it an idea. In this better approach for working several small firms together will in general structure a network which thus will help in the foundation of a collective brand.



Decoding the futuristic model

In the collective brand model, a bee sanctuary like structure would be shaped in which numerous little firms will fill in as the structure square. These littler firms are self-guided and independent in their working and are located in several different places, the motivation behind why these little firms will meet up to frame a communitarian brand is to have extraordinary systems administration abilities and to manufacture a network. Likewise, the communitarian brand framed in such a way will enable these organizations to produce business notwithstanding it the interconnected system will likewise help them in creating business for one another. This model can be contrasted to some degree with a corporate umbrella yet the center quality of this model is its solid system and the network framed by the littler firms. The interconnected system would introduce a win-win circumstance for the entirety of the substances who are into it.

Advantages over the traditional model	Value creation for customer	
A Higher resilience to risk.	A secure and trustworthy source	
distributed workforce		
diversified network		
Strong customer relationship		
Less infrastructure	Low-cost services	
Lower operational cost		
Greater flexibility.	Quick and adaptive supply of services	
Agile organization structure.		

The structure of the collective brand working model furnishes organizations with built-in spryness, adaptability, flexibility, and redundancy. These implicit points of interest that this structure gives will be the significant motivation behind why everybody needs to grasp it. Another enormous preferred position that the auxiliary change will give the associations is the disposal of a requirement for hot sites, disaster recovery sites, cold sites and subsequently leading to decreased framework cost. All being said we feel ample opportunity has already past for IT&ITeS segment organizations to begin thinking and setting themselves up toward this path well ahead of time. Else, it may be simply past the point of no return for them.

Recommendations for the company:

- 1. Involve the student in the work place, including exposure to "real world" issues such as funding, and meeting all members of the organization. Similarly, learn from your intern about the current issues and concerns of college students. Get to know the intern by inviting the student to lunch.
- 2. Interns seek knowledge helpful in career planning. Ask them about their job fantasies and try to help them explore career options. Expose the student to the work that professionals do at the work site and, if feasible, take or send the student on a field trip to another site where the student can meet other professionals. Invite the intern to attend staff meetings or go with staff to educational meetings. Emphasize to the student that the internship is a professional development opportunity and not just a grade.

- 3. Keep copies of intern evaluations, notes, and other records for use in writing future recommendations and referrals. If the intern was really great, provide a letter of recommendation without being asked
- 4. The practice of market research plays a major role specially in consultancy firm all the consultants of the firm should be up to date with the whole market scenario. In order to achieve that background research is one of the major aspect to look upon. Jagdish Hirani and associates have been working on background research with an as and when required approach. I feel if there is a continuous ongoing research going on at the firm it will help the consultants, the clients and it will also help to attract more customers to the firm.
- 5. The stage at which jagdish Hirani and associates is working at I would like to recommend them that it would be the perfect time for them if they are thinking of an expansion as strategic consultants as well as they can think so some other new vertical to add to their portfolio.

Part-3

Learning and experience

The internship experience was overall learning and enriching experience. The knowledge and skills learner in the institution through various courses and workshops helped in the research work and overall summer training.

- The data mining skills learned during the course of completion of various assignments proved to be the most important skill in the internship. Using those skills, I was able to identify the various macroeconomic skills and the impact of COVID -19 onto them.
- The lessons learned during the course of microeconomics and macroeconomics and IEGC were applicable throughout the course. It helped me in the preparation and completion of various market research reports which were given as a task to me.

The course of my internship was divided into two phases the first phase was of 2 weeks in which the main focus was to study the Indian economy and its various macroeconomic parameters, along with this the aim was also to study the impact of the COVID-19 Financial crisis on the Indian economy. The main focus and the work of the first phase of the internship helped me improve my data mining and data analysis skills and also helped me in furnishing my research skills. It also helped me in gaining a better understanding of the whole scenario of the Indian economy and how the COVID-19 has impacted them.

The second phase of the internship which was of 6 weeks was about a more in-depth study of some major sectors of the Indian economy like an automobile, chemical, and IT&ITeS sector. Again, working on these research reports involved a lot of data mining and data analysis which helped me in furnishing my skills even more. After completion of these reports on the sectors I gained a better understanding of these sectors and how they contribute so much to the Indian economy and employment generation by these sectors is huge.

Along with these major reports which analyzed the impact of COVID -19 I worked with a lot of client-based research as well which were focused on prediction of how things are going to shape up and what are the key decisions they need to take in line with the changing scenario. These helped me in gaining the insights upon key decision-making points for a firm.

Along with the work, Jagdish Hirani and associates had a learning experience known as an enigma in which you will be presented upon a selected topic in front of the other people

working with the firm. This helped in soft skill augmentation in the training program which in turn helped me with interpersonal skills and other communication skills enhancement.

The internship helped decide the future course of the career. Working at Jagdish Hirani and associates was absolutely an amazing opportunity. Working in a work from home mode was further helpful in learning a whole new perspective and way of working. It also helped me apply the skills I learned through my engineering the overall application of engineering background with the skills and knowledge learned during the MBA course helped in the successful completion of the SIP. It also helped me realize that I have good research and analytical skills and it might be a good field for me to pursue further as a career.

The overall summer internship experience was great. I learned a lot about the global impact of the COVID-19 virus and the various economic parameters of our Indian economy. I was also able to learn in-depth about the major sectors of the Indian economy. It fulfilled the objective and was a rewarding experience.

References

https://www.mckinsey.com/featured-insights/leadership/the-future-is-not-what-it-used-to-be-thoughts-on-the-shape-of-the-next-normal

https://www.cnbctv18.com/economy/moodys-reviews-indias-negative-rating-outlook-says-upgrade-unlikely-5872941.htm - Moods forecast - phase 1.1

https://www.mckinsey.com/industries/healthcare-systems-and-services/our-insights/beyond-coronavirus-the-path-to-the-next-normal

https://www.fortuneindia.com/macro/contagion-how-covid-19-will-impact-different-sectors/104300

https://insights.daffodilsw.com/blog/7industries-that-are-affected-by-coronavirus-covid-19

https://www.accenture.com/in-en/services/consulting/coronavirus-industry-impact

https://www.acquisio.com/blog/agency/covid-19-ppc/

https://qz.com/india/1830849/coronavirus-could-be-indian-pharmas-big-opportunity-in-africa/

https://economictimes.indiatimes.com/news/economy/foreign-trade/coronavirus-crisis-its-time-for-india-inc-to-create-opportunities/articleshow/74153826.cms

https://www.business-standard.com/article/economy-policy/coronavirus-india-may-impose-duties-on-100-top-chinese-imports-120022901126 1.html

https://economictimes.indiatimes.com/news/international/business/us-supports-firms-weighing-india-as-alternative-to-china/articleshow/75437352.cms

https://economictimes.indiatimes.com/news/economy/foreign-trade/as-china-stumbles-india-plans-big-exports-push-in-bulk-drugs/articleshow/75480532.cms

https://www.thehindubusinessline.com/economy/covid-19-lockdown-estimated-to-cost-india-45-billion-a-day-acuit-ratings/article31235264.ece

https://www.thehindubusinessline.com/economy/covid-19-lockdown-estimated-to-cost-india-45-billion-a-day-acuit-ratings/article31235264.ece#

https://www.arcweb.com/blog/covid-19-industry-disruption-shows-why-revised-goal-setting-crucial

https://www2.deloitte.com/in/en/pages/consumer-business/articles/following-up-on-the-immediat-economic-response.html#

https://www.arcweb.com/blog/industry-disruption-covid-19-shows-imperative-transformation

https://www.arcweb.com/blog/covid-19-opportunity-not-headwind-industry-workers

https://www.arcweb.com/impact-covid-19-industrial-markets

https://www.peoplematters.in/article/diversity/pnb-metlife-head-hr-on-inclusivity-over-diversity-25112

https://www.jatinverma.org/economic-survey-vol-1-chapter-5-creating-jobs-and-growth-by-specializing-to-exports-in-network-products

https://www.ndtv.com/business/moodys-cuts-india-growth-forecast-news-moodys-lowers-india-gdp-growth-projection-amid-covid-19-2220066

 $\frac{https://www2.deloitte.com/us/en/insights/economy/asia-pacific/india-economic-outlook.html-deloittee indian economy snapshot$

https://www2.deloitte.com/us/en/insights/economy/asia-pacific/india-economic-outlook-04-2019.html deloitte indian economy outlook.

https://data.worldbank.org/indicator/NY.GDP.MKTP.KD.ZG?locations=IN – world bank data for gdp https://tradingeconomics.com/india/gdp-growth-annual GDP data

https://economictimes.indiatimes.com/small-biz/trade/exports/faster-export-growth-can-be-charted-for-india-via-focus-on-network-products-says-eco-survey/articleshow/73801514.cms?from=mdr

https://economictimes.indiatimes.com/news/economy/foreign-trade/india-can-explore-usd-82-billion-export-potential-in-20-products-in-china-report/articleshow/73073651.cms?from=mdr

https://economictimes.indiatimes.com/news/economy/indicators/economic-survey-how-to-solve-indias-jobs-crisis-the-china-way/articleshow/73798625.cms

https://commerce-app.gov.in/eidb/ecom2.asp

https://yourstory.com/2020/04/indian-economy-post-covid-19-positive-outlook?utm_pageloadtype=scroll