

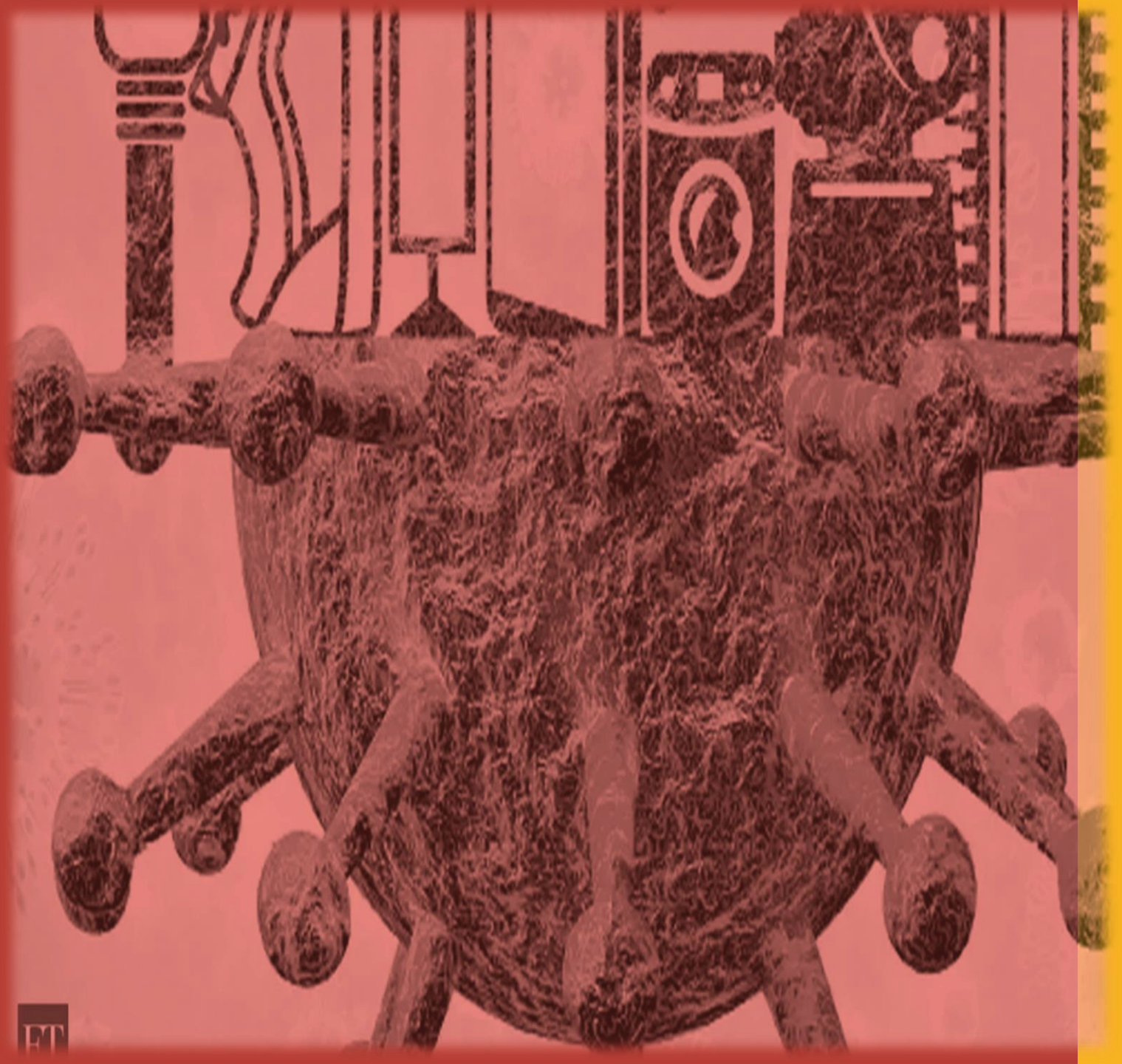
COVID-19 AND ITS IMPACT ON INDIAN ECONOMY

Presentation by- Dr. Prerana Payal

*MBA-Hospital & Healthcare
Administration*

1st year

ROLL NO 0960



CONTENT

- INTRODUCTION
- OBJECTIVE
- RATIONALE
- METHODOLOGY
- RESULT
- OCCLUSION

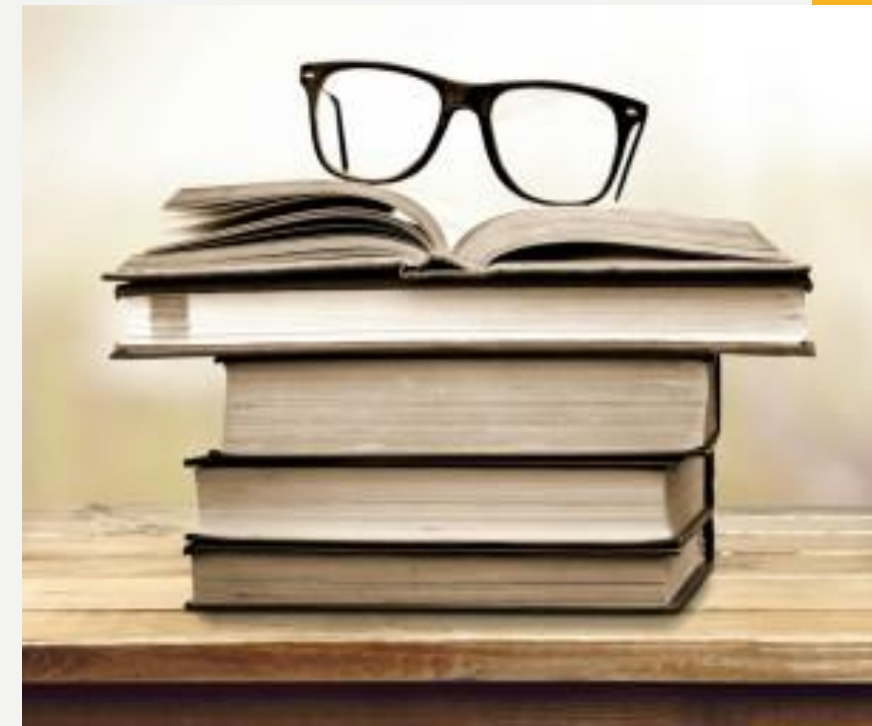
INTRODUCTION

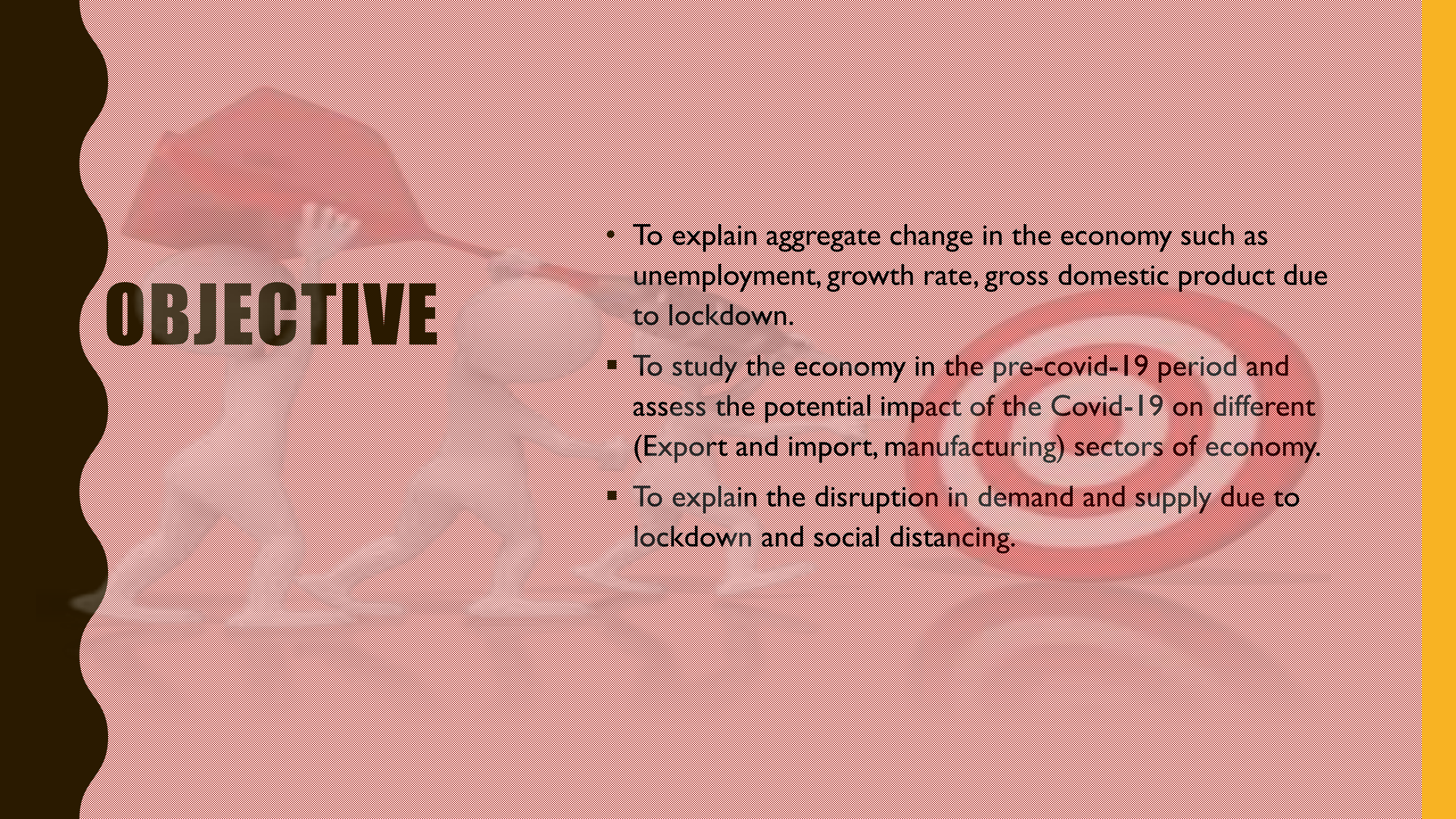
The novel coronavirus (covid-19) has infected more than 5.4 million people in more than 200 countries and the death toll crossing more than 1000000. The World Health Organisation declared, the virus outbreak a pandemic in the second week of March 2020, four months after the novel virus first made headlines. The total number of cases in India has soared to 682143 and fatalities to 18164 till 30 June 2020. All the policy actions such as social distancing, shutting institutes, public facilities, order to stay at home impact on the economy, day to day lifestyle and well-being both subjective as well as objective. This situation, clubbed with sluggish economic growth in the previous year, leading to extremely volatile market conditions. The estimated impact of pandemic on global economy will be 2.2% to 4.8% (us\$ 3 trillion). GDP growth rate is already slowed pre Covid-19 to 4.7% which is now estimated down to 2.5% to 4.5% after 21 days lockdown and expected to lose over 32,000 crore every day. Also because of the preventive policies dip in supply side of the chain. Social distancing and lockdown lead to the decrease in labour participation and production as all the factories are in halt. The pandemic creates a gap between supply and demand chain, economic disruption results GDP growth likely to go in negative territory.



- **Ozili, et al. (2020)** The paper describes the impact of coronavirus on various factors of economy like travel, hospitality, sports, financial, health, education, oil price war, event and entertainment industry. Also talked about the transition phase in terms of online education, transportation, health affects economy recession and difficulties b/w saving lives and economy as well. It had also discussed about policies to overcome the impact of virus and opportunities to fix both economic and financial status also it has made all countries to improve their health facilities and highlighted the impact of COVID-19 on the global economy.
- **Khosle, et al. (2020)** paper titled —”Breaking down of business and Workers in India: impact of Coronavirus crises” explains the major impact of coronavirus on industrial sector which leads to crisis and effects the businesses, health system and the pharmaceutical industry. The paper emphasizes on the new normal of working from home along with exploring the impact on the trade and commerce (exports-imports mainly) to and from China.

- **S. Mahindra Dev, et al. (2020)** has compared the situation before the crisis and after the crisis which explains how Covid-19 impacts the economy. This paper highlighted about Banking Sector, Financial Markets, MSMEs, Informal sector and various policies and their implementations to tackle the situation of pandemic and its impact. It has discussed how the preventive action effects, employment, income, production, consumption, Growth rate of the economy and brought all economic activities in halt. In last, also discussed about the measures taken by the Government to improve the economic situations.
- **ShlomoMaital., et al. (2020):** This study surveyed and summarises recent reports on impact of COVID-19 on global economy. The study asserted that major impact of novel COVID-19 outbreak would be on supply side of the market, but the remedies being considered currently is largely focusing on the demand side. It also concludes that under reasonable ongoing scenarios, a global recession is much likely to occur.



The background of the slide features a light pink, textured surface. On the left, a dark brown, wavy-edged vertical bar contains the word 'OBJECTIVE' in large, bold, black capital letters. Behind the text, two white, stylized human figures are depicted in a running pose, moving from left to right. The figure in the foreground is slightly ahead of the second figure. In the background, a large, red bullseye target is visible, with a white arrow hitting the center bullseye. The overall theme suggests a goal or objective.

OBJECTIVE

- To explain aggregate change in the economy such as unemployment, growth rate, gross domestic product due to lockdown.
- To study the economy in the pre-covid-19 period and assess the potential impact of the Covid-19 on different (Export and import, manufacturing) sectors of economy.
- To explain the disruption in demand and supply due to lockdown and social distancing.

RATIONALE

- It is important to focus on providing relief and securing the population especially to poor population from health hazard by this pandemic, also we need to work and think long -term to secure the health status of the economy, the sustainability of business and the livelihood of people, apart from providing strong security nets for the vulnerable, ensuring job continuity and job creation And there is an urgent need to mobilise resources to stimulate the economy. It posed a challenge to the industries and companies because of lower demand and supply which leads to crisis and going out of business.
- The Covid-19 crisis plays significant role and learning for country, that how to deal with the present situation, recover and emerges stronger, where to prepare for the next normal and possibilities and manage continuity.



METHODOLOGY

- Literature review, a rigorous and comprehensive search of various studies, reports, journals, articles and papers of identified areas was done (The Economic Times, The Hindu, India Today, ResearchGate).
- **METHOD OF DATA COLLECTION**
- External Secondary Data Research- Government documents, market research reports, articles were downloaded and studied.

RESULT

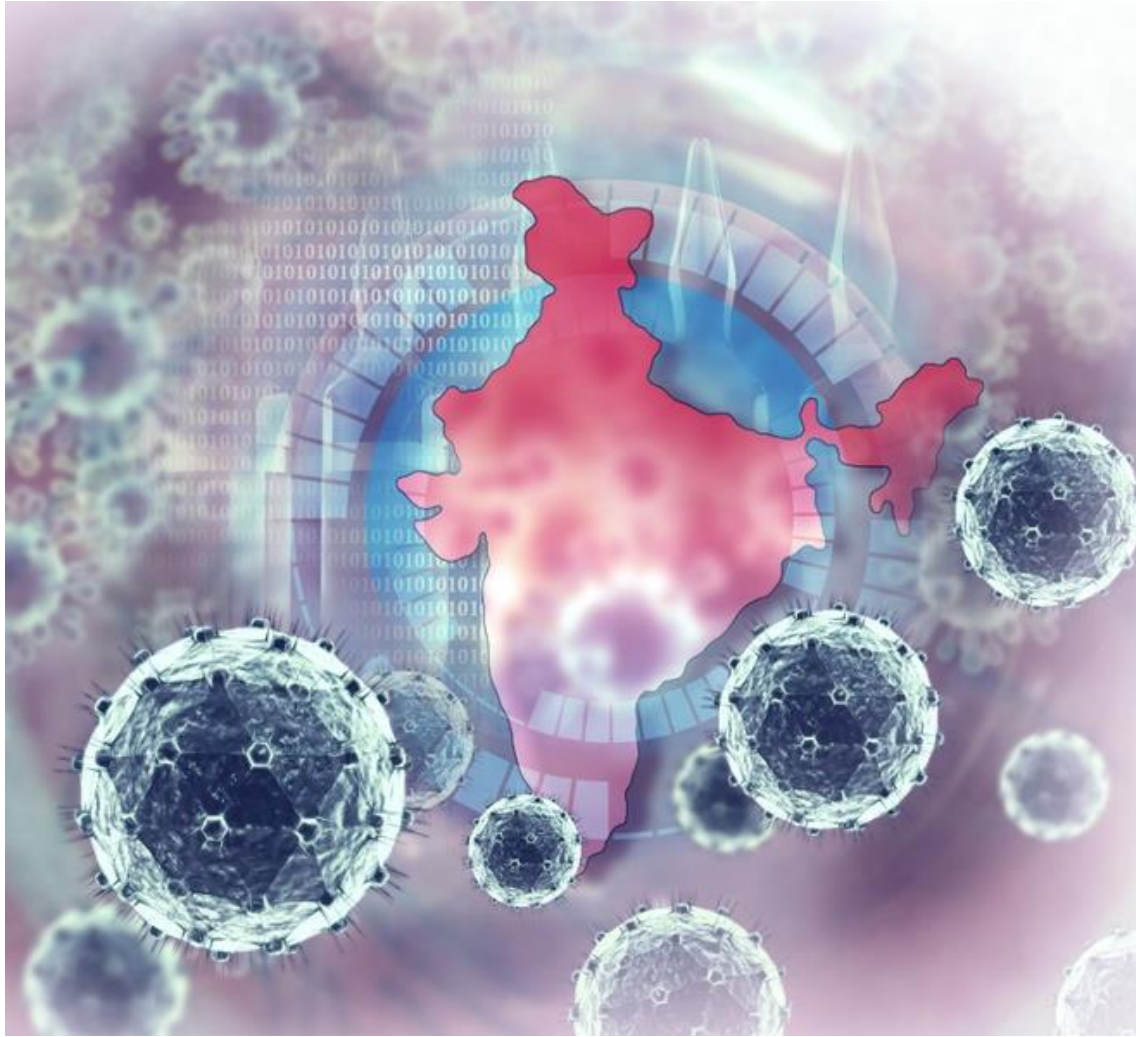
- COVID-19 has resulted in an acute demand shock for the economy in India and may lead to a further temperance of the nation's GDP growth, especially due to the fact that the prolonged lockdown due to the virus and a reluctance of firms in fully operationalising its capacity is causing a major disruption across multiple sectors of our economy.
- Therefore, there is sharp fall in the prime levels of economic activity and an increased sense of unpredictability and unreliability leading to a twofold blow to the economy- shutdown of firms and businesses which has led to the global shocks in supply chains and a rapid decline in the consumption expenditure of the people and the firms.
- This pandemic creates negative impact on economy specially consumption and informal sector which is essential component in contribution to the GDP, This sector was already affected by two shocks consecutively from 2016 to 2019, first was Demonetisation in November 2016 followed by the Goods & Services tax in 2017 which did not affect the disruption of demand and supply mechanism for long term but in the case of current situation of the demand-supply is not there, hence revenue are not there and the already struggling sector will be disproportionally affected.
- Also rise in unemployment rate from March 2019 (6.68% to 8.74%) to March 2020 especially daily-wage workers (the urban poor and migrant laborers) were left with no work.

- Companies saw supply side disruption because of their over- dependence on Chinese products, many companies like Maruti Suzuki, M&M, Hero Moto Crop, BHEL, Amtek Auto announced temporary shutdown, collapse of tourism industry, negative growth rate, lack of labour ,raw material for production, transportation, unavailability of goods, lack of cash flow, reduced consumer activity.
- Merchandise exports in April 2020 lowers at USD 17.12 billion, 58.65% compared to USD 17.12 billion in April 2019. Electronic goods (-62%), Petroleum (-59%), organic & inorganic chemicals (-35%) all these group of imports showed negative growth rate. Oil import in April 2020 stood at USD 4.66 billion compared to USD 11.38 billion in April 2019.

- FMCG firms such as Hindustan Unilever, ITC and Dabur India also shut manufacturing facilities. Some industries depend on other industries for goods but because government has already instructed employees to stay at home so now it's very difficult to meet the customers demand as supply chain has disrupted because of this pandemic. Market value and share decreasing or changing as clients now probing other options if they are not getting good products or on time which is a risk for supplier to lose the market value

CONCLUSION

Covid-19, not only changes our lives for a while but for a long time. Although it is difficult to assess the exact impact of coronavirus on global economy. To calculate the accurate impact, we only not need to take 21-days of lockdown but those extra additional days until, all the services, procedure and production cycles resume. Long-term lock down from Covid-19 would deepen our systemic unemployment. Pressure would intensify on the state to continue to offer taxes without creating employment. Some remedies are worse than the illness and the condition is considered life-protection loss. Life itself is less relevant without livelihoods. Just as the right antidote to sickness is a healthy body, the right antidote to Covid-19 in the medium term is a healthy economy (Jagannathan, 2020). Also, this is an urgent wake up call for Indian government and companies to work on its own local sourcing units as well as incorporating diagonal strategies for reducing dependency on other countries.



“Indian small businesses form the backbone of the economy, and so, when they are impacted, the whole economy gets impacted”. - Gopal Pillai, Amazon India

THANK YOU



THE DATA SCIENCE COURSE 2020: COMPLETE DATA SCIENCE BOOTCAMP

WHY THIS COURSE....?

- Data scientist is one of the best suited professions to thrive this century. It is digital, programming-oriented, and analytical.
- Therefore, it comes as no surprise that the demand for data scientists has been surging in the job marketplace.
- However, supply has been very limited. It is difficult to acquire the skills necessary to be hired as a data scientist



COURSE OBJECTIVES

- To analyze data driven decisions require well organized and relevant data stored in a digital format.
- To use data how to create reports and dashboards to gain business insights.
- To assess potential future scenarios by using advanced statistical methods.
- To understand various business driven processes like basic customer data financial, trading data, price Optimization, inventory management, User experience, sales forecasting, fraud detection and client retention
- To utilize artificial intelligence to predict behavior in unprecedented ways.
- To learn data preprocessing and data analysis various statistical tools like regression and clustering analysis
- To understand basic of python, machine learning, artificial intelligence and statistical methods.

LEARNING METHODOLOGY

The instructors were Martin and Ylia from 365 careers team on Udeemy platform.

- 29 hours on-demand video lectures
- With 90 articles and 154 downloadable resources
- Multiple real-life business cases (Case Study)
- An unsolved assignment and quiz

COURSE MODULE

This course was divided into 8 sections namely

The field of data science - Introducing various data science disciplines, career in data science

Probability - Bayesian interface, permutation combination, probability distributions and probability in Healthcare

Statistics - Descriptive statistics practical examples, inferential statistics and hypothesis testing`

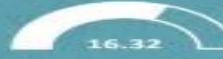
Python - Basic syntax, functions, iterations, advanced statistics method in Python, linear equation, multiple regression, Logistic regression and clustering analysis.

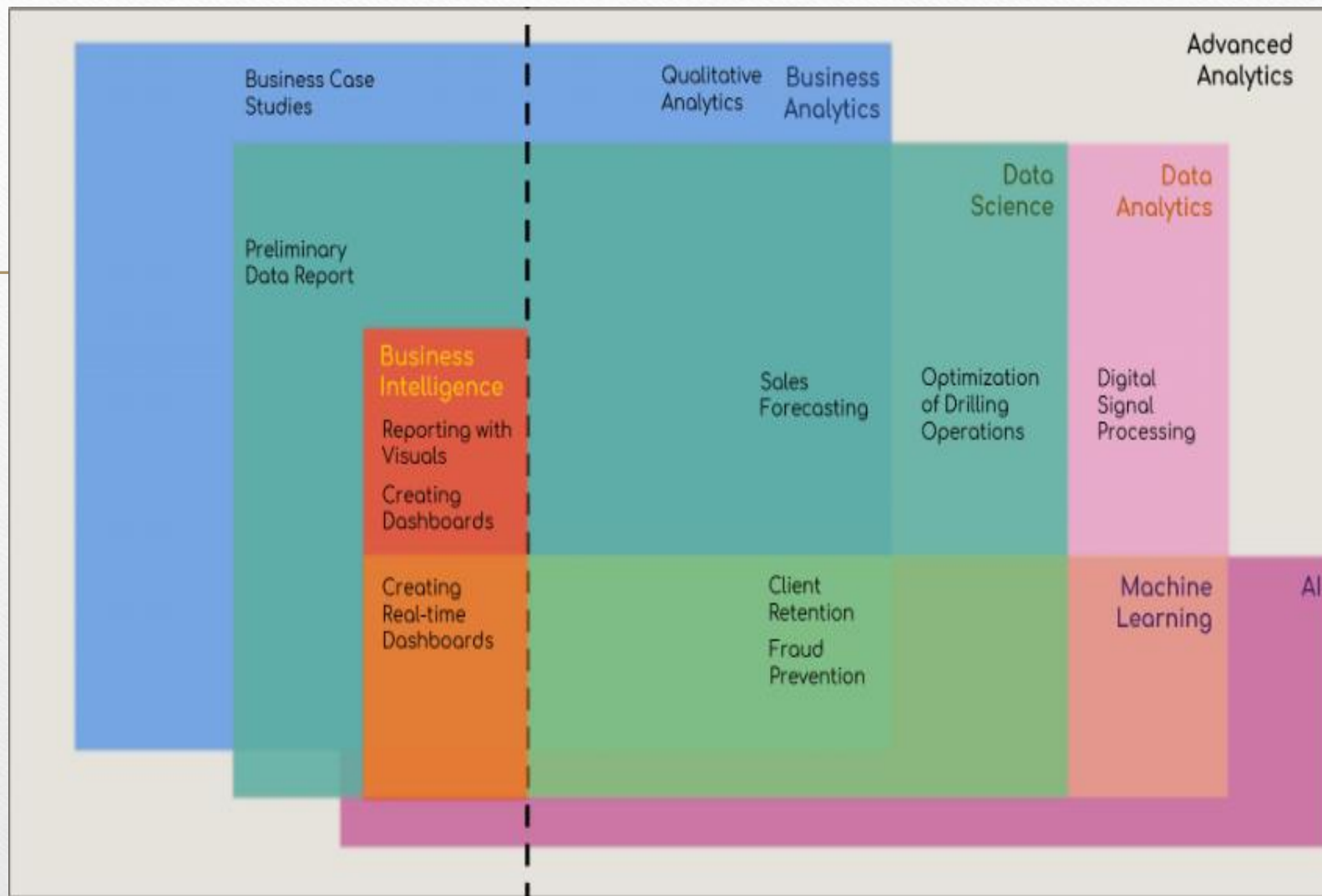
Deep learning - Neural networking, TensorFlow, overfitting & underfitting and MNIST data set

Business case analysis by deep learning TensorFlow

Case study

Analyzing the Predicted Outputs in Tableau

	Data		Data Science			
	TRADITIONAL	BIG	BUSINESS INTELLIGENCE	TRADITIONAL METHODS	MACHINE LEARNING	
WHEN it is applied	At the beginning of your analysis		After the data has been gathered & organized	After BI reports have been created and discussed		
			PAST	NOW	FUTURE	
WHY you need it	data-driven decisions require well-organized and relevant raw data stored in a digital format		use data to create reports and dashboards to gain business insights	Predictive Analytics		
WHAT techniques are involved	DATA COLLECTION PREPROCESSING - class labeling (categorical vs. numerical) - data cleansing - dealing with missing values CASE SPECIFIC - e.g. balancing & shuffling datasets  		ANALYZE THE DATA EXTRACT INFO AND PRESENT IT IN THE FORM OF: - metrics - KPIs - reports - dashboards   	REGRESSION  LOGISTIC REGRESSION CLUSTERING  FACTOR ANALYSIS TIME SERIES 	SUPERVISED LEARNING - SVMs - NNs - deep learning - random forests - bayesian networks UNSUPERVISED LEARNING - k-means - deep learning REINFORCEMENT LEARNING similar to supervised learning, but instead of minimizing the loss, one maximizes reward	
	WHERE	BASIC CUSTOMER DATA HISTORICAL STOCK PRICE DATA		PRICE OPTIMIZATION INVENTORY MANAGEMENT	USER EXPERIENCE (UX) SALES FORECASTING	FRAUD DETECTION CLIENT RETENTION
HOW using what tools	PROGRAMMING LANGUAGES     SOFTWARE  		PROGRAMMING LANGUAGES     SOFTWARE   	PROGRAMMING LANGUAGES     SOFTWARE     	PROGRAMMING LANGUAGES    SOFTWARE   EViews Stata	PROGRAMMING LANGUAGES       SOFTWARE   
WHO	DATA ARCHITECT DATA ENGINEER DATABASE ADMINISTRATOR		BI ANALYST BI CONSULTANT BI DEVELOPER	DATA SCIENTIST DATA ANALYST	DATA SCIENTIST MACHINE LEARNING ENGINEER	
ARE YOU AWARE	200,000 lines of data is not necessarily big data. It is not just volume that defines a data set as 'big' - variety, variability, velocity, veracity, and other characteristics are determinative as well.		Qualitative analysis tools such as SWOT are not used for quantitative analysis. Hence, they are not part of business intelligence.	Software like Excel, SPSS, and Stata, can be successfully used by data science teams in many companies.	In deep learning, there is still a debate on WHY the algorithms used outperform all conventional methods.	



KEY LEARNINGS

The course provides the entire toolbox that need to become a data scientist.

Developed the data science skills: Statistical analysis, Python programming with NumPy, pandas, matplotlib, and Seaborn, Advanced statistical analysis, Tableau, Machine Learning with stats models and scikit-learn, Deep learning with TensorFlow

Learn how to pre-process data

Understand the mathematics behind Machine Learning

Start coding in Python and learn how to use it for statistical analysis

Perform linear and logistic regressions in Python

Carry out cluster and factor analysis

Be able to create Machine Learning algorithms in Python, using NumPy, stats models and scikit-learn

Applying skills to real-life business cases

Usestate-of-the-art DeepLearning frameworks such as Google's TensorFlow develop a business intuition while coding and solving tasks with big data

Unfold the power of deep neural networks

Improve Machine Learning algorithms by studying underfitting, overfitting, training, validation, n-fold cross validation, testing, and how hyperparameters could improve performance.
