

**PROJECT REPORT**

**ON**

**“TECHNOLOGICAL ADVANCEMENT LEADING TO DEMAND GROWTH OF WIPRO”**

**SUBMITTED TO**

**G.S. COLLEGE OF COMMERCE AND ECONOMICS, NAGPUR**

**AFFILIATED TO**

**RASHTRASANT TUKADOJI MAHARAJ NAGPUR UNIVERSITY**

**NAGPUR**

**IN PARTIAL FULFILMENT FOR THE AWARD OF THE DEGREE OF**

**BACHELORS OF BUSINESS ADMINISTRATION**

**SUBMITTED BY**

**GAURAVI G ACHAREKAR**

**UNDER THE GUIDANCE OF**

**PROF. DR. KAMLESH THOTE**

**G.S. College of Commerce & Economics, Nagpur**

**Academic Year 2022 –2023**



**G.S. College of Commerce & Economics, Nagpur**

**Academic Year 2022 –2023**



**CERTIFICATE**

THIS IS TO CERTIFY THAT “GAURAVI G ACHAREKAR” HAS SUBMITTED THE PROJECT REPORT TITLED “A STUDY TECHNOLOGICAL ADVANCEMENT LEADING DEMAND GROWTH OF WIPRO’’, TOWARDS PARTIAL FULFILLMENT OF BACHELOR OF BUSINESS ADMINISTRATION DEGREE EXAMINATION. THIS HAS NOT BEEN SUBMITTED FOR ANY OTHER EXAMINATION AND DOES NOT FORM PART OF ANY OTHER COURSE UNDERGONE BY THE CANDIDATE. IT IS FURTHER CERTIFIED THAT HE/SHE HAS INGENIOUSLY COMPLETED HIS/HER PROJECT AS PRESCRIBED BY RASHTRASANT TUKADOJI MAHARAJ NAGPUR UNIVERSITY, NAGPUR.

PROF. DR. KAMLESH THOTE  
PROJECT GUIDE

DR. AFSAR SHEIKH  
BBA CO-ORDINATOR

DATE:

PLACE:

**G.S. College of Commerce & Economics, Nagpur**

**Academic Year 2022 –2023**



DECLARATION

I HERE-BY DECLARE THAT THE PROJECT WITH TITLE “A STUDY OF TECHNOLOGICAL ADVANCEMENT LEADING TO DEMAND GROWTH OF WIPRO” HAS BEEN COMPLETED BY ME IN PARTIAL FULFILLMENT OF BACHELOR OF BUSINESS ADMINISTRATION DEGREE EXAMINATION AS PRESCRIBED BY RASHTRASANT TUKADOJI MAHARAJ NAGPUR UNIVERSITY, NAGPUR AND THIS HAS NOT BEEN SUBMITTED FOR ANY OTHER EXAMINATION AND DOES NOT FORM THE PART OF ANY OTHER COURSE UNDERTAKEN BY ME.

GAURAVI G ACHAREKAR

PLACE: NAGPUR

DATE:

**G.S. College of Commerce & Economics, Nagpur**

**Academic Year 2022 –2023**



**ACKNOWLEDGEMENT**

WITH IMMENSE PRIDE AND SENSE OF GRATITUDE, I TAKE THIS GOLDEN OPPORTUNITY TO EXPRESS MY SINCERE REGARDS TO DR. SWATI S.KATHALEY, PRINCIPAL, G.S. COLLEGE OF COMMERCE & ECONOMICS, NAGPUR.

I AM EXTREMELY THANKFUL TO MY PROJECT GUIDE .PROF. DR. KAMLESH THOTE FOR HIS GUIDELINE THROUGHOUT THE PROJECT. I TENDER MY SINCERE REGARDS TO CO-ORDINATOR, DR. AFSAR SHEIKH FOR GIVING ME OUTSTANDING GUIDANCE, ENTHUSIASTIC SUGGESTIONS AND INVALUABLE ENCOURAGEMENT WHICH HELPED ME IN THE COMPLETION OF THE PROJECT.

I WILL FAIL IN MY DUTY IF I DO NOT THANK THE NON-TEACHING STAFF OF THE COLLEGE FOR THEIR CO-OPERATION.

I WOULD LIKE TO THANK ALL THOSE WHO HELPED ME IN MAKING THIS PROJECT COMPLETE AND SUCCESSFUL.

GAURAVI G ACHAREKAR

PLACE : NAGPUR

DATE :

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# INTRODUCTION

## INTRODUCTION

### TECHNOLOGICAL ADVANCEMENTS

Technological advancements mean scientific or technological advancement is the generation or discovery of knowledge that advances of the understanding of sciences or technology. The evolution in technology has been successful in creating innovation as well as the impactful changes that made things easier for people in business have realized the importance of technological advancements because it innovates new tools that efficiently deal with all the complexity and hurdles.

Digitalization has garnered a lot of fame recently and it can be an excellent advantage to the business sector as well. The technological advancements in digitalization have been one of the trends that the business sectors are focusing on. Technological advancements have made things effortless and convenient for businesses all around. One of the reasons why the business sector needs technological advancements is the increase in demand for goods and services from people worldwide. Also, the fact is that technological advancements increase the scope of businesses.

Now-a-days business are trying being advance in technological basis, production basis and also to ease down the work load. The technological advancement helped some business to group up from the pandemic period. So, the companies which have been grown in market basis and also has been in demand.

### INTRODUCTION OF INDUSTRY

As their title may suggest, Technology Consultants work with clients to help them transform the way they use technology. Traditionally, these transformations have been geared towards improving business processes, reducing costs, maximising use of tech opportunities, and more. Today, they encompass so much more – from digital strategy to technology change projects. As technology rapidly evolves, this area of work is becoming increasingly important to ensure the future growth of organisations globally.

Some companies which are entitled under this industry are as follows:

1. Accenture
2. Deloitte
3. Trianz
4. Wipro

Wipro is also belonging conglomerate industry. A conglomerate is a multi-industry company which has a combination of multiple business entities operating different industries under one corporate group usually involving a parent company and many subsidiaries. Conglomerates are often large and multinational.



# **COMPANY PROFILE**

# WIPRO

## INTRODUCTION

Wipro is an Indian multinational company that deals in information technology (IT), consulting and business process services. Its headquarters is situated in Bangalore, Karnataka. It was founded in 1945 by Mohamad Premji. Azim Premji, one of India's greatest entrepreneurs and philanthropist, owns the company today. The company provides IT consulting, custom application design, development, re-engineering, BPO services, cloud, mobility, analytics services, research and development and hardware and software design.



Wipro's new logo comprises multi-coloured dots in four circles.

Technology major Wipro has revamped its brand identity and unveiled a new "bold and dynamic" brand identity. Replacing a logo featuring a multi-coloured sunflower introduced in 1998, Wipro's new logo comprises multi-coloured dots in four circles. "The expanding pattern symbolizes a boundless Wipro. The four circles represent the Wipro Values, Employees, Clients & partners, and communities. The blue of the word mark creates a sense of reliability and authority," Bengaluru-based Wipro - India's third-largest software services firm - said in a statement.

It has garnered global recognition for its various services and has been serving clients across 6 continents across the globe. It also has a proud 180,00 employee base. It was featured in the Bloomberg's

Gender Equality Index in 2020 and has also received a score of 90/100 on the 2020 Corporate Equality Index. In 2019, it won the Global Breakthrough Partner of the Year from Pivotal Software and was also the winner for the Gender Inclusion category with NASSCOM Diversity and Inclusion Awards. It was also declared as one the best companies for Women in India in 2019 by Best Companies for Women in India (BCWI). It was the first runner up for the United National Global Compact Network India (UN GCNI)- Women at Workplace Awards 2019 among others. Wipro Enterprises was founded in 2013 for non-IT services from Wipro. It has two main divisions as follows: Wipro Consumer Care and Lighting (WCCLG) and Wipro Infrastructure Engineering (WIN).

## CORE INFORMATION

Wipro limited is an Indian multinational corporation that various technology service. Wipro is a public company and it belongs to a conglomerate industry. It was founded in 29 December 1945 by Muhammed Hashmi Premji. It has headquarters in Bangalore, Sarjapur road , Karnataka . Wipro serves its services worldwide and its products too which are related to personal care , health care and lighting . Wipro provide services like information technology consulting, outsourcing.

Wipro's capabilities range across cloud computing cyber security ,digital transformation artificial intelligence robotics ,data analytics, and other technology consulting services to customers in 167 countries.

## WIPRO PRODUTS

The Indian household business is led by our flagship brand santoor one of the leading toilet soap brands in India. Our other key brands include Yardley, enchanters hygienix Chandrika (ayurvedic bathing products), glucovita (energy drink and tablet), safewash (liquid detergent), softtouch (fabric conditioner), gifty (Dish wash liquid), maxxleen (floor cleaners and surface sanitizers), Wipro garent (LED lights) and Aramusk (male grooming).

HYGIENE :



## HOME CARE



## PERSONAL CARE



## DTC



## OFFICE SOLUTION



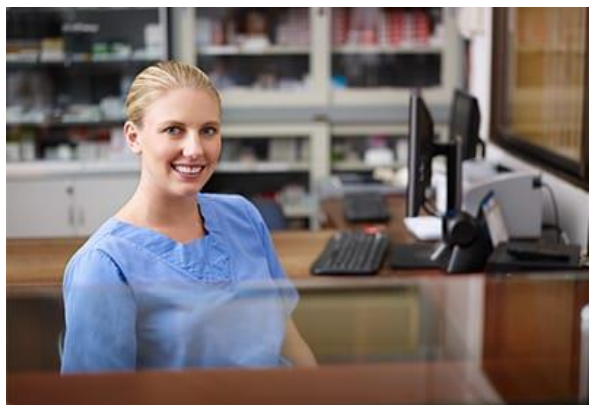
## WIPRO SERVICES



AI CLOUD FULLSTRIDE



CYBERSECURITIES



AI HEALTHCARE  
TECHNOLOGIES



IT CONSULATATION

## **WIPRO UPDATES**

During the year 2018-19, the Company allotted 1,681,717 equity shares and transferred 2,599,183 equity shares of Rs 2/- each from Wipro Equity Reward Trust, pursuant to exercise of stock options by eligible employees and allotted 1,508,469,180 equity shares of Rs 2/- each as bonus equity shares on 08 March 2019 by capitalization of sums standing to the credit of the free reserves and/or the securities premium account and/or the capital redemption reserve account of the Company. During the financial year 2018-19, your Company invested an aggregate of Rs 36,373 million in its direct subsidiaries. On 16 April 2019, the Board approved a proposal to buy back up to 323,076,923 (Thirty Two Crores Thirty Lakhs Seventy Six Thousand Nine Hundred and Twenty Three) equity shares of the Company for an aggregate amount not exceeding Rs 105,000,000,000/- (Rupees Ten Thousand Five Hundred Crores only), being 23.03% of the aggregate of the fully paid-up equity share capital and free reserves as per the audited standalone balance sheet as at 31 March 2019, at a price of Rs 325/- (Rupees Three Hundred and Twenty Five) per equity share. During the FY2019, merger of Wipro Technologies Austria GmbH, Wipro Information Technology Austria GmbH, New Logic Technologies SARL and Appirio India Cloud Solutions Private Limited (wholly owned subsidiaries) with and into Wipro Limited pursuant to order dated 29 March 2019 passed by NCLT approving the scheme of amalgamation ('Scheme') for the aforesaid merger. As per the said Scheme, the appointed date is 01 April 2018. The company liquidated Appirio Singapore Pte Ltd and Appirio GmbH. Also carried out the merger of Callant Mittelstandsberatung GmbH with and into callant GmbH, Germany. The company setting up of a new subsidiary namely Wipro IT Services S.R.L in Romania. Also Setting up of a new subsidiary namely Wipro US Foundation in USA. Wipro was ranked as the third fastest growing global IT Services brand in 2019 in a study conducted by Brand Finance, the world's leading brand valuation firm. Wipro received Quality Global Supplier' award from Innogy SE. Wipro was included in the Dow Jones Sustainability Index (DJSI) - World and Emerging Markets for the 9th time in succession. Pursuant to the approval of the Board on 16 April 2019 and approval of shareholders through special resolution dated 01 June 2019 passed through postal ballot/e-voting, your Company concluded the buyback of 323,076,923 equity shares of face value of Rs 2/- each at a price of Rs 325/- per equity share, for an aggregate amount of Rs 105,000 million, in September 2019.

During the financial year 2019-20 your company has carried out restricting of its following subsidiaries: a. Dissolution of Wipro retail uk limited and liquidation of appiriob gmbh, b. Merger of front Worx informationstechnologie gmbh with and into callant gmbh, c. Merger of digital aps with and into design it's a/s.

During the nine months ended 31 December 2020, the Company has completed two business combinations (which individually are not material) for a total consideration of Rs 7,853. These include (a) acquisition of IVIA Servicos de Informatica Ltda. ('IVIA '), a specialized IT services provider to financial services, retail and manufacturing sectors in Brazil (b) acquisition of 4C NV and its subsidiaries ('4C'), a Salesforce multicloud partner in Europe, U.K. and the Middle East, and (c) acquisition of Encore Theme Technologies Private Limited ('ETT'), a Finastra trade finance solutions partner across the Middle East, Africa, India and Asia Pacific. On 13 October 2020, the Board of Directors approved a proposal to Buy back up to 237,500,000 equity shares of Rs 2 each (representing 4.16% of total paid-up equity share capital as at 30 September 2020) from the shareholders of the Company on a proportionate basis by way of a tender offer at a price of Rs 400 per equity share for an aggregate amount not exceeding Rs 95,000 million ('Buyback'), in accordance with the provisions contained in The Securities and Exchange Board of India (Buy-back of Securities) Regulations, 2018, as amended and the Companies Act, 2013 and rules made thereunder ('Buyback Regulations'). Subsequently, the shareholders of the Company approved the Buyback through postal ballot (including e-voting) on 16 November 2020 and 11 December 2020 was fixed as the record date for the Buyback. In accordance with the provisions of the Buyback Regulations, the Letter of offer for the buyback was approved by SEBI on 21 December 2020 and tender period for Buyback opened on 29 December 2020 and will close on 11 January 2021. Consequently, the Company has recorded a liability towards gross obligation on Buyback of equity shares of 95,000 million and the corresponding liability for tax on buyback of Rs 22,021 million as at 31 December 2020. On 22 December 2020, as part of strategic partnership, the Company entered into a definitive agreement with Metro AG to take over the IT units in Germany and Romania. The consummation of the transaction is subject to receipt of regulatory approvals and customary closing conditions and is expected to be completed by 30 April 2021. In March 2021, the company has acquired London-based The Capital Markets Company(Capco) for USD 1.45 billion. Capco is a management

and technology consultancy firm that provides digital, consulting and technology services to the global banking and financial services industry. Formed in 1986, Capital Market Publishers India Pvt Ltd pioneered corporate databases and stock market magazine in India. Today Capitaline (<http://www.capitaline.com>) corporate database cover more than 35,000 listed and unlisted Indian companies. Latest technologies and standards are constantly being adopted to keep the database user-friendly, comprehensive and up-to-date.

## LIMITATION OF WIPRO TECHNOLOGIES

The weaknesses of a brand are certain aspects of its business which are it can improve to increase its position further certain weaknesses can be defined as attributes which the company is lacking or in which the competitors are better. Here are the weaknesses in the Wipro technologies SWOT analysis:

- Low operating margin of the other group companies: even through its sector creates huge profit for Wipro ltd, the other group companies like customer care and lighting is just accounting for only 9% for the revenue. So, a conglomerate company like Wipro will get affected if one of its main sectors fails. There are other players who are especially in those same sectors who already excelled in that sector like HUL, ITC etc.
- Concentrating on mature markets: Domestic market is huge but is underdeveloped. If Wipro technology considers capturing the remaining under developed rural areas like sub metros, it could have a very strong base in India and can improve its share and can be a No 1 player in IT sector.
- There are gaps in the product range sold by the company this lack of choice can give a new competitor a foothold in the market .
- The marketing of the products left a lot to be desired. Even through the product is a success in terms of sale but its positioning and unique selling proposition is not clearly defined which can lead to the attacks in this segment from the competitors.
- Investment in research and development is below the fastest growing players in the industry. Even though Wipro limited is spending above the industry average on research and development, it has not



been able to compete with the leading players in the industry in the terms of innovation. It has come across as a mature firm looking forward to bring out products based on tested features in the market.

- Need more investment in new technologies. Given the scale of expansion and different geographies the company is planning to expand into, Wipro limited needs to put more money in technology to integrate the processes across the board. Right now, the investment in technologies is not at par with the vision of the company.
- The profitability ratio and net contribution % of Wipro limited are below the industry average.
- The company has not been able to tackle the challenges present by the new entrants in the segment and has lost small market share in the niche categories. Wipro limited has to build internal feedback mechanism directly from sales team on ground to counter these challenges.

# **LITERATURE REVIEW**

- **THE GIANT OF THE GLOBAL SOFTWARE INDUSTRY- WIPRO**

- Wipro is a market leader in business process outsourcing, consulting, and information technology worldwide. Wipro helps clients succeed in the digital world by utilising cognitive computing, hyper-automation, robots, the cloud, analytics, and emerging technologies. They have more than 2 lakh committed people serving customers on six continents and are well-known throughout the world for their extensive service portfolio, strong commitment to sustainability, and outstanding corporate citizenship. They generate original concepts and make connections to forge a brighter and riskier future. Objective is to examine Wipro's growth and problems, as well as the contributing factors that aided this expansion. Information gathered from a variety of academic journals and web articles was analysed and presented using the SWOC framework. Based on the examination of facts and numbers as well as the many scenarios of firm expansion in India, it is clear that the Wipro company has experienced significant growth and advancement in various areas such as job creation and the country's economy. A few suggestions are also made to expand on the notion. The analyses and solutions presented in this article are only applicable to businesses with similar operations, yearly revenues, and levels of expertise to Wipro.

K. Annapoorneshwari Shetty, Subrahmanya S. Bhat

(International journal of case studies in business, IT, and education)

- **BUILDING A GLOBAL BRAND : THE CASE OF WIPRO**

- In this business case study, we describe the transformation of Wipro, a Bangalore-based information technology company. Founded in 1945 as Western India Vegetable Products Limited, Wipro is today the world's largest independent R&D services provider and among the top three offshore business process outsourcing (BPO) service providers with over 490 clients, 53000 employees and 40 plus development centers across the globe. Wipro's aim was to continue its transformation from a low-cost provider of outsourced services to become a global information technology leader, delivering world-class solutions to its global customers through a process of fostering ongoing internal and external innovation while maintaining the cost advantage associated with being located in India. The

case also describes the steps senior management at the firm took to enhance brand awareness, brand differentiation, and brand positioning, which were all playing important roles in the growth of the company. Teaching objectives of the case include (a) understanding the evolution on the Wipro brand, (b) developing strategic initiatives to move up the value chain, (c) enabling intellectual leadership and building a global outlook within a large services firm, and (d) managing the challenges and opportunities of a technology-based global delivery model, combined with a multi-location strategy.

B. Rao, B. Mulloth

(Portland International Conference on Management of Engineering)

- **DIGITAL BUSINESS TRANSFORMATION: A CASE STUDY OF WIPRO**
- Moving towards the digital world and transforming businesses into digital enterprises is the need of the hour. Every such enterprise needs to come up with a proper strategy for implementation. Wipro Limited is an Indian multinational company helping enterprises with digital transformation by providing services such as consultancy services and products. Wipro uses a very agile and effective strategy that incrementally gets strengthened with customer experience. The purpose of this study is to give insights into the successful journey of Wipro in this process of digital transformation and also to analyse the company's strengths in sustaining in the business field, its weaknesses, opportunities that could be further explored, and challenges that could be handled effectively to improve the development of the company. The data required for the case study analysis paper on Wipro's Digital Transformation is collected from secondary resources. The secondary resources used for the study mainly include the Wipro website, scholarly articles collected using Google Scholar, and other websites and reports. This study has given an understanding of the customer-centric approach of Wipro, technology, and IT services provided by the company. The Strengths, weaknesses, opportunities, and challenges faced by Wipro, especially in the IT industry are analysed based on the facts collected from secondary resources. Wipro serves its customers all over the world with a wide range of products and consultancy services. The study reveals that Wipro could accelerate its journey

of digital transformation by focusing on widening its growth both in the local and global market by diversifying brand products and consultancy services. This paper focuses on the factors including the digital transformation model employed by Wipro and its journey toward success. The paper is limited to the study of the technology services, achievements, and corporate social responsibilities exhibited by the company throughout its journey of transformant

Sumangala N., Shashidhar Kini

(International journal of case studies in business, IT, and education)

# **RESEARCH STUDY**

## **RELEVANCE OF STUDY**

**Technological advancement** is the improvement and innovation of the utility of science. **Science** is an epistemological methodology in which understanding, descriptions, explanations, and predictions for natural and mathematical phenomenon are sought after through observation, investigation, experimentation, and especially falsification. Essentially, science is the systematic weeding out of bad or false ideas. **Technology** is any utility and applicability of scientific understanding; i.e., technology is the application of science for practical use and purposes.

Technological advancement occurs when technologies or applied sciences become more precise, accurate, efficient, or more powerful or capable. Scientific and technological advancements have made many important changes throughout history, some better than others.

## **LIMITATION OF STUDY**

The limitation of study states with the following points:

1. Quality : As per quality it is an average quality project with the secondary data because of limitation of time for the project .
2. Time : As the time given for project was of 40 days, it was a limited time period for the deep and intact research for the project.
3. Scope : As the project was completed through secondary research format, it has a limited scope of information.
4. Cost :As for the project there was no funds assigned for the research project, therefore there was no deep study is been done.

- **OBJECTIVES OF RESEARCH**

1. To know the leading advancement relating to technological aspects.
2. How it led to Wipro being the largely growing company through technology.
3. To know how the technological reform increase the demand of Wipro.
4. To understand how technological advancements changed the way of market.
5. To understand the significance of technological advancement in the growing business.
6. To study how the technological reforms changed the market substantial.

- **NEEDS OF RESEARCH**

1. This research helps to signify the technological reform which are needed in the new age market.
2. To understand new age market and the development in the technological fields.
3. To know the scope of the technology services.
4. How to know if the technology is in the need of demand for the new age.
5. This research will help to accelerate the evolution of an enterprise to achieving improved.
6. How does Wipro help the other organization through a consultancy.



## **HYPOTHESIS**

### **HYPOTHESIS 1**

**H0:** The technology advancement doesn't help the growth of the company.

**H1:** The technology advancement helps to the growth of the company.

### **HYPOTHESIS 2**

**H0:** The company doesn't analyse the need of the technological advancements in the new age market.

**H1:** The company analyses the need of the technological advancement in the new age market.

### **HYPOTHESIS 3**

**H0:** The demand of Wipro's technological advancement services decreased.

**H1:** The demand of Wipro's technological advancement services increased.

## **PROBLEM DEFINATION**

Wipro was ranked as the third fastest growing global IT Services brand in 2019 in a study conducted by Brand Finance the world's leading brand valuation firm. Wipro received 'Quality Global Supplier' award from Innogy SE. Wipro was included in the Dow Jones Sustainability Index (DJSI) - World and Emerging Markets for the 9th time in succession. Pursuant to the approval of the Board on 16 April 2019 and approval of shareholders through special resolution dated 01 June 2019 passed through postal ballot/e-voting your Company concluded the buyback of 323076923 equity shares of face value of Rs 2/- each at a price of Rs 325/- per equity share for an aggregate amount of Rs 105000 million in September 2019. During the financial year 2019-20 your Company has carried out restructuring of its following subsidiaries: a. Dissolution of Wipro Retail UK Limited and Liquidation of Appirio GmbH b. Merger of Front Worx Information technologies GmbH with and into Callant GmbH c. Merger of Digital Aps with and into Designit A/s. During the FY2020 Wipro was included in the Dow Jones Sustainability Index (DJSI) - World and Emerging Markets for the 10th time in succession. The company has been named as 2020 World's Most Ethical Company for the 9th successive year by the Ethisphere Institute. The company was also recognised as leader in Everest Group PEAK Matrix™ in 2019 and 2020 Healthcare payer digital services. The company has been recognised by the Top Employers Institute as a Top Employer in Australia for 2020. During the nine months ended 31 December 2020 the Company has completed two business combinations (which individually are not material) for a total consideration of Rs 7853. These include (a) acquisition of IVIA Services de Informatica Ltda. (IVIA ) a specialized IT services provider to financial services retail and manufacturing sectors in Brazil (b) acquisition of 4C NV and its subsidiaries (4C) a Salesforce multicloud partner in Europe U.K. and the Middle East and (c) acquisition of Encore Theme Technologies Private Limited (ETT) a Finastra trade finance solutions partner across the Middle East Africa India and Asia Pacific. On 13 October 2020 the Board of Directors approved a proposal to Buy back up to 237500000 equity shares of Rs 2 each (representing 4.16% of total paid-up equity share capital as at 30 September 2020) from the shareholders of the Company on a proportionate basis by way of a tender offer at a price of Rs 400 per equity share for an aggregate amount not exceeding Rs 95000 million (Buyback) in accordance with the provisions contained in

The Securities and Exchange Board of India (Buy-back of Securities) Regulations 2018 as amended and the Companies Act 2013 and rules made thereunder (Buyback Regulations). Subsequently the shareholders of the Company approved the Buyback through postal ballot (including e-voting) on 16 November 2020 and 11 December 2020 was fixed as the record date for the Buyback. In accordance with the provisions of the Buyback Regulations the Letter of offer for the buyback was approved by SEBI on 21 December 2020 and tender period for Buyback opened on 29 December 2020 and will close on 11 January 2021. Consequently, the Company has recorded a liability towards gross obligation on Buyback of equity shares of 95000 million and the corresponding liability for tax on buyback of Rs 22021 million as at 31 December 2020. On 22 December 2020 as part of strategic partnership the Company entered into a definitive agreement with Metro AG to take over the IT units in Germany and Romania. The consummation of the transaction is subject to receipt of regulatory approvals and customary closing conditions and is expected to be completed by 30 April [2021.in](#) March 2021 the company has acquired London-based The Capital Markets Company (Capco) for USD 1.45 billion. Capco is a management and technology consultancy firm that provides digital consulting and technology services to the global banking and financial services industry.

## RESEARCH METHODOLOGY

Research can be classified in many different ways on the basis of the methodology of the research the knowledge it creates the user groups the research problem it investigates etc following is the methodology that we have used in research:

### Applied research

Applied research is a non-systematic way of finding solutions to specific problems or issues these problems or issues can be on an individual groups or societal level. It is called non-systematic because it goes straight to finding solutions.

It is often called a “scientific process” because it uses the available scientific tools and puts them to use to find answers.

Like in regular research the researcher identifies the problem makes a hypothesis and then experiments to test it. It goes deeper into the findings of the true or basic research.

Applied research is generally closely affiliated with ideas from “scientific process”, which can include:

- The generation of strategies , analysis and hypothesis
- New ways to analysis the human behaviour and market needs.
- It allows to detect the gap between the customer wants and their gets.
- It is exploring research which means it just explores towards the industry or companies’ general information.

The research is held in the secondary format.

**Secondary data collection is a collection of data, which is readily available from other sources such data are cheaper and more quickly obtainable than the primary data.**

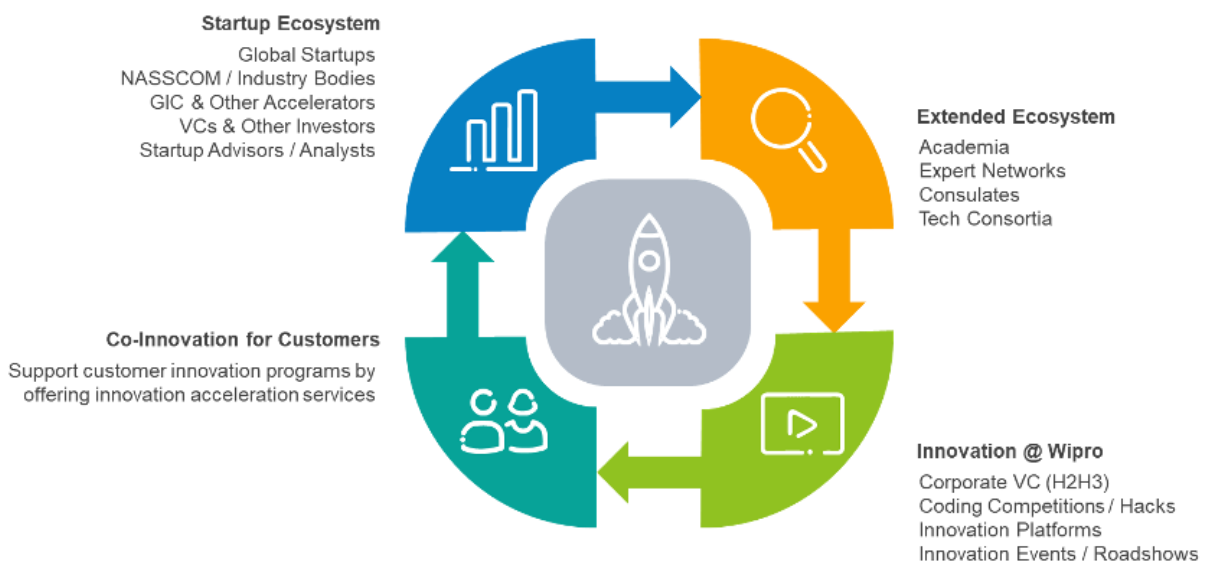
# **DATA ANALYSIS AND INTERPERTATION**

## WIPRO'S EXPERTISE

Open Innovation at Wipro refers to our collaboration within an innovation ecosystem that includes Startups, Accelerators, Venture Capitalists (VCs), Academia, Expert Networks, Incubators, and Technology Consortia, enabling the creation of differentiated and compelling propositions for our customers and partners. Our driving belief is that ecosystems introduce emerging tech, innovations, agility, and faster time-to-market results, while simultaneously allowing us to create enterprise-grade solutions and offer them in a risk-reduced model of experimentation. Our customers then have the opportunity to demo these innovations within a structured and managed initiative.

What do we do?

- Discover, assess, and partner with members of the ecosystem to create business value
- Support promising B2B startups that seek market access and scale
- Drive the creation of joint IP by integrating startup solutions into Wipro's platforms
- Structure and govern Wipro's collaboration programs with academia (research), expert networks, and other technology/industry bodies



What's in it for you?

Customer

- Access to enterprise-grade, curated startups for your challenges
- Risk-reduced model of engaging with a startup ecosystem
- Agile Co-Innovation engagements that bring together an ecosystem, Wipro IP and Service Offerings, and SMEs

#### Startups

- Wipro's global customer base for joint GTM as partners
- Technology and industry SMEs to help create enterprise-grade offerings
- Single connection to manage as well as partnership across Wipro
- Exclusive meetings with and demonstrations for Fortune 500 customers
- Access to funding from Wipro Ventures for select strategic partners

#### VC / Accelerator

- Access to global markets for portfolio companies
- As a partner, get SME perspectives for your diligence activities
- Wipro leadership support and engagement for marquee events and collaboration.

### **TECHNOLOGY ADVANCEMENT OF WIPRO**

In the two decades leading up to the COVID-19 pandemic, the world experienced one of the fastest rates of technological change, fueled by the enhancements in computing power. The restrictions introduced at the onset of the pandemic accelerated that pace exponentially, pushing technology advancements and adoption into the next decade within a few months.

- As the physical world came to a standstill, the IT services industry became the backbone of business across the world, helping them transform and adopt the technologies needed to 'keep the lights on.'
- Recognizing this growing influence and importance, the IT services industry has been on an ambitious transformation journey. Their transformation has not only been helping businesses around

the world drive the broad-based transformation needed to succeed in this new remote/virtual/hybrid world but has also been shaping the new era of digitalization.

- Wipro has been reinventing itself to adapt to changing times and the evolving needs of its stakeholders since 1945. Increasingly, the company's 70+ years of investments in R&D and technology, along with its global reach, engineering prowess and expanding design capabilities, are becoming vital to its clients' success in building agile, digital-era businesses.

### **ORCHESTRATING SERVICES AND SOLUTIONS AT SCALE**

- Today, the challenges faced by global business are far too complex for any one company to tackle alone.
- From the challenges of getting to a NetZero future and delivering seamless digital experiences to leveraging emerging technologies, the world of technology is ever-changing.
- Wipro onboarded 45,000 employees in the last fiscal year alone. Increasingly, the company's global workforce of 250,000+ consultants, engineers, designers, and technology experts are playing a critical role in helping clients think through their most challenging business problems, design sustainable, scalable solutions that are unique to their needs, and implement the technologies needed to achieve their business objectives.
- Further, as cloud computing becomes the driving force behind new, agile business models, Wipro's role in helping clients shape their strategies is fast evolving. With its full suite of cloud solutions—Wipro Full Stride Cloud Services—and the power of its best-in-class partner ecosystem, Wipro is leading the charge in helping clients streamline operations, accelerate product development, and deploy new technologies that help unlock new revenue streams.

### **ENGINEERING A BRIDGE TO SOLVE THE WORLD'S MOST COMPLEX CHALLENGES**

- There's hardly been a time when the need for engineering and tech talent has been more pronounced.
- With nearly four decades of engineering expertise, 19,000 patents, and one of the largest engineering workforces in the world—fortified with its 1.5 million strong Topcoder community—Wipro is a catalyst in helping clients realize their boldest engineering ambitions.



- Wipro's 5G and edge computing teams are working with equipment and network providers to create an infrastructure that supports the exponential growth of connected devices and meets the demands of an always-on society.
- Wipro's Industry 4.0 and IoT experts are partnering with companies across sectors to help them redefine their value propositions, drive outsized innovation, and gain deeper visibility and predictability into their assets.
- Wipro engineers are helping automotive companies develop next-gen infotainment platforms. They are leveraging Wipro's Cloud Car ecosystem to help car manufacturers innovate faster and keep software-defined vehicles digitally relevant for years
- Whether it's accelerating the designing of chips to address the chip shortage challenges, discovering sun-grazing comets for NASA, or building new AI-based forecasting models that provide clients with predictive analytics into revenue streams, Wipro's engineering edge is enabling clients to build the solutions they need to stay competitive in a changing world.

#### **CAPITALIZING ON RAPID CHANGES IN TECHNOLOGY**

- New technologies such as AI, data analytics, Web3, metaverse, and IoT are allowing enterprises to unlock new insights and new methods of engagement. Wipro is helping clients traverse into the future and capitalize on the opportunities created by these advances in technology.
- For a global consumer durable-goods manufacturer, Wipro is deploying an IoT-enabled kitchen appliance that connects to the cloud for product updates and delivers recipes to consumers. For an auto-components manufacturer, Wipro engineers are building a digital twin of the client's complete production line, enabling them to plan and schedule for different SKUs and minimize downtimes across 16 manufacturing sites worldwide.
- In each of these examples, and hundreds of others, Wipro is bringing its deep industry domain expertise and partnering with clients to help them deliver unique experiences, realize new efficiencies, better manage risks, and build agile and sustainable organizations.

## **DEEPENING SUSTAINABILITY COMMITMENTS**

- As one of the founding members of Transform to NetZero, Wipro has long been committed to making sustainability the core of its business model. The company is now taking what it has learned and applying it to its clients. Whether it's goal setting, impact tracking, developing responsible products and services, operationalizing decarbonization initiatives, or managing sustainability as a strategic transformation, Wipro is continually expanding its integrated portfolio of sustainability solutions to accelerate the impact of sustainability initiatives.

## **MAKING AMBITIONS REALIZED A REALITY FOR CLIENTS**

- With a new leadership and a bold growth agenda, Wipro is on an ambitious journey to reinvent how it works with clients and how it deploys its global workforce to help clients realize their biggest ambitions.
- Wipro's recently launched brand, Ambitions Realized, is a testament to the company's commitment to making ongoing innovation and transformation a reality—for itself and its clients. As the company gets close to turning its seventh decade in business, it seems like the 250,000+ Wiproites are only beginning to scratch the surface of what's possible.

### Wipro's use cases powered by emerging technologies

- **Smart Airport:** An airport transformed from a mundane travel infrastructure to an experience hub with personal robot assistants and guides, superimposed representation of travel information and experiential buying lounge as well as efficient and faster check-ins systems.
- **StyLoft:** A digital personal advisor for fashion houses and designers that recommends the latest in fashion while assessing their needs. It handpicks fashion goods to suit the event, based on the preferences and personality of the designer and is driven by technologies like Virtual Mirror and Hyper-relevance.

- **VR for catastrophe management:** A solution created using interactive VR with a first person's view for disaster management in an oil rig. It includes a 3D environment modeled with the minutest details including familiarization of the facility, training evaluation, and time-bound study effort.
- **Windy:** It is a personification of Wipro's artificial intelligence platform, computer vision algorithms and advanced Natural Language Understanding (NLU) capabilities that is disrupting ways of employee recruitment. It is an RPA-based application which uses a 3D depth-sense camera to identify the interviewee as well as a persona for the candidate to interact with. It processes and analyses the inputs and provides responses, as needed.
- **Cognitively-enabled immersive systems:** This solution, developed for JCB, helps solve customer issues through field and remote assistance. It enables tracking, health monitoring and fleet management. A digital twin remotely assists field personnel using augmented reality, OCR and annotation.
- **Connected Healthcare:** The Assure Health platform includes a 3D printed device (for a patient suffering from cardiac ailments or complications in pregnancy), a cardiac necklace and a fetal monitoring device. It has been extended to a smart bed and health buddy using advanced IoT, robotics, NLU and voice-based interaction. It can accommodate innumerable medical devices including glucometer, sphygmomanometer and oximeter while seamlessly interacting with the patient's daily routine.

Wipro works closely with global academic institutions to collaborate on research and development in emerging technologies like AI, Blockchain, Robotics, Autonomous Systems, and 5G. In partnership with some of the world's most prestigious universities and research centers, we conceptualize, design, and develop innovative solutions.

Our strong partnerships with universities throughout the world enable us to engage in impactful research with the best academic minds to create new and compelling technology solutions for our customers.

Right now, our main areas of focus encompass these technologies:

- 5G
- AI
- HSI (Hyper Spectral Imagery)
- Quantum Computing
- Autonomous Vehicles
- Blockchain

#### Protolab - Customer Co-innovation

Our Protolab serves as our Co-Innovation ecosystem for experimenting with emerging technologies to solve customer's new-age business challenges. Key advantages our Protolab provides include:

- Access to advanced labs and validation zones
- Isolated IT Infrastructure enabling technology R&D
- Secure development and deployment tools
- Co-incubate and co-develop model within Wipro

Our Protolab is able to deliver these advantages by offering a results-driven suite of services:

- Proactive in-house programs to pilot ideas and innovations around emerging technologies
- Experiments and POCs that last from four to eight weeks
- Execution from Lab set-up in Mountain View, California, and Bangalore, India

It's time to begin your co-innovation journey.

By partnering with Wipro, we can help you address your organization's challenges and capitalize on opportunities, delivering a complete innovation journey from concept to joint prototyping and then final build. It's time to unlock the answers you've been seeking.

- We curate on-demand and proactive startup solutions to meet client requests.
- We bring creative solutions to our customers by nurturing innovative startups.

- We offer innovation programs like ideathons and hackathons to problem-solve and address technology or industry whitespaces.
- We offer ProtoLab for rapid experimentation and POCs.
- We collaborate with academic institutions globally to advance emerging technologies like Blockchain, Autonomous Systems, 5G, Drones, Quantum, Advanced AI, and IoT.
- We help you tap into a brain trust of ideas, conversations, and approaches that support sustainable and continuous innovation.

Are you ready to join our industry-leading collection of innovation specialists from across the world? Our network provides results-driven innovation at scale that's built to address real-world problems and drive value for our customers. Fill out the form below, and we'll contact you with next steps.

### **Transform into a digital enterprise by leveraging platforms that trigger radical change in business and operations**

Wipro has built significant capabilities in next generation technologies such as analytics, mobility, collaboration, cloud, IoT and Augmented Reality (AR) that are key for Engineering & Construction (E&C) organizations. Clients use our project analytics solutions to measure and predict project performance and benefit from our collaboration platforms that bring together engineering, project sites, enterprise back office, contractors, suppliers, academia, and communities. We also have mobility solutions that can be applied to improve workforce productivity, power employee self-help and track incidents and asset. In addition, our clients use our innovation labs to research new technologies and develop PoCs to bring about ground breaking change in business and operations.

The one constant in technology is change. Tech evolves so quickly that it feels like by the time you install the latest and greatest tech package, it feels as if it's already obsolete, replaced by the next big thing.

But now all the rules are out the window. A digital awakening is taking place, and CIOs recognize that the tried-and-true strategies of yesterday will likely sputter today.

It's also important to remember digital transformation isn't about being on the cutting edge of the latest innovations. It's about serving your customers as efficiently as you can, and "trends" only extend as far as being tools to help your business thrive.

### **Developing ethical artificial intelligence**

The data companies collect is often sensitive and important to the people it belongs to, and handling it maliciously, carelessly, or with the intent of distributing it willy-nilly is problematic . AI gives companies a whole host of new freedoms and abilities, and many companies have gotten so excited over this tech tool, they haven't stopped to consider the damage that data can do in the wrong hands, or when used for the wrong purposes. As a way of providing some guidance, Harvard Business Review outlines a seven-point plan for operationalizing AI ethics and data.

Today, consumers have a much more values-based approach to their data. Their expectations are shifting toward a more ethical way of handling it. No longer do we expect our email addresses, social security numbers, and other datapoints to be scattered across the Web, going to the highest bidders.

Companies are starting to catch up and are considering their technology's ethical impact. The trends suggest that both consumers and businesses will seek out partners who are committed to the ethical handling of data and ignore those who are not.

### **Revisiting and revamping automation roadmaps**

If you're not already automating processes, you're behind quite a bit, especially as we enter the first full year of the pandemic. Automating the customer experience (while maintaining a personalized approach) should be standard procedure for most companies, but in the remote work environment, it's time to push forward.

COVID-19 is altering automation agendas rapidly toward back-office processes and creating business resilience. Intelligent automation infuses robotic and digital automation processes with pragmatic AI and low-code tools that help businesses increase efficiencies and resilience while expanding operations.

This reduces disruptions, boosts fulfillment strategies within remote work environments, and enables increased flexibility in both front- and back-end operations. Reducing employee work wherever possible is your next step in becoming a fully streamlined company.

### **Creating hyperlocal business operations**

As the online world continues to push us to a global business model, businesses are increasingly looking to rein things back by creating and cultivating a hyperlocal strategy. Businesses looking to break into a new market will employ existing local businesses to meet the on-demand needs of customers via a digital platform. A common example is for delivery services like DoorDash or GrubHub. Each of these businesses hire local drivers to pick up food at local restaurants, then make deliveries to their customers.

Large enterprises continue to tweak and hopefully perfect their hyperlocal operations, while regional midsize businesses are also growing and expanding to new geographies. Employing local shops gives them the ability to serve a new community under their existing banner without a lot of the infrastructure required by traditional growth models.

But a hyperlocal strategy still will allow organizations to design architectures that can expand customer engagement and business operations to new geos while keeping centralized technology management benefits. This will allow penetration into those new hyperlocal markets without much of the overhead necessary in days gone by, and will promote growth of the individual company as well as the community it's entering.

### **Innovating with cloud-native tech**

Certainly, one of the key developments of the next five years is emerging cloud-native technologies and the new innovations that will come along with them. Coming from open source and incubated in public clouds, cloud-native tech drives innovation quickly, and in more locations than in the public cloud.

Cloud-native tech will usher in a new era of distributed enterprise software from cloud providers, edge providers, and software vendors.

- Serverless computing will further unleash the capabilities of cloud computing by using infrastructure to meet security, reliability, and scalability requirements.

- Container-based cloud-native tech will become more widely used and accepted by users, making it the basic cloud user interface.
- Virtualization will accelerate enterprise cloud migration and containerization.

All of these will expand the capabilities of the technology significantly and lead to greater adoption.

### **Edge computing using cloud-based strategies**

New edge computing breakthroughs in the past year have broadened the appeal of edge computing, pulling it out of its historical attachment to the Internet of Things. Innovations like next-generation communications, cloud-native technologies, and new edge computing architectures have created new frameworks in which edge computing has proven useful.

This trend will continue over the next several years as firms shift their cloud strategies to include edge services on a larger scale, creating a viable alternative to public cloud vendors. The emergence of 5G and the Internet of Everything will lead to a greater number of connected smart terminals, and cloud computing capabilities will shift away from traditional cloud computing centers to edge nodes and terminals.

This article from Alibaba Cloud discusses how these new developments have shifted the scope of edge computing, allowing it to grow in the expanded 5G era while maintaining security, autonomy, and flexibility to handle the increase in demand.

### **Technology beyond the pandemic**

Since the start of the pandemic, businesses and individuals saw first-hand the tremendous potential of technology. It kept people connected, helped businesses adapt and keep running. It also introduced some organizations to new operating models and capabilities that make their business more competitive and help it grow. Lessons learned throughout this pandemic will continue to be applied to innovate and develop superior business models that are customer-centric and resilient enough to navigate future disruptions.

Wipro, for example, switched its global operations to work from home within a few days of the pandemic's announcement. As a multinational company, Wipro was already very remote friendly, but we noticed an increase in productivity in certain roles and job functions that had previously worked mostly onsite. This



reaffirmed the Wipro belief that competency and skill are more important for productivity than location, and encouraged us to consider more hybrid working arrangements going forward to promote talent availability, consolidation of services, and overall efficiency.

Other employers are having similar realizations. Remote work saves money on rent and enables companies to draw from a more global talent pool. At the same time, some roles require on-site work or benefit from the energy of in-person collaboration. To strike the right balance, businesses need to evaluate their needs and design a solution that works for them.

An important lesson the pandemic taught us is not that there is a single right way to go digital, but that embracing digital provides many ways to keep going. Technology has helped businesses become more customer-centric, made business models more adaptable, improved visibility and decision-making throughout organizations and supply chains, and increased overall resiliency. Beyond the pandemic, individuals and businesses will keep the technologies that helped them overcome challenges and develop new solutions to fill gaps in their toolkits.

### **Digital essentials going forward**

Organizations employed many new and familiar technologies throughout 2020 and 2021, but a few stood out as truly game-changing and are likely to continue influencing business operations going forward.

### **Remote infrastructure**

The pandemic highlighted the importance of connectivity in today's global economy. To keep business running, people need to be able to keep in touch and keep working from anywhere. Remote infrastructure and collaboration tools (video conferencing, virtual desktops) will therefore be essential going forward.

### **Cybersecurity**

Support for remote work services will also remain essential. This includes remote tech support for IT assets, customer care for end customers, as well as monitoring for infrastructure and applications. Working from home extends an organization's digital network from onsite, company-owned devices to personal devices using a range of public and private networks. Ensuring that these devices have the necessary software and are following safety protocols requires greater investment in IT infrastructure and cybersecurity.

## Supply chain and industrial automation

A resilient supply chain is a must-have during any adverse situation. Throughout the pandemic, panic-buying and sudden shifts in demand resulted in shortages of toilet paper, sanitizer, face masks, and laptops. Technology came to the rescue in the form of dynamic supply-chain planning and industrial automation. Greater visibility and communication throughout the supply chain — especially upstream with manufacturers, and downstream in last-mile delivery — enabled businesses to predict bottlenecks or shortages and plan accordingly, such as repurposing factory lines to create high-demand products.

## 5G and cloud computing

Had 5G been more widely adopted before the pandemic, many issues with connectivity and remote work may have been reduced. Going forward, 5G adoption is likely to increase. The power of cloud and edge computing combined with a 5G network will greatly enhance the capabilities of underlying infrastructure.

The most important lesson from this global situation is clear: Technology is a powerful tool and an essential investment in the future of any business. Enterprises that invested in technology prior to the pandemic were much better equipped to handle the hurdles of 2020. In some cases, they even gained market share.

Beyond the pandemic, businesses should continue to look to technology as an enabler of their business goals and a way to constantly improve operations.

Artificial Intelligence (AI) has from the very beginning of the pandemic been busily working behind the scenes assisting the limitations of human knowledge in the massive endeavour of understanding and tracking the spread of COVID-19. Today multiple AI-powered projects based on data science, machine learning, and big data are being used across a broad range of fields to predict, explain, and manage the different scenarios caused by the health crisis. With AI use growing in the healthcare sector, it's predicting early COVID-19 symptoms and thereby control the spread of the infection. It's also being used to screen and track patients, as well as predict future infections, using algorithms that process data to identify insightful patterns.

Machine learning is the main driving force behind AI's capability to detect these patterns. For example, in a given country, it may be possible to predict the number of deaths from COVID-19 in males over 60.

This technology's algorithms allow healthcare organizations to effectively diagnose and customize medical care and follow-up plans, resulting in better patient experiences. AI is helping drive COVID-19 prevention

at the molecular level (e.g., drug and vaccine discovery), the patient level (e.g., patient diagnosis), and the population level (e.g., epidemiological surveillance). As the following images outlines, AI enables physicians to accelerate their ability to treat patients and deliver effective care.



### Prediction and Tracking

Healthcare professionals are studying the transmission rate of the pandemic by using AI in conjunction with these mathematical models:

Susceptible, Infectious, and Recovered (SIR): This model is used with AI to analyse and forecast the virus's spread or containment. It's the most prominent mathematical agent-based model using ordinary mathematical equations. The recovered individuals can be said to be "Susceptible-Infected-Recovered."

Global Epidemic and Mobility (GLEaM): The GLEaM model offers the ability to simulate the spread of COVID-19 across the world. This user-friendly program enables researchers to develop case studies, test and justify hypotheses on the spread of the disease, and understand the perceived epidemic variants. It also allows teams to study the efficacy and outcomes of diverse interpolation strategies, analyze threats through model scenarios, and forecast newly evolving infectious diseases.

Transportation Analysis and Simulation (TRANSIMS) system: TRANSIMS works with unconventional computational and analytical techniques to examine regional transportation systems and predict the spread of COVID-19 based on people's travel habits and local interactions. It simulates the travel behaviours of each individual for an entire 24-hour period based on the survey data received, which includes statistics on the volume of traffic and congestion, time-dependent delays for the entire road and transit network, and queues at intersections.

These models can theoretically predict the number of positive cases and the rate of transmission. Once these models have produced data, researchers can upload that data into HealthMap, an online information resource that collects the publicly available COVID-19 data, making it readily available to facilitate the effective tracking of its spread.

Recently, AI has helped identify and forecast COVID-19 outbreaks by employing multidimensional data. Regularly, AI-driven tools are limited to one data type, which may not lead to an accurate measurement of the coronavirus's spread. In such a case, the use of multidimensional data can help support decision-making processes with higher reliability.

As an example, AI is being used with anomaly detection (AD), which identifies abnormal and unfamiliar patterns in a medical image (such as a chest X-ray). AD can also be applied to either single-dimensional or multidimensional data. Without AI, AD-driven processes would be tedious for physicians to analyze and provide treatment for patients. Using the data AD generates, AI can be used to identify the most vulnerable

regions by tracking the number of confirmed cases and recommending the necessary actions to curtail the spread.

### **AI-based Vaccine Discoveries and Predictions**

Since the outbreak of the coronavirus, several AI-based approaches have been used to design vaccines. Natural language-processing models, especially language-modelling techniques, have helped drive COVID-19 vaccine discovery. These models' algorithms analyze the data, which includes geographic locations and patients' social interactions, and provides recommended treatments, facilitating vaccine development. AI is also being used with the Vaxign machine-learning platform, which is based on supervised classification models, to accelerate the discovery process.

AI is also furthering COVID-19 research in three major areas: binary diagnosis (whether COVID-19 is present or absent), studying lung abnormalities, and distinguishing COVID-19 from non-COVID-19 pneumonias. AI tools can predict the patient's need for oxygen therapy or incubation and the development of acute respiratory distress syndrome. With AI platforms, healthcare teams can determine the generalizability of treatments to multinational patient populations, integrate imaging and clinical information, analyze serial imaging data, and customize patients' steroid treatments. Additionally, by using natural-language tools to process clinical reports, machine-learning models are assessing radiology images to predict the need for intensive care unit admissions.

### **Wipro's AI Solutions for Detecting COVID-19**

Wipro is contributing to pandemic efforts and has developed a fully automated AI tool that detects COVID-19 based on CT scan images or chest X-rays. Our research teams have also developed the Covigilent app in association with Healthcare Global Enterprises (HCG) supported by the Karnataka government, Bhakti Vedanta Hospital in Mumbai, and Bangalore Medical College and Research Institute (BMRCI).

Using deep-learning and machine-learning algorithms, the app is an advanced AI-powered cough-analysis and rapid COVID-19-screening tool. It helps in premature detection efforts, with a person's cough being the primary metric. The app discriminates COVID-19 coughs from those due to seasonal bronchitis and pneumonia. It captures audio and data, such as gender, age, and other health points, which are uploaded to a secure cloud server. AI algorithms then analyse the audio signals and identify those who are infected.

## Developing AI-Driven Insights for Containing the Pandemic

Healthcare organizations are in crucial need of real-time decision-making technologies to help them decrease the spread of the coronavirus. AI's ability to mimic human intelligence in a proficient way is enabling healthcare professionals to quickly understand the nature of the virus and develop vaccines for reducing its spread. This results-driven technology is driving screening efforts, analysis, predictions, and the tracking of current and likely future patients. It's also playing a role in tracking the confirmed, recovered, and fatality cases, enabling physicians to gain important insights on how to treat patients and end the pandemic.

Today, forward thinking enterprises are reaping huge benefits by incorporating technological advances into older processes platforms, and products. For example, artificial intelligence (AI) has been around for quite some time, and for much of that time its disruptive potential has been widely discussed, but narrowly implemented. However, with the emergence of cloud big data technologies and low-cost compute, AI has found widespread acceptance in enterprises. Where AI was once a curiosity, it is now regarded a critical component to any enterprise strategy. As another example, texting has been a form of communication since 1990s, but widespread adoption came only after mobile phones becomes popular and layered in messaging as a core utility of the device.

Combinatorial technological innovation is visible in most, if not all, of the current leading technology products. Things like 3D Printing, IoT, Drones, Robotics, Machine Vision, Machine Learning, Cognitive Computing, Data Discovery, AI, Natural Language Processing, Blockchain, and more, were built by bringing together previous innovations to create exponential gains in value and applicability. It is not necessary to reinvent the wheel to gain a competitive advantage. Two or more disruptive technologies in the right combination will do just fine -- the critical part is thinking through the ways two technologies leverage one another to enhance their collective value. When individuals or organizations get this right, the sum of the parts is far greater than their individual value. One plus one equals ten, or even one hundred, instead of two!

The potential to marry multiple technologies into a single process transformation is very high for most business processes. Combinatorial technologies are creating super intelligent products and services everywhere you look. In a retail store, the ability to combine Computer Vision, real time Big Data analytics

and IoT information can redefine the in-store customer experience. Technologies such as Object Detection, IoT, Augmented Reality and Haptic Feedback can be combined to create immersive learning/training/experience environments. A CNC lathe operator could use these technologies for training. Sport coaches could use it for training athletes. Oil & Gas, Utilities and Mining operations could use these to make field workers more efficient and improve safety. The Armed Forces could use it for military training without putting personnel in harm's way.

Other examples of relevant technology combinations -

- Computer Vision + Machine Learning + 5G + Cloud - Traffic monitoring and control in a smart city
- Augmented Reality + Virtual Reality - Entertainment, education and work
- 5G + Autonomous Vehicles + Computer Vision - Real time route optimization and last mile travel and delivery
- Blockchain + Smart Contract + AI – Distributed systems that can enforce laws and implement services, the next generation of 'public utilities'

Given the enormous amount of technological innovation and development happening, the critical element, once again, is thinking carefully about how technology can intersect and amplify. Choosing the right combination of technology, along with a deep understanding of the domain in which they will be applied, is essential to create relevant innovation.

## **CLOUD TECHNOLOGY**

Today, business leaders are looking to transform their technology infrastructure to innovate faster and accelerate business growth. Cloud is the catalyst and plays a foundational role in this new agile world. Cloud is the key to deliver flexible, on-demand access to business-critical resources and to creating new business offerings.

Wipro FullStride Cloud Studio has been designed with these changes in mind to help companies drive business transformation at scale. Cloud Studio plays the role of a strategic ecosystem integrator leveraging Wipro's platforms, IPs and talent – along with native and niche tools developed by hyperscale's and partners – to offer a one-stop marketplace that drives business outcomes and value for our clients.

We have vast experience delivering transformative cloud engagements across every major industry. Our Cloud Studio brings together a unique set of solutions and platforms to accelerate our clients' cloud journey. With 1000+ standard blueprints and 40+ industry solutions, it acts as an integrated workbench to easily plan, create, design, develop and manage cloud projects with an automated and industrialized approach.

Wipro FullStride Cloud Studio provides a comprehensive platform to deliver innovative solutions that address partners' most complex business challenges.

## **CLOUD INDUSTRY**

The value that cloud technologies deliver has grown exponentially over the last few years, providing greater business agility and new ways of working that have been greatly accelerated in response to the pandemic. Remote or hybrid workforces have become common, with people gaining access to real-time information from anywhere, anytime, on any device. Business teams are also gaining vital market insights and processing huge amounts of data, thanks to cloud-based applications, AI/ML platforms, and automation tools.

In this hyperconnected ecosystem, the increasing benefits of cloud as the transformational platform to build businesses are undeniably clear, and with cloud capabilities evolving, the business opportunities are expanding. Cloud advancements and a cloud development mindset have ushered in a new era, and among the new fields and advancements is the creation of industry-specific clouds. These custom-built cloud solutions are specifically designed to address unique industry challenges and nuances to provide greater



advantages than standard cloud platforms, which are limited in their ability to provide industry-focused advantages.

## **CLOUD BUSINESS APPLICATION**

Wipro's Application Services partners with business and IT leaders to address their most complex business challenges to advance intelligence, agility and resilience across their entire enterprise.

Today's digital era businesses are embracing technologies and innovations that make their organizations more intelligent, data-driven and interconnected. We empower our clients with new levels of innovation and business value across the entire digital value chain.

Our global experience, industry solutions, IPs and strategic partnerships with technology leaders is helping clients accelerate their digital transformation journey to modernize their enterprise making them future ready.

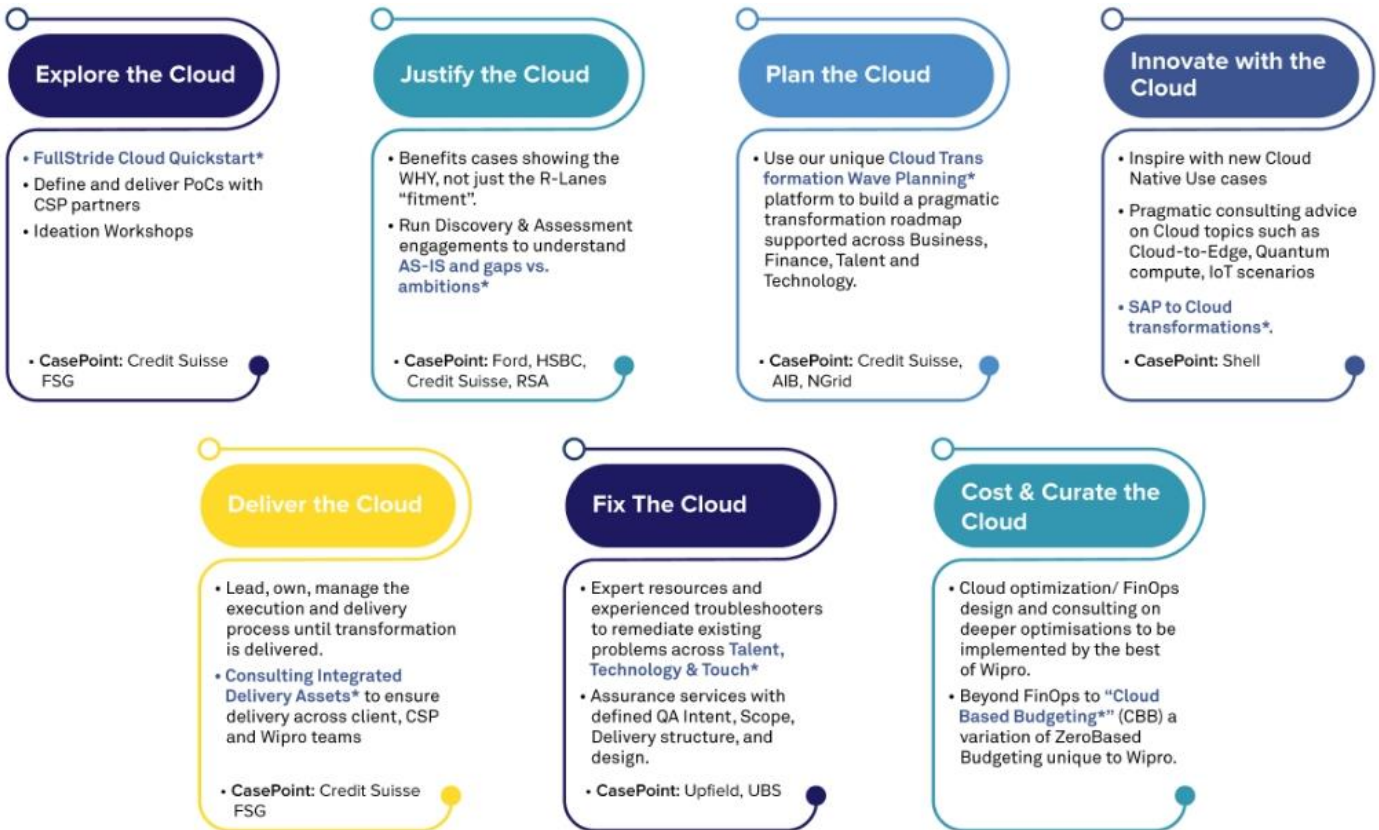
Wipro brings together applications, platforms and cloud solutions to enhance the experience across all touchpoints, delivering superior business outcomes.

## **CLOUD CONSULTING**

Wipro FullStride Cloud FullStride Cloud Services combines industry and cloud consulting expertise to tailor strategies designed to meet the specific requirements of an organization. Our business-first approach focuses on developing a custom-tailored roadmap based on identifying the business objectives and requirements that correspond with an enterprise's overarching business objective. Wipro's strategy ensures the production of long-term business value, the enhancement of competitive distinctiveness, the improvement of business agility, the instilling of resilience, and the widespread implementation of responsible investment practices.

At Wipro FullStride Cloud Consulting, we work define and implement the right cloud platform for a business system or process based on a business case. Using a consultative approach, we navigate the technological platform options, identify necessary organizational knowledge, and engage the appropriate Wipro support for our clients.

## Cloud Consulting



\*Enabled by unique and specific CTC assets and methods to maximise insight, outcome, and speed-to-value

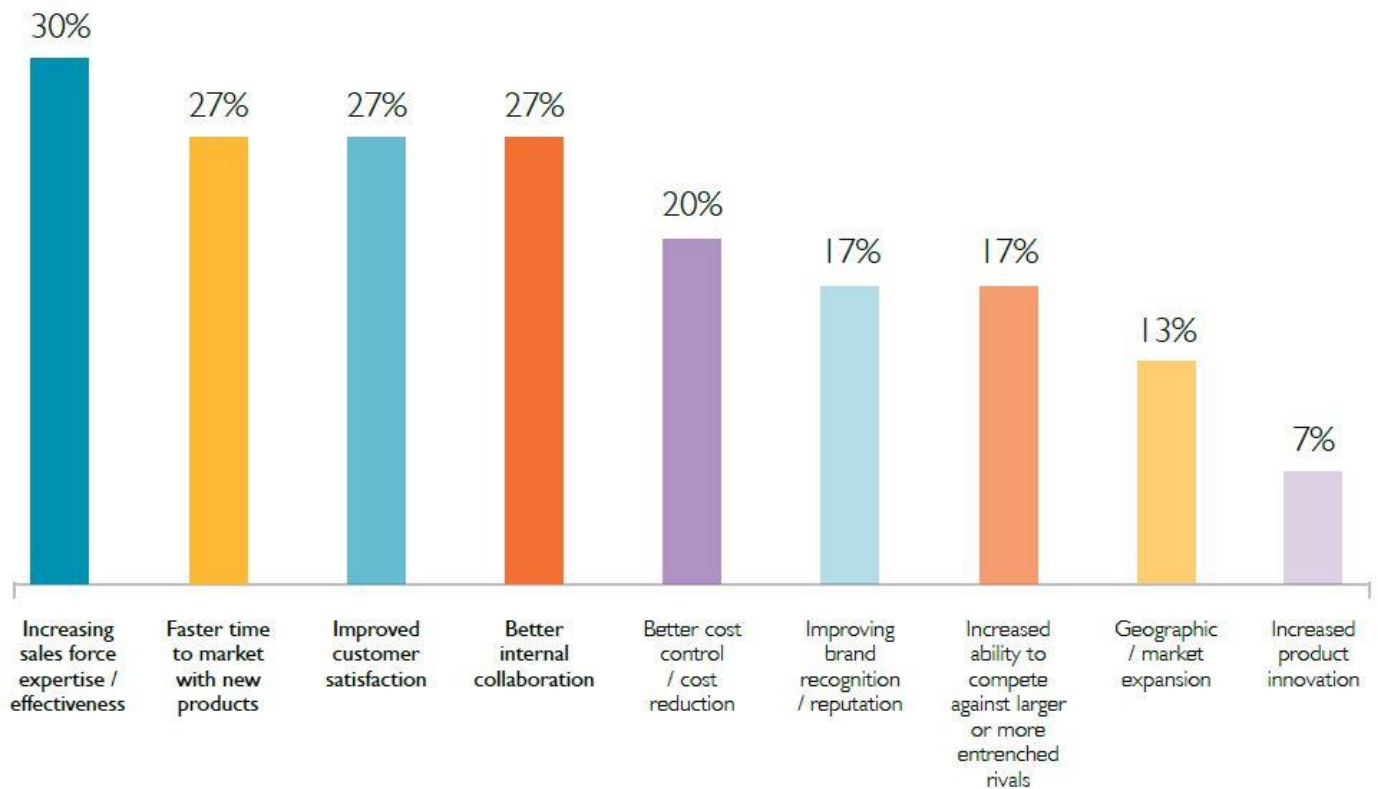
## CLOUD SECURITY

Today's business leaders want to achieve success through digital transformation. Unfortunately, they are only scratching the surface of how they can capitalize on the innovative capabilities of cloud to redefine their strategic models and go-to-market strategy.

While the new opportunities to accelerate speed of business, new revenue streams and overall growth are exhilarating, often cloud security and compliance are an afterthought. This oversight has put organizations in a precarious position and has moved security from an IT-centric function to a risk management issue. This is becoming the single biggest barrier to cloud adoption, negating an organization's ability to reach its business ambition and take a full stride forward.

It is this challenge that drives Wipro FullStride Cloud Services to deliver a secure-by-design approach to our clients' cloud journey. Our Cloud Security teams, comprising of cloud security experts and strategists, accelerate resilience during the cloud journey and provide guidance on how to mitigate threats responsibly.

Our core tenets of Transformation, Modernization, Connected Intelligence and Trust empower our clients to make bold moves leveraging cloud responsibly with a security-by-design approach.



### Benefits gain from cloud-based solution

#### Six Reasons Cloud Computing Is a Game Changer

We've compiled some key benefits of cloud technology to know how cloud computing has transformed businesses.

##### 1. Modular software prioritization and SaaS

One of the most significant changes is how the software is delivered. Earlier, the software was delivered in large and monolithic packages. This was inefficient and resulted in wasted resources as users only utilized some features of the entire solution. With cloud computing, the software is delivered in modular components, which can be combined to develop a custom solution.

Compared to the previous process, this is a more efficient way of managing resources, and thus, it has allowed businesses to be agile in their operations.

Moving ahead, SaaS is one of the largest chunks of cloud spending because the variety of apps (Salesforce, Dropbox, Microsoft Office 365, and Google Workspace) delivered via SaaS is vast. SaaS apps can be accessed from anywhere through any device with an internet connection. Thus, it has made it possible for employees to work from home or anywhere worldwide.

Cloud computing and SaaS help businesses embrace scalability, integration, cost-efficiency, and time-saving.

## **2. Increased security**

Working remotely has made businesses realize the importance of data security more than ever. However, cloud computing has enabled businesses to keep their data safe and secure while making it easier to access them from anywhere. Cloud computing also provides unique security settings in their systems for each user as it provides an extra layer of protection.

Now, organizations can focus on other areas of their business growth instead of worrying about data security or other data storage techniques.

## **3. Improved collaboration**

For businesses, collaboration is significant. In the new normal era, the demand for collaboration tools has increased. Organizations must satisfy employees' needs without affecting work efficiency, productivity, and security. That's where Cloud Computing comes into the picture! Tools like Dropbox, Asana, Trello, and Google Workspace improve how teams work together.

With collaboration tools, anyone in the team can access, review, and update the files in the cloud. While maintaining productivity, these tools are entirely safe to use. They have several benefits for businesses, including,

- Reduced investment
- Easy file access

- Scalability
- Real-time updates.

Collaboration tools enhance the quality of work while minimizing the time required to complete the project.

Collaboration is undoubtedly possible without cloud computing, but it will never be as effective and engaging as it is with cloud computing solutions!

#### **4. Working from home**

Earlier, working from home seemed difficult. Most jobs required employees to work from offices as access to company resources, meetings, etc., was denied outside the premises due to security and other company protocols.

But things have drastically changed in 2022. Millions of people today work remotely, thanks to cloud computing technology. With several tools that allow integrated emails, document collaboration, video-conferencing, and instant messaging, cloud computing has helped businesses establish a work-life balance with improved productivity.

As a result, employees can leverage flexibility, save commuting costs, and focus on their health and well-being.

#### **5. IoT and cloud computing**

Many organizations are adopting IoT for smart offices to promote interaction between connecting teams. With the combination of IoT and cloud computing, sensors exchange the data with connected devices in the smart office system and help organizations adjust the work environment, improve collaboration, and identify cost-saving opportunities.

The ability to tap into the data clusters helps organizations improve their operations by better understanding the behaviour of both customers and employees.

## **6. Document control**

To keep business secure, document control is necessary. Cloud\_computing\_simplifies that by enabling businesses to edit easily, view, and share documents with internal and external users. As every change can be easily tracked, it helps avoid data tampering. Instead, it provides real-time collaboration and reduces the need for many versions of the same file floating around.

### **Mobility on the Cloud**

Apart from the above benefits, it is worth mentioning that the cloud also supports environmental proactivity. For example, it cuts down paper waste and enhances energy efficiency.

Cloud computing offers several benefits and opportunities to the modern workplace, such as flexibility, increased collaboration, mobility, and adaptability. It has taken the workspace to the next level of proficiency and efficiency.

### **Journey towards a new paradigm**

This 3-pronged approach will help companies in the Middle East reap maximum benefits from their AI and automation programs while augmenting their human potential.

Healthy public discourse on Future of Work prior to COVID-19

For decades, there have been discussions about how technology, demographic changes, and lifestyle choices will transform the way we work.

At the World Economic Forum in Davos last year, leaders and experts debated a range of issues like robots replacing humans, the decline of current job families and creation of new jobs, skills gaps in the workforce, the need for diversity and inclusion, and more.

In hindsight, what these conversations had in common was the comforting conviction that while planning would be necessary, the future would of course arrive gradually, predictably.

But sometimes, as the world works, events unexpectedly accelerate us into the future. Enter 2020 and the global outbreak of COVID-19.

An unprecedented global health pandemic with significant economic fallout

Over the last few weeks, COVID-19 has proliferated into an unprecedented health pandemic. With over three million infected, and 200,000+ casualties across 180 countries (as on 28 April), millions of people and thousands of businesses are being severely impacted.

The shocks to the system are sweeping, with industries like travel, leisure, and construction particularly hard hit. Worse, with global supply chains profoundly disrupted and manufacturing stalled, recovery will be more difficult than in past crises. Not surprisingly, stock markets have tumbled, and global GDP projections have been halved.

Organizational preparedness put to the test

So far organizations have been doing business continuity planning (BCP) based on the notion of localized exigencies like terrorist attacks, natural disasters, civil and political disturbances, etc. These were limited in geography and time duration.

But, as Peter Drucker memorably put it, “The greatest danger in times of turbulence is not the turbulence; it is to act with yesterday’s logic.”

The COVID-19 pandemic is global and ongoing. Businesses must consider disruptions at such scale as the *new normal*. BCP now must shift from addressing needs that are local and temporary, to needs that are global and far greater in duration.

A fundamentally altered discourse on the future of work

Taking the long view, there is little doubt that the pandemic will subside in time, even if pinning down exactly when is impossible. But already, it seems likely it will have accelerated digital adoption years ahead of prior expectations. If so, we will have to re-think much about business – particularly meetings, conferences, and the commercial real estate footprint.

Where once people would ask, “Why do we need to do this virtually?” we may increasingly hear, “Is there any real reason this must be done in person?”

The prolonged lockdowns have forced a previously unthinkable stress-testing of a virtual working world, and organizations are discovering it works. The barriers to online tools and virtual presence have fallen and will never be as strong again.

#### Immediate impacts to the future of work

1. Work from home will now be a real option for companies or employees.

Businesses that once resisted the work from home concept due to fears of data security or higher hardware and network costs will find there is no escape now. As success stories across organizations on higher employee productivity and quality spread and some will point to a BAU (business-as-usual) experience, businesses will find it hard to justify high real-estate costs.

As employees adapt to this new lifestyle and flexibility, they might find it challenging to go back to long commutes. This might mean that work from home becomes a foundational aspect of future of work. Twitter in the U.S. is reimbursing employees to set up their home office. A large IT services firm in India has announced that more than 75% of its staff will work permanently from home by 2025 Will this become a trend? Time will tell.

2. The proliferation of online tools will replace a physical presence.

Increasing use of video conferencing tools, virtual reality, and digital avatars, etc., will enable and further promote virtual meetings and collaboration. The finance functions would further emphasize the low economic returns on travel and may push for retooling the sales and marketing function to a more digital presence. The push toward cost-savings and practical utility of using automation to supplement a human workforce will accelerate. We can expect businesses to intensify the use of chat-bots, RPA, and AI to take over more and more processes and tasks because these are less prone to future epidemics.



### 3. Further acceleration of the gig-economy.

Firms will realize that work is becoming more decentralized and gig-oriented, and freelancers can bring desirable skill sets to the table. They can use gig workers to manage demand spikes, economic slow-downs, etc., creating a better balance of freelancers and permanent workers as a part of their overall talent strategy. This will give them flexibility to quickly adapt to unforeseen circumstances.

#### Wipro Topcoder

Topcoder is a 20+ year old organization that provides crowdsourced Talent as a Service to enterprises. It helps organizations by providing access to 1.6M+ gig workers in the technology space and ensures business continuity and scalability amidst current resource constraints. Topcoder also supports the workers by keeping them connected and engaged. Topcoder was acquired by Wipro in 2016.

### 4. Traditional sectors will transition to virtual environments.

This pandemic has forced many sectors to push their boundaries in ways that would have been unthinkable a few months ago. Social and regulatory barriers for virtual delivery in traditional areas like government, health, education, and events are shrinking, and it's difficult to imagine that they will return to their former levels.

**Government:** COVID-19 has forced many institutions to go virtual. For instance, the Supreme Court of India has decided to conduct hearings via video conferencing. Can this be continued post the virus scare as well? Can the benefits of staying closer to their representatives push Parliamentarians to legislate virtually? Can voting be done completely online to increase inclusion? The benefits are clear, and the question of, "Can this really work?" will have been thoroughly answered. The new normal is unlikely to resemble the former status quo.

**Health:** To date, telemedicine has been on the sidelines as a cost-effective alternative to physical consultation. Here too, telemedicine has been put to the test and is working. Doctors today routinely consult with patients via telephone, or video through Skype, FaceTime, etc. As we will revive from the pandemic, both healthcare professionals and patients would realize the convenience of virtual consultation will affect a shift in healthcare delivery.

**Education:** The online revolution in higher education, with many renowned universities offering both degree programs and short-term certifications online, was already well underway. Once families successfully experiment with online schooling during the pandemic, there is likely to be an increased demand for full or partial online schooling.

**Events:** The Tokyo Olympics in 2020 have been postponed due to the COVID-19 outbreak, which might result in losses to the tune of \$6 billion. But people are also learning that crowded stadiums aren't the only way to engage fans. In Europe, many football matches are being broadcast from empty stadiums. Global concerts are happening virtually. There is clear potential to expand event audiences far beyond singular, in-person events to multiple, virtual ones. That revenue potential will be hard to ignore.

Virtual working is not without its challenges

As remote working becomes more commonplace, society will need to upgrade systems and infrastructure to support a massive workforce working from home. Internet bandwidth availability, data security on home systems and networks, employee dependability and integrity, will be key issues that need to be answered before a transition to remote working becomes a reality.

In addition to technology, companies will need to have effective workflows and supportive organizational culture enabling employees to contribute productively.

This is a final call to action

Organizations must revisit their BCP strategy for future pandemics and disruptions of similar or even larger scale. There is an urgent need to:

- Create ways for job functions to operate virtually
- Develop succession exigencies for major executives
- Cross-train team members to perform critical functions to eliminate single-user dependency
- Document business-critical functions, processes, and procedures

It is unclear how many future pandemics will arise, or how frequently they may strike. Given that uncertainty, organizations with remote work strategies would be much better positioned for continuity.

Ready or not, we have already leapt into the future

In just a few short months, the world has learned a new – and in many ways, better – way of working. The future of work is already here, and while it will never completely replace the human touch, society has been given an opportunity to create a healthier balance between working physically together and using digital channels.

This is being called phygital, and it is already a reality. Together we need to navigate this immediate disruption, while at the same time remain aligned to long term transitions taking place at work.

Now is the time to plan and act on the future of work. The idea of “business as usual” has changed permanently. Now is the moment when we can also

## **COVID-19: IMPACT AND RESPONSE**

As enterprises, individuals and a species, the current pandemic has forced us all out of our routines and “business as usual.”

The first action for most businesses is to ensure employees’ health, safety and productivity. Related to this, we must also address the challenges of work-from-home connectivity and remote collaboration. The second priority is connecting with customers, clients, suppliers and partners. The third imperative is confirming business continuity and building resilience. All of this must be accomplished amid the constraints of lockdowns, supply-chain uncertainty and volatile global markets.

In this environment, we believe that organizations will encounter the following situations:

1. Increased need for scale and velocity, particularly by migrating business and operations to digital channels
2. Greater focus on costs as they deal with an evolving and uncertain economic climate
3. Surging demand for digital products and services to replace brick-and-mortar and in-person touchpoints
4. Accelerated adoption of digital technologies in the areas of collaboration, supply chain, commerce, cloud and others
5. Organizational efforts and initiatives to boost resilience and use current learnings to prepare for future disruptions

Businesses with a high degree of cloud maturity, robust digital platforms, high-performance teams and deep digital connections with their stakeholders will be the most resilient. The ability to adapt, with technology-enabled human interfaces, will be a key differentiator as we define our “new normal.”

In this moment of need, we have assembled a collection of relevant capabilities and thought leadership that can help companies minimize business disruption while ensuring their employees’ well-being. Applicable across industries, these capabilities focus on critical aspects of business continuity to help enterprises react, recover and retain their organizational agility. We have organized them into four key areas: **Managing the Employee and Workforce Experience, Leveraging Digital Technologies, Optimizing and Reimagining IT, and Increasing Organizational Resilience.**

### **Managing and Workforce Experience**

- Adopt “Agile Anywhere” for Seamless Software Delivery
- Changing Change Management: Zero-Touch Intervention
- Facilitate Remote Collaboration with Microsoft Teams
- Four Steps to Thriving with Remote Collaboration
- Go Beyond Enabling Remote Work; Plan for the Future
- Monitor Connectivity to Improve the WFH Experience

- Six Best Practices for Remote Meetings
- The Importance of Rapid Onboarding to the Future of Work
- Tracking Employee Safety for Business Continuity
- Using AI to Help Solve Remote-Working IT Issues

### **Leveraging Digital Technologies**

- Address COVID-19 with HOLMES Assistant for Researcher
- An AI-Powered Bot to Answer Your COVID-19 Questions
- Creating a Conversational Interface for Bot Adoption
- Enabling Remote Device Management for a Biotech Leader
- How AI Can Reduce Response Times to the Pandemic
- Managing the Top Marketing Challenges Amid COVID-19
- Now is the Time to Design What Matters
- Overcome Sales Disruptions with eCommerce as a Service
- The Paperless Enterprise is Key to Remote Business
- Scale and Test Remotely with Digital Assurance as a Service

### **Optimizing and Reimagining IT**

- Future of Software Development: AI in Developer Productivity (Part 1)
- Future of Software Development: AI in Developer Productivity (Part 2)
- How to Accelerate the Enterprise Cloud Journey
- Leverage Rapid Integration to Launch Channels Quickly
- Modernization Initiatives Need Not Stall
- Optimize Change to Regain Transformation Momentum
- Quickly Identify Cost Reductions with the SGT Framework
- The Social Physics of Cloud-Native Transformation
- Transforming the Technology Operating Model

### **Increasing Organizational Resilience**

- Ensuring IT Compliance in a Work-from-Home Scenario

- Gain a ‘Clearview’ to Manage Project Portfolios
- Optimize Working Capital During a Challenging Economy
- Quickly Enable Remote Work Using VirtuaDesk BCP
- Transforming Supply-Chain Communications for a Technology Leader
- Enabling Transformation in Healthcare & Life Sciences
- React, Respond and Rethink Business with a Disruption Canvas to Guide You.

### **Managing the Top Marketing Challenges Amid COVID-19**

The COVID-19 pandemic has made it imperative for business leadership to adapt strategies that enable business continuity, customer stability and revenue growth during an unpredictable and unprecedented moment in history. COVID-19 has changed the way the economy will function for the foreseeable future.

Key challenges for CMOs and CXOs are becoming clearer with each passing day, including:

- **Significantly reduced budgets:** Marketing isn’t often viewed as a mission-critical function, so in times of cash preservation, it can be the first department whose budgets are cut. CMOs are challenged to drive continued customer acquisition and revenue growth under much tighter budget constraints.
- **Rapidly changing marketing mix and messaging:** The pandemic has introduced new complexities to, and constraints upon, the marketing mix. Cautious customer sentiment and a digital landscape flooded with an onslaught of news make it difficult to break through the online clutter. As buyers stay at home, out-of-home marketing becomes obsolete, and key events are postponed or pushed into a virtual environment, having a strong digital strategy in place is critical. In addition, marketers must be sensitive to the current economic environment and adjust their marketing messages to ensure they consider the broader context of COVID-19.
- **Heightened focus on brand perception:** People are paying close attention to how brands are responding to and acting during the COVID-19 crisis. Listening, reporting, and quickly adapting to customer concerns are paramount to protecting brand sentiment and perception. In addition, customers no longer have easy access to their own networks or support ecosystems, leading to overwhelmed call

centers that risk not keeping up with demand. Digitally managing customer relationships with tact, empathy and mindfulness through social media, forums, chat and in-product tools can help manage brand reputation during these isolation periods.

- **Increased need to understand and apply technology:** The need for businesses to shift to a virtual customer experience model reinforces the need for marketing leaders to continue to embrace technology. Successfully applying technology that drives a cohesive digital-purchasing experience will be the differentiating factor between marketing organizations that thrive and those that are constantly in triage. Additionally, the ability to track and report analytics across customer touchpoints will become critical to showcasing marketing success during a time of churn.

Wipro and Designit help CMOs and CXOs address these and other marketing challenges amid COVID-19, with core solutions that support their efforts to:

- **Bolster customer support:** The Customer Signal Hub, an always-on solution, enables companies to actively monitor and respond to customers across multiple digital channels. This can augment call centers cost-effectively and in real time, helping to drive 1:1 engagement through channels customers prefer. These customer engagements can then be synthesized and shared across departments, providing insights that can help optimize the customer experience. In addition, Designit's crisis- and escalation-management programs enable brands to swiftly and effectively detect and address negative customer incidents, with a team of experts who perform root-cause analyses and distribute/publish stakeholder communications 24 x 7 x 365.
- **Manage brand and reputation:** Using advanced listening tools and custom social-listening dashboards, companies can scan the digital landscape for brand and keyword mentions. This in turn provides insights and recommendations about brand sentiment and reputation management, including opportunities and potential areas of risk.

- **Efficiently acquire new customers:** As potential customers navigate their online buying journey, the Global Demand Center (GDC) builds a bridge between marketing and sales in a fully measurable way across the digital ecosystem. GDC spans go-to-market strategy, demand generation, campaign management, and customer acquisition and nurture. This comprehensive offering provides everything from marcom strategy and marketing-automation implementation to content strategy/production and media buying/management. The solution is also extensible to a vast network of systems integrator partners, allowing the brand and partners to jointly go-to-market in a way that generates trackable co-selling opportunities.
- **Enable and optimize remote teams:** Using Rapid Delivery Labs, organizations can not only keep the lights on, but maintain their productivity and drive business forward. The Labs enable companies to collaborate in workshop-like environments that support rapid ideation, iteration and prototyping. Business can currently use the Labs for the following five remote services: 1. Driving Online Engagement and Sales, 2. Accelerating Time to Market for Campaigns, 3. Tools and Services for Internal Collaboration, 4. Optimization of Workflows, and 5. Content Management (make less, use more, convert more).

Embedding new and more-flexible operating models and toolkits are key to business continuity in disruptive times. From understanding shifting moods and motivations to managing high-risk interactions with ease, CMOs and CXOs face new and evolving marketing challenges amid COVID-19. Technology can help address these challenges while empowering companies to reinforce their customer centricity, be more adaptable and improve their responsiveness. Using solutions like the above, enterprises can more quickly transition to faster, more cost-effective business services and more-flexible working environments, positioning the enterprise for success in a socially distanced, virtual world.



## **HYPOTHESIS TESTING**

### **HYPOTHESIS 1**

**H0:** The technology advancement doesn't help the growth of the company.

**H1:** The technology advancement helps to the growth of the company.

From the above study it is found that from the above H1 the alternate hypothesis i.e.H1 "The technology advancement helps to the growth of the company.", is found to be true hence accepted, whereas null hypothesis i.e., H0 "The technology advancement doesn't help the growth of the company."

### **HYPOTHESIS 2**

**H0:** The company doesn't analyse the need of the technological advancements in the new age market.

**H1:** The company analyses the need of the technological advancement in the new age market.

From the above study it is found that from the above H1 the alternate hypothesis i.e.H1 "The company analyses the need of the technological advancement in the new age market.", is found to be true hence accepted, whereas null hypothesis i.e., H0 "The company doesn't analyse the need of the technological advancements in the new age market."

### **HYPOTHESIS 3**

**H0:** The demand of Wipro's technological advancement services decreased.

**H1:** The demand of Wipro's technological advancement services increased.

From the above study it is found that from the above H1 the alternate hypothesis i.e.H1 "The demand of Wipro's technological advancement services increased.", is found to be true hence accepted, whereas null hypothesis i.e., H0 "The demand of Wipro's technological advancement services decreased."

## **FINDINGS**

## **FINDINGS OF PROJECT**

- Increasing the digital platform to provide with high- performance of digital and AI technologies.
- Accelerated the digital and technological advancement to create the AI platform for the future deals.
- Wipro technologies has increased the operation scale velocity of the business operation through digital channel .
- Wipro’s technologies have created an information AI portal technology to better understand and also for educational platform.
- Wipro’s technologies have created a healthy consultancy through an AI portal and via skype, facetime and video conference, etc
- Wipro’s technologies help to increase the virtual growth by making the supreme court of India conduct hearing through video conferencing.
- Wipro’s technologies increase the enhancements of the companies which has an IT-based technologies, tools, and also the accessibility of the tools
- Cloud technologies improvise in collaboration tools as it reduced the troublesome of websites and apps.
- Cloud technologies collaboration is been blended with the tools like dropbox, asana, Trello, and google workspace.
- Cloud technologies helps to access with several tools such as collaboration, video conferencing, and instant messaging .
- Cloud computing helps to control the documentation process so that is easy to access, to edit, to track and to simplify it.

# **CONCLUSION**

## CONCLUSION OF PROJECT

During its investors day last week, IT company **Wipro Ltd** was in the spotlight. Its management is bullish about the company's future prospects and anticipates margins to remain constant. According to management, the demand environment is strong and broad-based, with good traction across all industrial verticals. Within geographies, the company's previous growth driver, the United States, continues to grow, while Europe has seen significant acceleration, according to management.

This IT behemoth hopes to be the go-to organiser for **Cloud** agreements, allowing it to work with both clients and Hyperscale's. It also repeated its plan to invest \$1 billion in the development of its Full stride Cloud service, as well as plans to invest in other high-growth areas, according to management.

Investment in the sales channels, including lateral leadership recruits, a large deals team, and strategic alliances, is expected to drive development, according to the management.

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