

# Management discussion and analysis



## Industry Overview

### IT Services

Fast-evolving technology landscapes, dynamic economic environments and the emergence of digital business has created a need for enterprises to look for a partner to advise, design and execute their technology transformation and support programs. Large multinational enterprises are engaging global IT Services companies who can deliver high quality service on a global scale and at competitive costs. Over the past two decades, with the emergence of the internet and inexpensive connectivity, the global delivery model of service delivery has risen to become the preferred model in sourcing of IT services, business process services and research and development services. In this period, service providers have gained technological expertise, domain competency and delivery capability by either developing organically or by acquiring companies with these competencies. Large multinational enterprises are engaging global IT Services companies to deliver high quality service on a global scale and at competitive costs. We believe the IT Services industry has significant growth potential.

Global IT service providers offer a range of end to end software development, digital services, IT business solutions, research and development services, technology infrastructure services, business process services, consulting and related support functions. According to the Strategic Review 2018 of NASSCOM (the NASSCOM Report)

in FY 2018, IT export revenue, from India was estimated to grow by 7.8% to \$126 billion.

In the last few years, enterprises around the world are embracing the reality that digital transforms every aspect of business. Experiences, consumers, entire industries, business models and ways of working are all rapidly and fundamentally changing. Recognition of these trends, combined with the realization that enterprises may not be able keep up with this pace of change, has a profound impact on our clients. This requires new business models, new ways of working and integrated capability across strategy, design and technology.

### IT Products

The key components of the hardware industry are servers, desktops, notebooks and tablet computers, storage devices, peripherals, printers and networking equipment. According to the NASSCOM Report, the hardware segment of the IT-Business Process Management exports from India is estimated to be \$15 billion in fiscal year 2018. Emergence of cloud computing technologies is negatively affecting demand for IT products such as servers.

## Business Overview

We are one of the leading providers of IT services globally. We combine the business knowledge and industry expertise of our domain specialists and the technical knowledge and implementation skills of our delivery team leveraging our products, platforms, partnerships and solutions in our development centers located around the world.

We develop and integrate innovative solutions that enable our clients to leverage IT to achieve their business objectives at competitive costs. We use our quality processes and global talent pool to deliver 'time to development' advantages, cost savings and productivity improvements.

Our IT Services business provides a range of IT and IT-enabled services which include digital strategy advisory, customer-centric design, technology consulting, IT consulting, custom application design, development, re-engineering and maintenance, systems integration, package implementation, global infrastructure services, analytics services, business process services, research and development and hardware and software design to leading enterprises worldwide.

The vision for our business is "To earn our clients' trust and maximize the value of their businesses by providing solutions that integrate our deep industry insights, our

leading technology and best-in-class execution”. We seek to emphasize our core values of being passionate about our clients’ success, treating each person with respect, being global and responsible, and maintaining unyielding integrity in everything we do.

The markets we serve are undergoing rapid changes due to the pace of developments in technology, innovation in business models and changes in the sourcing strategies of clients. Pressures on cost-competitiveness, an uncertain economic environment and immigration restrictions are causing clients to develop newer business models. On the technology front, digital business has changed the nature of demand for IT services. Development of advanced technologies such as cloud based offerings, big data analytics, mobile applications and the emergence of social media is making technology an integral part of the business model of our clients. In addition to the Chief Information Officer, newer stakeholders such as Chief Marketing Officer, Chief Digital Officer and Chief Risk Officer play a key role in shaping the technology roadmap of our clients. These trends on newer business models, emerging technologies and sourcing patterns provide us with significant growth opportunities.

Our IT Products segment provides a range of third-party IT products, which allows us to offer comprehensive IT system integration services. These products include computing, platforms and storage, networking solutions, enterprise information security, and software products, including databases and operating systems. We have a diverse range of clients, primarily in the India and Middle East markets from small and medium enterprises to large enterprises in all major industries. We continue to focus on being a systems integrator of choice, where we provide IT products as a complement to our IT services offerings rather than sell standalone IT products.

## Business Strategy

Our customers today are undergoing an unprecedented change and transformation in their businesses led by forces such as Digital, Consumerization of technology, Industry platform disruptions, and competition from new age companies across industries. We at Wipro believe that there are a few key industry trends, which over the next 5-10 years, will fundamentally transform the way technology is bought and consumed by enterprises. These are ‘as-a-service’, ‘Intelligent automation’, ‘Digital’ such as Design and user experience, Digital ways of working and shared economy, ‘Cyber-security and Cyber-defense’.

In today’s market context, our vision and our strategy is about helping our clients navigate to a Digital future while driving hyper-efficiencies in their ‘Run’ operations through a comprehensive and integrated portfolio of services. We deliver this through industry wrapped process,

and technology solutions and services through an open innovation led approach.

## Modernize the core – the “Run Strategy”

Our “Run” strategy is about “Modernizing the clients’ core” operations and technology landscape. It includes the following strategies:

- a. **Business Solutions** brings together domain and technology solutions across applications, infrastructure, business process services and analytics to deliver business value to our clients in an ‘as-a-service’ model.

The Integrated Services and Solutions Group (ISSG) focuses on building integrated offerings across four key business themes: Customer Experience, Business Acceleration, Simplified and Sustained IT and Connected Ecosystem. An example is Insights-as-a-Service, which accelerates Time-to-Insights using the Data Discovery Platform (DDP) powered by advanced visualizations, models, accelerators and algorithms and is offered as Pay-Per-Use.

- b. **Process & IT Simplification** is about demystifying the complex processes and technology landscape of our clients. We deliver this through consolidation, elimination, automation and cloudification to deliver agility and productivity benefits. An example of one of our approaches is the Framework for Application Services Transformation which covers:

- New age application development;
- App rationalization, optimization and modernization;
- Cloud application services;
- Newer methodologies such as AgileBase and DevOps; and
- Next generation quality assurance, application support and trust management.

## Enable the future – the “Change Strategy”

Our “Change” strategy is about “Enabling our clients’ digital future”. It includes the following strategies:

- a. **‘Digital’** is about enabling transformation for our clients as they become a digital enterprise. It begins with an advisory and design approach followed by engineering and build initiatives, all of which are deployed in a native cloud environment and delivered in an AgileBase delivery model (DevOps). We co-create and co-innovate with clients by leveraging our Digital

Pods across the globe and new ways of working.

We have adopted a four 'm' model: method, model, machine and mindset:

- Our method applies a five-step design and build methodology through our Designit® and Buildit® platforms;
- Our 'team of teams' model allows us to create multi-disciplinary, collaborative digital teams to scale across client projects;
- A custom-built engineering machine, which we call the 'Digital Rig', creates the environment for rapid prototyping, testing and launching at extreme velocity; and
- A specific mindset, which focuses on attracting and retaining the right people and surrounding them with a digital culture, ensures we have the right talent to support our customers.

Our acquisition of Cooper, an award-winning design and business strategy consultancy, strengthens Wipro's design and innovation capabilities. Cooper, as a part of Digital, expands our reach in North America and adds significant capabilities in professional education. We are seeing significant synergy across our integrated digital and design capabilities.

Through March 31, 2018, we have trained over 90,000 professionals in digital technologies. We are expanding our innovation labs, or digital pods, to offer enhanced transformation services to global customers. Currently we have 18 Digital Pods spread across the globe and are continuing to expand, introducing two new pods this year in Edinburgh, Scotland and Mountain View, California.

Our approach of creating a consulting ecosystem has seen success. It continues to focus on delivering growth and improving quality for our clients, thereby delivering impact to us through growing business relationships and creating integrated deals.

- b. **Big Bets:** A key element of executing the Wipro Strategy is the approach to prioritization on high potential growth areas. Towards this, we have focused on 'Big Bets' at a company level where we are making disproportionate allocation of investments to drive differentiated focus and growth. Examples of these include Cloud, Cyber and Digital.

## Four core strategies

Underlying the 'Run' and 'Change' strategies, are four key strategies which apply equally to the 'Modernize the core' and 'Enable the future' strategy. These are:

- a. **Non-Linearity** is about driving differentiated offerings leveraging IP, platforms, solutions and innovative commercial constructs to realize the 'as-a-service' need of our clients, thus allowing them to have a variable cost structure in a risk reward model (e.g., transaction-based and outcome-based pricing).

We have invested significantly to drive non-linearity through investments in IP in the form of platforms acquired through acquisition of Gallagher Financial Systems Inc., Opus Capital Markets Consultants, LLC, HPS and ProMAX Systems, Inc. and organically developed platforms, frameworks and solutions such as Wipro HOLMES.

As part of this effort, we have increased our patent filings significantly in the past few years and have developed a business model that emphasizes upon our patent portfolio and growth in our inventor base within the organization. Industry analysts and rating organizations recognize the quality of our intellectual property (IP) and we intend to continue developing high quality inventions. Many of our patents are in emerging technology areas and serve as a foundation for many of our new technology platforms, including AI, IoT, connected devices, and autonomous vehicles.

- b. **Open Innovation** is about leveraging the innovation ecosystem through following vehicles:

- **Wipro Ventures:** The strategic investment arm of Wipro, is a \$100 million fund that invests in early to mid-stage cutting edge startups. As of March 31, 2018, we have invested in and partnered with 11 startups in the following areas – AI (Avaamo, Inc., Vicarious FPC, Inc.), Business Commerce (Tradeshift, Inc.), Cybersecurity (Demisto, Inc., IntSights Cyber Intelligence Ltd., Vectra Networks, Inc.), Data Management (Imanis Data, Inc.), Industrial IoT (Altizon Systems Private Ltd.), Fraud & Risk Mitigation (Emailage Corp.) and Testing Automation (HeadSpin, Inc., Tricentis GmbH). In addition to direct investments in emerging startups, Wipro Ventures has invested in two enterprise-focused venture funds: TLV Partners and Work-Bench Ventures.

- **Partner Ecosystem:** We have established a dedicated unit to drive and deepen our partner ecosystem to drive creation of new markets and solutions, expand in key verticals and geographies, drive innovation in our offerings and drive go-to-market outcomes. We

have sub-divided the partner ecosystem into the following categories:

- **Strategic Partners:** Multiple product lines with significant business volume and potential
  - **Growth Partners:** Single practice alliances
  - **Niche Partners:** Niche products with differentiated solutions
  - **Academia Partners:** Collaborating with academic institutions and associations in the United States, Europe, Israel and India in the fields of computer and electrical engineering to promote innovative technology research and capability
- **Horizon Program:** The goal of the horizon program is to drive organic incubation in emerging areas covering products, platforms, solutions and capabilities. In order to achieve this objective, we are investing in key areas such as AI, AR/VR, IoT, cloud computing, Software-Defined Everything, autonomous vehicles, cybersecurity, digital experience, digital marketing and commerce, and Industry 4.0. During the year ended March 31, 2018, we funded 19 projects as part of this program.
  - **Crowdsourcing – Topcoder:** A community of more than one million developers, designers and data scientists with offerings focused around analytics, Connected Customer Experience (CCX), quality assurance, enterprise transformation, community experts, self-service and hybrid expert networks.
  - **M&A:** Acquisitions are key enablers for us and drive our capability to build industry domain, focus on key strategic areas, strengthen our presence in emerging technology areas, including Digital, and increase market footprint in newer markets. We focus on opportunities where we can further develop our domain expertise, specific skill sets and our global delivery model to maximize service and product enhancements and higher margins. We also evaluate business units to determine if divestments would maximize our focus on key priorities.

Acquisitions consummated during the year ended March 31, 2018 include InfoSERVER and Cooper. InfoSERVER is a Brazilian IT Services company that predominantly caters to the Banking, Financial Services and Insurance market in Brazil. Over the last 21 years, InfoSERVER has been recognized for its excellence in delivery and specialized knowledge of local banking domain and processes. InfoSERVER is headquartered in São Paulo, Brazil. With this acquisition, Wipro and InfoSERVER will be able to deliver a full suite of integrated IT services across Digital, consulting, and business process services to four of the top five banks in Brazil. Cooper is an award-winning design and business strategy

consultancy. Cooper will further strengthen design and innovation capabilities and expand reach in North America besides adding capabilities in professional design education. Increasingly, global enterprise clients recognize that design is a critical part of any digital or business transformation. By adding Cooper's skills and expertise, Wipro will be better positioned to support its clients' digital programs.

We have also made minority investments in Denim Group, Ltd., a leading independent application security firm, serving as a trusted advisor to customers on matters of application risk and security and Harte Hanks, Inc., a U.S.A based global marketing services company specializing in omni-channel marketing solutions including consulting, strategic assessment, data, analytics, digital, social, mobile, print, direct mail and contact center. Also, during the year ended March 31, 2018, we have increased our ownership in Drivestream Inc. from 19% to 43.7%.

Further, we have entered into an agreement with Ensono Holdings, LLC (Ensono), a company engaged in providing complete mainframe and Hybrid IT services to mid to large enterprises across industries, to acquire 10.2% stake in the entity. Ensono has a right to repurchase up to an aggregate of 5.5% of the above units if Wipro is not able to achieve certain joint business milestones agreed between the parties.

- c. **Localization:** We are focused on acting local and thinking global. The core components of this strategy are local hiring, campus hiring, setting up local delivery centers, establishing digital pods and making strategic investments through acquisitions. We are driving localization initiatives in our key geographies such as the United States, United Kingdom, Continental Europe, Canada, Latin America, Africa, Asia Pacific and the Middle East. We believe that commitment to these geographies is important in growing our business. We expect an increase in the percentage of our global workforce comprised of local employees and consultants, and diversity is a key strategic priority as part of our globalization efforts.
- d. **Hyper-Automation:** is about driving efficiency in business process and technology operations through deployment of robotics and cognitive automation, through Wipro HOLMES. Wipro HOLMES helps enterprises hyper-automate processes and offload specific cognitive tasks to the artificial intelligence (AI) platform to gain agility, enhanced user experience and cost efficiencies. Wipro HOLMES helps businesses adopt a hybrid mode of operation (i.e., pairing automation and human effort), which is achieved through a combination of virtual agents, predictive systems,

cognitive process automation, visual computing applications, knowledge virtualization and AI reasoning. We also offer automation advisory services to help clients in their journey of AI/Automation through designing Automation roadmap and setting up Centers of Excellence for automation initiatives. In addition to the Wipro HOLMES platform, we are building a collaboration ecosystem for automation, working with partners such as Robotics Process Automation providers, startups, and established partners. Over 3,000 employees have been trained and certified on AI/ML.

## Commitment to Sustainability

### a. Driving differentiation and leadership through our people

We believe that our employees are the backbone of our organization and a key differentiator in the global market for IT services. We are committed to recruiting and training highly skilled employees, service providers and leaders. Our aim is to build a best in class global, diverse leadership team, hire locally and provide our employees with attractive opportunities for learning, career enhancement and growth. We continue to design and implement processes and programs to foster people development, leadership development and skill enhancements among our global team. It is our aim to be a global company that not only serves clients but also empowers our employees worldwide to increase their expertise beyond their industry peers.

### b. Acting Responsibly

At Wipro, we think it is critical for businesses to engage with the multiple social and ecological challenges that face us. We have classified eight sustainability mega

forces that have an implication on our business. Such engagement must be deep, meaningful and formed on the bedrock of long term commitment; and that is the only way by which real change can happen on the ground. This is also reflective of the fact that such an approach serves both, enlightened business interest and social good.

### c. Environmental Sustainability

As part of Wipro's deep commitment to ecological sustainability, we have been involved with multiple environment related programs, both within our business ecosystem as well as in the civic and social sectors outside. The four pillars of our ecological sustainability program are:

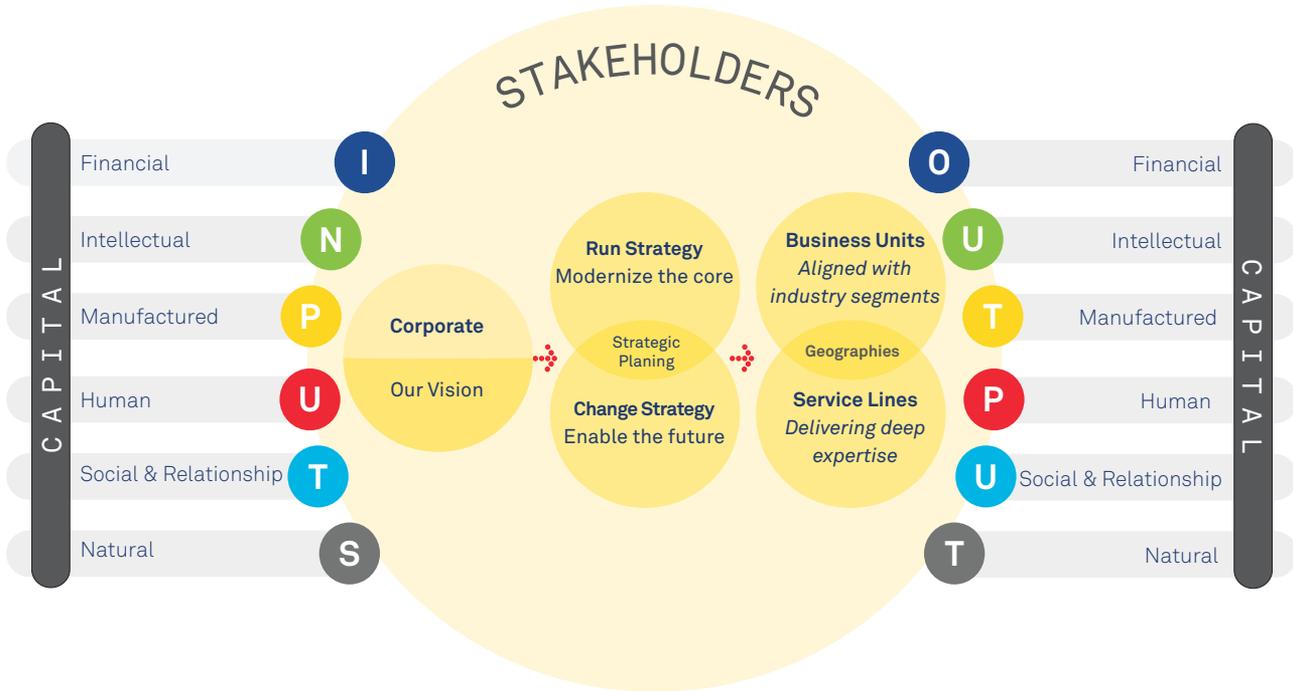
- Carbon Mitigation and Energy Efficiency
- Responsible Water
- Waste and Pollution Management and
- Biodiversity

### d. Community Initiative

At Wipro, we think that it is crucial to engage with proximate communities wherever we have significant presence. This is a reaffirmation of our belief that at its core, social responsibility and sustainability must transcend boundaries whether organizational or national. Wipro runs the following community programs in the various geographies we operate in.

- Wipro Cares
- Wipro Applying Thought in Schools
- Wipro earthian
- Wipro Science Education Fellowships
- Wipro South Africa Initiatives

# Business model - creating value across Capitals



## IT Services Offerings

We are a leading provider of IT services to enterprises across the globe. We provide a range of services which include digital strategy advisory, customer-centric design, technology consulting, IT consulting, custom application design, development, re-engineering and maintenance, systems integration, package implementation, global infrastructure services, business process services, cloud, mobility and analytics services, research and development and hardware and software design. We offer these services globally leveraging our products, platforms and solutions through a team of over 160,000 employees using our global delivery model. Effective April 1, 2018, we are realigning our service lines to achieve better synergies with our customers: Business Application Services is now Modern Application Services; Global Infrastructure Services is now Cloud Infrastructure Services; Analytics service line is now Data, Analytics and AI. Our key service offerings are outlined below:

- a. **Digital:** At Wipro Digital, the digital unit of Wipro, we continue to focus on the insights, interactions, integrations and innovations that make brands and businesses relevant to their customers. The common characteristic of digitally successful organizations today is their focus on enterprise transformation and agility. Outside-in innovation to “do digital” and create new websites, new apps and omni-channel experiences is not enough. To gain the full benefits of these digital initiatives, our customers now recognize they must enable inside-out enterprise renovation. Changing legacy systems, processes, tools, mindsets and even traditional ways of working are necessary for our customers to “be digital”, not just do digital.
- b. **Modern Application Services (MAS):** Wipro has been a strategic partner in transforming the application landscape of its clients by offering integrated business solutions that span across enterprise applications and digital transformation to security and testing. We have re-aligned our Applications service line into a new service line called Modern Application Services (MAS) which will comprise of 4 units: the Enterprise Applications and

Modernization (EAM) unit, the Application Engineering & DevOps (AED) unit, the Enterprise Architecture unit and the Appirio Cloud Services unit. These units will leverage themes such as AI/Cognitive, IoT, Blockchain and Open Source to enable 'Smart Applications'.

- The EAM unit will include SAP, Oracle, and IT Modernization along with Mainframe, application management and Transition practices. Technology focus areas will include Micro Focus, ServiceNOW, Infor and Coupa Software.
- The AED unit brings together our expertise in quality engineering and testing, Microsoft business, enterprise business integration, DevOps and cloud technologies. We use these to develop new ways of working and solution delivery along with 'as-a-service' models blending methods, models, machinery and mindset across various technology platforms including CA, Tricentis, Software AG and TIBCO.
- The Enterprise Architecture unit helps organizations simplify, modernize and accelerate their journey to the cloud including application migration to public clouds such as Amazon Web Services, Microsoft Azure, Google Cloud Computing, IBM and Pivotal. This team covers business design and architecture services across applications, infrastructure, data and process and enables making 'Applications Smarter' as part of the digital transformation journey.
- The Appirio Cloud Services unit results from the acquisition we made in 2016, continues to focus on integrating traditional SaaS technology providers such as Salesforce, Workday, Google and newer providers such as Apttus and FinancialForce with our capabilities in customer experience with worker experience.

MAS focuses on driving application transformation with contextual solutions for our customers from front office to back office by combining consulting, design and development, continuous testing and integration, automation and operational excellence across all industries

- c. **Cloud and Infrastructure Services (CIS) (formerly referred to as Global Infrastructure Services):** CIS is an end-to-end cloud and IT infrastructure services provider that helps global clients accelerate their digital journey. Our offerings include Cloud, end-user computing, Software Defined Everything (SDx), DevOps, data center, networking and IoT, all of which spans across our consulting, system integration, testing and managed services. We have a presence in over 45 countries with over 700 clients and 21 delivery centers. Our investments in IP, a comprehensive partner ecosystem and our skills in emerging technologies like

software-defined everything, opensource, DevOps and IoT, ensure that we are a one-stop shop for all cloud and IT infrastructure needs. Recently, we announced that we are divesting our hosted data center services business and developing a strategic partnership with Ensono, a hybrid IT services and governance services provider. Wipro's hosted data center services business, along with 925 employees and 8 data centers, will move to Ensono. Wipro will continue to serve our hosted datacenter customers through a partnership with Ensono.

- d. **Product Engineering Services Group (PES):** PES facilitates breakthrough product and engineering services transformations across all major industry verticals, influencing the way enterprises do business today. With a focus on Digital Transformation, PES's specialized team of skilled professionals, combined with in-house innovation labs deliver end-to-end Engineering R&D services from the design board to the shop floor and out to the market.

Over the years, PES has revolutionized product engineering at numerous global corporations by building innovative customer experiences, personalizing products for new markets, integrating next-generation technologies, facilitating faster time to market and ensuring global product compliance. In our bid to make the world a more connected and smarter place, we are making significant developments in new-age technology paradigms such as the IoT, Cloud platforms, 3D Printing, Virtualization, Smart devices and Artificial Intelligence. With the increased focus on Smart Manufacturing capabilities, we are further strengthening our Engineering services business.

- e. **Data, Analytics and AI:** Data Analytics and AI allows us to consult and support our customers to derive meaningful insights by leveraging our AI, machine learning, advanced analytics, big data and information management platforms and capabilities. We follow the "AI First" strategy to acquire & assimilate data, drive accurate decisions and deliver measurable business outcomes that help our customers transform their businesses. Our AI-infused end-to-end offerings include:

- Cloud & Data Platform (CDP) practice, which is focused on delivering online or connected services in areas of Internet Scale Application, Data Platforms, Cognitive platforms and HPC solutions. We build complete solutions for various industrial applications, either via on-premise or cloud-based platforms.
- Big Data Analytics practice, which offers insight delivery in real time or near real time through analytical platforms and solutions and leveraging our home grown team of decision scientists.

- Information Management practice, which is dedicated to enabling the digital transformation journeys of its clients through a trusted data foundation.
- Business Intelligence (BI) practice is focused on helping businesses unleash the value from their data and provide timely, contextual and relevant actionable insights rendered through rich and interactive visualizations
- Database & Data warehouse practice, which focuses on end-to-end solutions to automate the entire data warehouse migration as well as data offloading from on premise to cloud across analytical platforms with scalability and performance optimizations on the target platform.

f. **Business Process Services (BPS):** Wipro BPS is a leader in providing next generation technology-led business process services to global enterprises. Our mission is to connect the dots that drive superior customer experience, high levels of efficiencies, uncompromising quality and productivity to maximize returns for our clients. We combine our core business knowledge with emerging technologies like robotics process automation, cognitive technologies and analytics to offer powerful business intelligence, allowing business leaders to respond quickly to evolving market needs. Our non-intrusive industry and technology agnostic differentiators are:

- Enterprise Operations Transformation (EOT) Framework: Comprised of a suite of comprehensive solutions, EOT addresses the central business essentials of achieving process efficiencies with a focus on enhanced customer experience, cost optimization, reduced cycle times and accuracy.
- Wipro HOLMES for Business: An Artificial Intelligence platform that focusses on hyper-automating business and IT processes to reach highest level of autonomous maturity.
- Base)))™: As a Business Operations platform, Base)))™ leverages latest technologies to manage today's complex business operations by streamlining their existing operations.
- Customer Experience Transformation: Our analytics-powered customer service platform to deliver superior experience through cutting-edge technology.
- Robotics Process Automation (RPA): RPA helps achieve next generation business goals and transformative impact through rapid deployment and limited capital expenditure.

- BPaaS: Our delivery solution that allows standardized, yet highly configurable processes for quick deployment and use. We continue to invest in building a larger BPaaS portfolio across industries and service lines.

## IT Services Industry Verticals

For the year ended March 31, 2018, our IT Services business was organized into six industry verticals. Effective April 1, 2018, in order to provide strategic focus, we are realigning our Manufacturing and Technology (MNT) industry vertical into two separate verticals: the Manufacturing industry vertical and the Technology industry vertical. The Healthcare and Lifesciences industry vertical is being renamed the Health Business Unit.

The revised industry verticals are as follows:

- Banking, Financial Services and Insurance (BFSI)
  - Health Business Unit (Health BU)
  - Consumer Business Unit (CBU)
  - Energy, Natural Resources and Utilities (ENU)
  - Manufacturing (MFG)
  - Technology (TECH)
  - Communications (COMM)
- Banking, Financial Services and Insurance (BFSI):** The BFSI business unit serves over 100 clients globally across Retail Banking, Investment Banking, Capital Markets, Wealth Management and Insurance. We have been instrumental in delivering success to our clients by aligning with their business priorities; we have done this by leveraging state-of-the-art technology and process transformation solutions, service design innovation, domain expertise, IP and integrated offerings, end-to-end consulting services, adoption of new ways of working, and an ongoing focus on delivery excellence. We also harness the power of cognitive computing, hyper-automation, robotics, cloud, analytics, and emerging technologies, to help our clients adapt to the digital world.
  - Health Business Unit (Health BU):** Our mission is to help organizations to solve real world health problems to improve people's lives. Our health BU is dedicated to helping health and life sciences companies rethink, reshape and restructure their business to increase competitiveness in the industry. We help companies realize value in their core businesses by connecting organizations, communities and individuals to maximize insights, innovation and integration and to transform how healthcare services are provided in the future.
  - Consumer Business Unit (CBU):** CBU offers a full array of innovative solutions and services to cater to the entire value chain, where the consumer is at the core, through a blend of domain knowledge, technology expertise and delivery excellence. We offer an integrated environment

that allows organizations to model, optimize, forecast, budget, execute, manage and measure product and customer performance across the globe. We provide strong consumer-centric insight and project execution skills across retail, consumer goods, media, travel and public sector. Our domain specialists work with customers to maximize value through technology investments. Wipro's CBU encompasses Retail, Consumer Packaged Goods, New Age, Media, Education, Hospitality, Travel, Transportation and Public Sector Industries.

- d. **Energy, Natural Resources and Utilities (ENU):** Our ENU industry vertical has been collaborating with and serving businesses across the globe for over 17 years. Our deep domain and technology expertise has helped the business become a trusted partner to over 75 leaders in the Oil and Gas, Mining, Water, Natural Gas, Electricity, Airports, Ports, Engineering and Construction industries across the globe. Wipro's ENU vertical has been recognized by analysts as a major player in the Energy and Utilities sector. We provide consulting, engineering, technology and business process services expertise to the Utilities industry across Generation and Renewables, Transmission and Distribution, Retail, Smart Grid, Energy Trading and Risk Management and Health, Safety, Security and Environment. Our deep domain expertise in the Energy sector has helped us play a pivotal role in business transformation of major oil and gas companies across their value chain. Strategic acquisitions have further strengthened our capabilities and presence in the Energy sector.
- e. **Manufacturing (MFG):** Wipro's Manufacturing business unit caters to manufacturing companies across the industry segments of aerospace & defense, automotive, industrial and process manufacturing. By coupling our digital and extensive domain expertise, we help our customers transform their business processes across product design, supply chain, and aftermarket/services to achieve their digital transformation objectives. We have leveraged our network of partners and academia to develop IP, platforms and industry focused solutions. Our after-market solutions and services, are helping manufacturing customers capture additional market share by adopting new business models. Our ongoing investments in emerging technologies like autonomous systems and robotics, Industry 4.0, aftermarket, industrial IoT, augmented reality and virtual are helping customers create new business solutions and create new revenue models.
- f. **Technology (TECH):** Companies across the high-tech value chain; from the silicon providers to software companies, are serviced by Wipro's Technology business unit. Our extensive customer portfolio includes marquee companies in Semiconductors, Compute and Storage, Networking, Peripherals, Electronics, Platforms and Software products. Our solutions to this sector are built around Wipro's deep domain expertise and we

cater to customer requirements across product design, validation and testing, enterprise operations, marketing and customer support. We also are actively partnering with our customers to help them leverage digital technologies to stay ahead of the shifting expectations in the industry. Wipro's solutions built around cloud, blockchain, artificial intelligence, IOT, crowd sourcing and design thinking are driving new revenue streams and efficiencies in our customer organizations. We have leveraged our network of partners and academia to develop IP, platforms and domain/industry-focused solutions. We are investing in emerging technologies, which includes next-generation platform engineering (based on open source, containers and micro services), autonomous systems, machine learning, deep learning, industrial IoT, augmented/virtual/mixed reality, software defined infrastructure, 5G and LiFi.

- g. **Communications (COMM):** Wipro has been enabling the digital transformation journey of Communications Service Providers (CSPs) across the globe as they transform to become Digital Service Providers. Our digital business solutions are tailored around the customer context of CSPs, with capabilities in technologies such as AI, IoT, blockchain and cybersecurity, in order to focus on new ways of working. Our investments in new-age startups through Wipro Ventures, along with a comprehensive partner ecosystem, are enabling CSPs globally to create services that enable new revenue opportunities, build business agility and reduce their time to market in a B2B environment. Our focus on continuous improvement, alignment to industry standards, investments in technology solutions of tomorrow, especially as we gear up for the 5G revolution, are delivering proven business value to global CSP customers.

## IT Products

In order to offer comprehensive IT system integration solutions, we use a combination of hardware products (including servers, computing, storage, networking and security), related software products (including databases and operating systems) and integration services. We maintain a presence in the hardware market by providing suitable third-party brands as a part of our solutions in large integrated deals. Our range of third-party IT Products is comprised of Enterprise Platforms, Networking Solutions, Software Products, Data Storage, Contact Center Infrastructure, Enterprise Security, IT Optimization Technologies, Video Solutions and End-User Computing solutions.