

### **Infosys Limited Analyst Meet 2022**

May 31, 2022

1

### **CORPORATE PARTICIPANTS:**

Ravi Kumar S. President

#### Ravi Kumar S.

Thank you, I am guessing you can hear me now. I am so sorry that I could not make it. I was so looking forward to joining you in Mumbai. I ended up contracting COVID on my way back from Davos and I was just about to board a flight to Mumbai. So, hope the technology and my voice holds up for the next 25 minutes.

So, in the next 25 minutes or so, I am going to present a view about the Next in digital, what is coming up in digital, cloud and AI automation. I think Salil kind of summarized it pretty nicely, so I am going to little bit double click on it. I think I can give you enough to excite you, but not give away a lot so that we kind of lose our competitive advantage by pushing this information into the public domain.

If you can jump into slide two which is the Safe harbor and then slide three which talks about the market dynamics which are reshaping the future.

Salil spoke about it. Everyone is talking about the potential slowdown, the Ukraine war, the supply chain disruptions, high inflation in developed nations, but the digital opportunity is a real one. It is a very different one this time. It really contributes to the must have transformation rather than the historic past where it contributed to the nice to have transformation of enterprises.

In fact, digital technologies today can be the deflationary force for inflation. It can actually kind of reduce supply chain disruptions. It can even diffuse the heated labor market. Salil spoke about analyst predictions. I think the analyst predictions continue to remain intact - almost \$1.3tn of IT services spend by 2023 and significant chunk of it - between \$500bn all the way till \$800bn what Salil was speaking about digital services.

The four shifts I kind of put up on the slide are the market dynamics reshaping the future. It is a golden era for technology. We are going to see accelerated digitization - needless to say, just to give you an example in retail; it took a decade to go from 10% to 15.5% in e-commerce till 2020 and then it kind of hit 20% in literally 12 months at the onset of COVID. Every industry is going through this significant digital embrace.

Digitization + Dispersion as I call it. I wrote a very nice article in the Forbes three or four days ago, dispersion of work, heavy investments on digital infrastructure for employees, dispersion of healthcare, dispersion of education, dispersion of telecom, utilities in hybrid models as some of it is actually permeating into our homes. That is going to lead to more digitization as we go forward.

Software is the new alchemy of businesses. We have gone from using digital technologies for extended reach, disintermediated reach to consumers to deeply embedding software in automating businesses, to deeply embedding software into products and services. In fact, if you split the industries into bits and atoms, the bits related industry primarily services industries are becoming more bits and atoms are getting immersed into bits. Who would have imagined as an example, the car industry going from internal combustion to being a software business? Who would have imagined the car industry to not have any dealers? Tesla actually hands over cars on your driveway and you just open the car on your app and take the keys out. What a disruption we are all going through, in industries where the core product is changing.

Industry transitions that is the fourth shift. Amazon did it very smartly for many, many years. Every time they wanted to transition in an industry, they did it seamlessly. Now there is the smarter G2K companies, a large number of them are our clients having a renewed confidence on the digital platforms because of COVID. Of course, they had a strong physical network which is kind of important in the times we are in and a trusted consumer brand in the consumer base they are the

External Document © 2022 Infosys Limited



key to straddle transition between industries. Big box retailers in the US are getting into healthcare. Oil companies want to be in automated retail because they can change the gas stations into EV charging stations and then as more time is spent on EV charging stations you can go autonomous.

A lot of our clients are doing conversations with us on the industry transitions using digital technologies and these technologies, which I think makes the digital opportunity now very different from the past and therefore even if there is an impending slowdown, I do not see a big change in the outlook.

Slide four we have been speaking about the pentagon of digital services. More than 59% of our business is digital now and it is growing at 40% plus as Salil mentioned about it. A portion of that business, a chunky portion of that business is cloud related and it is growing significantly faster than digital which is of course growing significantly faster than our core services.

Our investments in Cobalt, the first cloud services brand - much ahead of our peers just to enable growth. We have 60 plus digital services. 25 of them have an annual run rate of more than \$100mn. So our endeavor is to create similar runway for all the 60 digital services. Now what has helped us get there is a focused go to market, a strong partner ecosystem, a lot of awards and recognition. Services plus platform approach, cocreation with a network of Living Labs and Design studios, early investments on reskilling infrastructure and distributed talent pool. So, as we localize them across the world - which is really kind of needed for digital capabilities – it has helped us to stay ahead of the curve.

The next slide is about really the Next in Digital. In some way it is a summary slide which I will double click here on. Digital technologies as I said, was always focused on the growth agenda of enterprises because you created extended reach to consumers and created more efficient way to reach consumers. Digital services there have now evolved across the efficiency stack, the growth agenda and of course creating smart connected products and services. As I had mentioned earlier, the atoms related industries that are getting immersed into bits.

All Digital has underpinnings of the Cloud, more nuanced offerings on the Cloud that emerge, hybrid, multi-Cloud offerings, the resource and the infrastructure layers are getting repurposed. SaaS is almost \$200 bn of market size both horizontal and modular industry apps, reimagination of data on the Cloud. We are going to double click on it, product engineering, embedding software into products, leveraging the 5G revolution.

Human experience is no longer about consumers, it is also about employees, better intuitive UI-UX design for employees as well as more businesses go hybrid.

Cyber security, I think the biggest opportunity for us is to industrialize Cyber security as a service. Emerging technologies which can future proof us and of course a new era of consulting and advisory at the intersection of technology and strategy, especially in industries where there is a paranoia to leverage technology at the core like the car industry we spoke about.

Slide six, Cobalt is a key differentiator and why is it so. We all have this notion that the cloud is a lift and shift of on-premise infrastructure to virtualize infrastructure. The reality is it is not a lift and shift only. Lift and shift is a vehicle to do significant transformation of this work loads and to create that transformation, we need an orchestration layer.

Just to illustrate this a little further between the three Hyperscalers, the top three Hyperscalers, almost \$100 bn will be spent on capital expenditure over the next 2 years and why do they do so. They do so to build infrastructure as a service and lend it to enterprises across the world, but that

External Document © 2022 Infosys Limited



is not where the real value is. The reason why they do so is you land that enterprise workload and then you straddle them over the value layers and these are three value layers I have kind of illustrated on my slide. So you could potentially take that workload which you land on, move it to IT and Business Operations and move it to Business Services.

In fact, between the three Hyperscalers they have economies of scale, because they have internal consumption like Google has 20% plus of the consumer internet traffic in the United States going through Alphabet assets, 40% of e-Commerce of the US is through Amazon, 145 odd million users go through Microsoft because of Teams. All of this allows them to create the insights, algorithms and the Business Services and the ability to create IT and Automated Business Operations which you can flip around and give as utilities to your clients.

So that orchestration layer, somebody has to straddle our client through that value and we early on adopted this mechanism to make Infosys the orchestration layer for our clients who are going through this transformation not just the lift and shift. So, the ability to straddle those layers will help us to generate that value and transformation needed and the spend on the cloud then becomes worthwhile.

Between the top three Hyperscalers almost \$150 bn of revenue per year is generated. So you could potentially, for every dollar spent there you could create \$2 to \$3 of Cloud services. \$600 bn is actually spent on public cloud or rather it will be spent on public cloud by 2023. So, this is an exciting opportunity on Cobalt. Through a grounds up exercise we created 35,000 Cloud assets, 300 plus industry templates. We have created a rhythm around building those assets contributing into a repository and deploying them for project, deploying them for programs.

The enterprising landscapes are going to become multi-cloud so we have created a poly-cloud layer. Again a part of our orchestration it creates interoperability, portability of data apps and services. You could straddle between the clouds and this is very uniquely ahead of the curve, because we did it way ahead of others and that gives us the opportunity to stay differentiated in the market.

Lots of exciting partnerships at the bottom of slide and all of them we are in the top 1, 2 or 3 as Salil had mentioned.

I am switching over to slide 7. This is a big shift in the way we see our business. Historically system integrators saw business as the tech spend of enterprises of the universe. With the advent of cloud, you could really pivot to Automated Business Operations orchestrated on the cloud and you could take large in-flight transformations and accelerate as a service.

For years, system integrators spoke about as a service, consumption-based models or open based models. We have now reached an inflection point because of the cloud because you could literally give as a service model to your clients. I think one of the differentiating value propositions of Infosys is that ability to create a viable economics and taking an existing state of applications, data centers, the people, taking the current mode of operations as I call it, giving it as service in the current mode, underwriting the advances and then taking future mode of operations and transitioning all that to the cloud. And doing this in a big bang way seamless, I think, is what our differentiation is, and that is why we are able to cut large deals with the clients from current code of operations to future mode of operations.

The next section is going to be a video from Australia Grid, the largest electricity distributor on the Australian east coast which owns, maintains, and operates electric networks. We have created 120 curated services, leverages of poly cloud platform with a digital command center, Al

External Document © 2022 Infosys Limited



operations, advanced observability for business operations which are automated through those 120 plus cloud services.

The next slide is about transforming digital experience. Again I am kind of drawing from the summary slide I put up earlier. We had this very unique value proposition, Salil early on created a strategy of the string of pearls for Digital Experience. So, we brought a bunch of companies to create the beachhead capacity. We did not go the traditional way of buying creative talent but we went on specialized services and we built that beachhead capacity and then we went to schools in the United States and actually got non-STEM talent, design talent and then we built a platform which is uniquely different to the agency talent everybody else built experience on. And then as the onset of COVID happened, we realized that experience will be doubled down on digital assets with our employees, so we bought a bunch of assets all the way from Wongdoody, Blue Acorn iCi, Brilliant Basics. We did Carter and then recently we bought Oddity which is actually an exposure to Germany but more importantly it also has AR/VR capabilities to create immersive experience which is needed especially in some of the industries where you have the physical and digital interface.

And over the last few years we created network of 16 Digital Studios and we orchestrated all of this underneath the leadership of Wongdoody. Wongdoody really ran the whole process because they knew this business and they actually ran it for us. They were very tightly integrated with the Infosys engine.

Our belief is that programmatic Digital Experience Services or Creative Services as we call it will be insourced over a period of time because of privacy, data considerations, iterative in nature because when you are doing digital campaigns and digital branding, new age creative is much more iterative with digital feedback loops. You will need a service where you could give dedicated studios to your clients.

We have already done three of them. In fact, we call it Studio Next and we are now helping our clients to build their own studios in some ways using Infosys to insource their own creative. It is a very, very, unique value proposition and it is a block buster offering of Infosys. I am going to now show you a video from Rite Aid an American drug store chain having 2400 retail pharmacy locations in 18 plus states. It delivers health care services, retail products and every day 1.6 mn Americans buy from Rite Aid.

How do we evolve a pharmacy system from dispensing prescriptions to focusing on personalized holistic wellness? That was the problem statement, and Wongdoody, Infosys came together for building something which can give holistic wellness to the customers of Rite Aid.

I am on slide 11 : next generation Data and Analytics Services. I know we are running out of time, so I am going to kind of rush up the rest of session.

Data Services has been talked for a while so I do not want to go into details. Our approach has been very simple. We want to unlock data from legacy states, create a flexible mesh of foundational services, build a data supply chain, create digital feedback loops and use data for AI modules. But the opportunity we tapped into way ahead of everybody else is the Data on the Cloud and Data Exchanges. We built some very strategic partnerships with Snowflake, Databricks on data exchanges and data on the cloud.

Let me give you one example of why this is such a powerful opportunity. I call it the network effect of data and I call it the network effect of data on the cloud. Big box retailers as an example get higher revenues these times because they are straddling between physical and digital channels. In fact, they gained digitally much more during COVID because they had a physical network to

External Document © 2022 Infosys Limited

# Infosys°

support the digital channels. But they have lower margins. The reason why they have lower margins is because higher digital channels spend means lower trade promotion. Consumer goods companies know that consumers are just buying online, so they give you much lower trade promotion spend and of course higher shipping cost, higher returns. Digital channels uniquely however have the opportunity to monetize the data. So while you have lower margins because of lower trade promotion and high shipping and all, you have a digital estate.

Either you could say it does not exist because there is no real physical estate or you could at least say it is unlimited. So, the smarter ones are taking the data putting it on the cloud on a data exchange and then bringing the data elements across the value chain. Consumers, retailers, and the supply chain are coming together and those insights are monetized using either the data exchanges of the Hyperscalers themselves or specialized ones like Snowflake and Databricks.

We have early strategic partnership with these companies and we are seeing significant traction with the clients who actually want not just monetize but generate significant value by bringing all this data elements on the cloud across the value chain.

I am on slide 12 which is about Security. Security is like the first cousin of technology. If you spend more on technology, you have to spend more on Security. If every company across the world is going to be a tech company and the core of the product and services are going to be embedded with technology, you are going to have more dispersed businesses. You will see geo-political risk attached to Cyber Security. You are going to more orchestrated hacking communities. You will need an orchestrated approach to Security. We have a secure by design pervasive overarching approach which has given us an opportunity to build everything with a secure design mind set and we also have a zero-trust architecture. In the past most security was built on a castle-and-moat where the castle was the corporate network and you created a security around it. The users have left the corporate network on to the internet, the apps have left the corporate network, the data has the left the corporate network so you need a zero-trust architecture. So we are significantly investing on SASE based or Secure Access Secure Edge based security where we assume that you need zero trust architecture for building the future of security.

We have invested in seven cyber defense centers. In fact, I think security will move from a fragmented software-led insourced model to an integrated automated software plus services platform model and it will be a managed service in the future. So with the seven data cyber defense centers together, we can create  $24 \times 7$  security operations and secure enterprise landscapes in a hybrid world where it is more important than ever before.

It is a \$100 bn plus market opportunity as McKenzie says by 2025 and there is an acute shortage of talent. We were very early on to sign a partnership. In fact, we signed up with Purdue to get a thousand professionals on cyber security. We now have the solution for the supply constraints as well as we have created industrialized scaled security offering for our clients to embrace upon.

The next slide is about Applied AI. We launched an offering in 2021. In the last 5 years or so, there was a huge embrace of AI in consumer value chains. We now see enterprises embracing it. There is an inflection point now I would say. What enterprise software did in the late 90s to reengineer enterprises, we are now going to see AI software, evolving to the next wave of reengineering of an enterprise.

We did a formal launch in 2021 called Infosys applied AI, our unique approach to discover new used cases, democratize it and take it to production grade. We have something called the Infosys AI Cloud and we can curate the whole scaling process and the life cycle of AI, but we can also make it responsible enough by pulling the guard rails required. A significant traction again we have an AI store with 25 plus AI services. You can draw from 1000 plus used cases.

External Document © 2022 Infosys Limited

# Infosys°

Slide 14, I think Salil kind of alluded to it. We have accelerating automation for efficiency and productivity for ourselves. We have 24,000 bots. We have something called BOT factory and the idea is to constantly re-baseline our productivity so that we stay ahead of curve in wining large deals, staying competitive. Mohit will speak about how we have made that process so robust, but the idea is to keep the productivity cutting edge so that we win these deals. We not only win these deals with productivity commitments we make and therefore stay competitive, but also get transitional additional value on top of it so that we could release people from our projects and save more for us. We have done that very effectively over the last 3 years and we continue to stay ahead on that runway.

The next slide is about IoT, slide 15. IoT had a slow start I would say as it took off as a concept. It had a lot of promise. IoT is now starting to gain a new life because it is no longer about internet of things, it is internet of everything, internet of data process, things, people, everything else.

Equally it comes at the intersection of decentralized 5G, Edge and smarter devices. While the Cloud centralized compute and storage and network that is what the Cloud did. It just centralized it. With the advent of 5G and with smart devices you could decentralize, compute and storage and as you decentralize, compute, and storage you can build a mesh of the internet of things and create significant number of use cases. We distinctively see three categories, Industrial IoT, Product IoT, and of course Smart spaces and sustainability services which are the new wave in smart spaces, which are evolving in this space. Lot of excellent partnerships. We also have some significant industry solutions.

The next one is embedding software into core products. We spoke about it before. Historically Infosys had a lot of capability on turbo engineering, mechanical and electrical product development. Now we are embedding digital CAD based modeling, embedding software into end-to-end product life cycles, Digital twins and that we are embedding software into media services. We recently brought a company called Kaleidoscope Innovation. The idea is to expand our capabilities on product design, development, and prototyping infrastructure so that you could embed software into medical devices, consumer electronics, industrial products as these things comes to your living spaces, more medical devices come to your living spaces, you need to embed software in it and interact with that ecosystem virtually. So this is an interesting company we brought which helps to prototype and generate more value.

I am coming to the end of my deck. The next one is about emerging technology. Well, we see significant value in the future and therefore there is lot of curiosity and traction now and we know that we can future proof our business as we invest into these spaces. Again, I am going to just touch upon it.

The Metaverse Foundry which we launched. One of the first few system integrators in the world, which actually created a foundry for the Metaverse. I do believe that a three-dimensional internet is going to evolve a virtual world in parallel. Why do people want to go to the new three-dimensional Internet, because either they find inequalities and disparities in the physical world and therefore they want to spend time in the virtual world. They want to experiment in the virtual world and bring it to the physical world or they want to bring the virtual world to amplify the physical world, whatever be the reason I think we are going to see a Metaverse. The Metaverse also has underpinnings of the reset of web 3.0 because the current internet is having an imbalance between creators and participants so the ability to use crypto, blockchain all of that will come into the picture. We invested heavily on AR/VR, then recent acquisition of Oddity will help us as well and the Metaverse foundry is for enterprises to experiment and find out what their presence on Metaverse should be. Lot of traction we are having.

Gaming is a great opportunity, 3+ bn people in the world are in gaming. I am astonished to know that number is so high because I am not one of those gamers, \$200 bn plus of revenue from



gaming industry. I think there is \$40 to \$50 bn of IT services, also on core product development. A lot of it is done in Eastern Europe today and hyperscalers have a very big play and we think we can have a footprint out there.

Low code No code - in fact we have globally only 25 mn developers while the world has 3+ bn corporate users. The need of low code software is very critical because if software is going to be the alchemy for every business, you need power users and citizen developers who can code as well, but it has to be low code. We see a \$100 bn opportunity. We have some early partnerships as you can see on this slide with unqork, Appian, outsystems, PEGA, a lot of these companies have low code software and we believe this is going to be a \$100 bn opportunity.

The last one is co-creating innovation cycles. In fact, historically systemic grid has had a follow through innovation cycle. We think we have now got to the point where we need to co-create, so we have a bunch of things all through and we want to be the bridge between start-ups and large enterprises.

Startups accessing large enterprises who are our clients and our clients accessing start-up ecosystems. We have 120 startups in Infosys Innovation Network and we have created this bridge so that innovation capital can flow on both sides. We are also leveraging the innovation fund of Infosys. We have Living labs in all our innovation hubs in the US, Europe, Australia and of course now in India as well and we also have something called Listening Post as a Service (LPAAS). The idea is if clients want to access start-up eco-system, we create a listening post as a service which is creating a listening post for our clients and allowing them to access those startup eco-system. So this is again an exciting opportunity to future proof our business and the lines between the startups and large enterprises are blurring so we become the bridge for it.

So, thank you again for listening to me. I went a little overboard on my time, but I am very glad that my internet connection and my voice held up for the last 30 minutes. Thank you again.