Four hundred senior executives representing the crème de la crème of corporate America gathered in Scottsdale, Arizona, in early March at Cognizant Community 2018 to learn, discuss and share how digital gets done. These executives were treated to an agenda that revealed how digital will reshape commerce, education, finance, healthcare, insurance, manufacturing, transportation and more, and will contribute to solving many of society’s greatest challenges. Thought leaders from an array of disciplines and industries laid out a set of common themes that are central to being digital at scale.
The good news is that this amazing set of new capabilities — digital technologies — gives us the freedom to forget about precedent, and envision and deliver entirely new forms of value. Digital invites you to build on and really supercharge the tremendous capabilities you spent decades developing.

— Francisco D'Souza, CEO, Cognizant

Leveraging Historic Strengths

Although digital-native companies are often touted as having cornered the market on disruption and creativity, “industrial model” companies can become innovation powerhouses. Cognizant CEO Francisco D’Souza made clear that the industry establishment needs to play to its strengths. For these companies, their domain expertise, channels, customer relationships and vast troves of data are unique competitive assets. Companies that unleash these assets by embracing the Internet of Things, AI, analytics and machine learning technologies can “create entirely new businesses that deliver new performance thresholds and new customer experiences,” D’Souza said. “It’s nothing short of magic.”
Beyond Information to Intelligence

It’s no surprise that each speaker cited “data” as the catalyst for digital success. What’s astonishing is the exponentially expanding quantity and diversity of data becoming available. Virtual and augmented reality applications will collect granular data about individuals – think pupil dilation – at an unprecedented scale, noted Kevin Kelly, senior maverick at *Wired* magazine. “Medicalized” smartphones will capture sophisticated health data from individuals anytime, anywhere, asserted Dr. Eric Topol, author and Founder/Director of the Scripps Translational Science Institute. And Malcolm Frank, Cognizant’s Executive Vice-President of Strategy & Marketing, explained how Carnegie Mellon linguist Rita Singh is plumbing the human voice for what it reveals about physical and emotional health.

The value of all this data increases as it intersects with other data to make meaning. The MyGeneRank app from Scripps, for example, uses genetic data sequenced by 23andMe to calculate an individual’s genetic risk score for coronary artery disease. High risk scores indicate that cholesterol-lowering statin drugs should be effective, Topol said, while lower-risk patients with high cholesterol may respond better to diet modification and exercise.

Such individualized, intelligent offerings built on data, machine learning and AI will become the norm as industries transform their operations and business models. That means organizations should keep all the data they collect, said Vijay Mital, Corporate Vice-President of AI Architecture and Strategy at Microsoft, during a fireside chat on intelligent process automation. “Don’t destroy data,” he said, because data that seems unusable today may be extremely valuable as new technologies emerge that can extract meaning from it.

“I’m suggesting that artificial intelligence ... will be distributed so that anybody can purchase AI. You don’t have to make it yourself; you’d just buy it as a commodity like electricity or the Internet. We’re now going to take everything and add AI to it.”

— Kevin Kelly, Senior Maverick, *Wired* magazine
Create an Experience

With nuanced and personalized meaning on tap, companies are equipped to reimagine customer journeys as experiences, characterized by interactions with an elegant process or product, or immersion in a virtual or augmented reality.

Companies are already deploying robotic process automation (RPA) and cognitive automation (CA) to streamline processes and experiment with new ways of interacting with customers. It will be common for humans to have robotic partners handling rote, repetitive tasks, giving “hours back to the business,” a key metric for excess labor capacity created by RPA, said Dr. Mary Lacity, Curators’ Distinguished Professor at the University of Missouri-St. Louis.

Voice and visuals will become the favored interfaces. Voice is set to explode in ubiquity and value, yet most companies are underinvested in it, said Scott Galloway, Founder of L2 and Clinical Professor of Marketing at NYU’s Stern School of Business. Consumers increasingly will use voice – specifically, Amazon’s Alexa voice service – to conduct more transactions. AI will automatically edit orders based on purchase histories, eventually anticipating where and when to ship specific items, he said.

“Alexa is about to redistribute more shareholder value than any technology since the iPhone.”

— Scott Galloway, entrepreneur and Professor of Marketing, New York University Stern School of Business
Immersion into alternate and augmented realities will drive the new experience economy. “AR journey managers,” who can create helpful, compelling and exciting customer journeys, will be in high demand, Cognizant’s Frank said. “The customer experience is where interactive meets AR, [and where AR] meets data, and the firms that get that right are going to be able to change the game in their industry,” he said.

“VR in your brain, FaceTime in your mind” could be the ultimate experiences if Elon Musk is successful with Neuralink, his whole-brain interface company, said Tim Urban, creator of the *Wait But Why* website and chronicler of Musk’s ventures. With Neuralink, people could share experiences and emotions at the speed of thought, he said, creating mind-boggling new possibilities for information flows.

Whether immersive or merely efficient, experiences must be based on trust and transparency, two qualities that blockchain technology excels at delivering, said Joe Bonefas, Vice-President of Business Technology at Discover Financial Services. Posting a change in college enrollment status on a blockchain would enable all parties to a student loan to take appropriate action based on clear, current and immutable data. “When all parties have a quick and transparent view of what’s happened, that has great value,” he said during his fireside chat with Lata Varghese, AVP in Cognizant’s Blockchain & Distributed Ledger Consulting.

“[The whole brain interface ideally will cover every single neuron, will get real-time information from them and stimulate real-time information into them, and it will be noninvasive.](https://waitbutwhy.com/2018/08/whole.html)"

— Tim Urban, creator of *Wait But Why* and chronicler of Elon Musk’s ventures
Where to Start

To break free of old processes and repeatedly make new breakthroughs, large organizations must treat innovation as a discipline alongside finance, marketing and R&D, explained Eric Ries, entrepreneur and author of *The Lean Startup*. Experimenting with minimum viable products, modeling processes and learning from the inevitable frequent failures are all tactics that large companies must be willing to learn and deploy. The goal is continuous innovation that is embedded in the corporate DNA that draws on “the creativity and talent of every level of the organization,” Ries said. How to prioritize innovation? Focus first on delivering value to the customer by alleviating pain points in processes, products and experiences.

“Think big from the beginning, start small and then go fast.”

— Dr. Mary Lacity, Curators’ Distinguished Professor, University of Missouri-St. Louis

“*If we’re going to talk about entrepreneurship, we’ve got to be honest and say most of these things don’t work, but that’s OK, because we learn what’s necessary to make it work.*”

— Eric Ries, entrepreneur and author of *The Lean Startup* and *The Startup Way*
Be Human

Consumers and businesses will desire the human touch no matter how sophisticated and pervasive technology becomes. That theme resonated as world-renowned photographer and storyteller Platon drew on his experiences and shared images of world leaders, celebrities and ordinary people to demonstrate how humans connect on deeply emotional levels.

These human connections will be central even to technology that reshapes our perceptions of reality. “The most compelling content in AR and VR is other people and interacting with them,” said Kevin Kelly of Wired magazine. “VR will be the most social of all the social media.”

No matter how sophisticated, digital remains a tool developed by and for humans. Neuralink’s long-term goal is to ensure that super-intelligent AI is democratized and available to everyone, Urban explained. Humans will seamlessly tap an open, cloud-based AI capability that will function alongside our limbic systems and cerebral cortex to hear “just another voice in our heads” enhancing our thinking, he said.

Whether a plot-driven customer journey or intuitive AI, the best digital solutions will free humans and organizations to use their creativity, intuition and imagination to develop as-yet unimagined solutions, experiences and opportunities.

“I’m sure you’re all very different people, who believe very different things and have had many different life experiences. But you’re all present. You’re all here — to learn, to network, to exchange ideas — and I think that is beautiful. Because you can’t do this online; you have to be physically present to feel each other’s humanity.”

— Platon, photographer
“Our solution was to do the easy thing the machines can do and let people do what they are very good at doing.”

– Raffaello D’Andrea, entrepreneur, artist and Professor of Dynamic Systems & Control, Swiss Federal Institute of Technology (ETH)
Getting Digital Done: What To Do Now

To build digital share, organizations should take the following actions:

- **Automate intelligently** wherever possible.
- **Instrument everything** to capture all the data your organization creates.
- **Augment human and process capabilities with AI**, machine learning, analytics and robotics.
- **Imagine entirely new ways of doing business**, prioritizing those that solve pain.
- **Create rich experiences**, enhancing customer journeys with augmented and virtual reality.

To learn more about upcoming Cognizant Community events, visit our website.

“The one-question test about where a company is in its digital journey is whether management is obsessed about data. When management is saying, ‘We are struggling with it, we can’t get our arms around it, we create too much of it, we can’t integrate it, we’re having trouble with it’ – that’s a good sign. That means they are pretty far down the digital path. If they haven’t yet hit these frustrations around data, that means they are still neophytes.”

— Malcolm Frank, Executive Vice-President, Strategy & Marketing, Cognizant
Community guests browsed an exhibit of “21 Jobs of the Future,” AI-driven areas that Cognizant’s Center for the Future of Work has identified as driving significant employment growth in the coming decade.