Infosys®
Navigate your next

Being Resilient.
That's Live Enterprise.

Annual Report 2019–20

Resilience: What differentiates the Live Enterprise

Large incumbent companies are well-prepared for running their business at current course. They are also well-geared to respond to a very immediate and tangible crisis. But the nature of disruption is such that it plays out in the middle of this spectrum, peaking in the post-crisis weeks and months, sometimes stretching longer. It is hard for enterprises to respond to this not only because it's uncertain, but also because they are mired in the pressures of the short term that are so all-consuming that the disruption gets underplayed, even misjudged.

Being resilient means being able to respond to the disruption, and other market signals, effectively without stepping off the treadmill of continually escalating core business performance expectations.

At Infosys, when we took on the challenge of bringing the benefits of resilience for ourselves and our clients, we looked to natural life for inspiration. Living beings are often seen quickly recognizing situations that need their response, responding to these situations with precision, and also going further to evolve and build new capabilities that better position them to thrive. This is a combination of evolutionary, historic and real-time information processing, relying on best practices while also recognizing exceptions.

We have validated our hypothesis that companies can be life-like, responsive, evolving beings at enterprise scale – and any company, however large and complex, can transform to be adaptive and resilient. They can gain startup-like agility of response to disruption and dynamic market needs, simultaneously developing velocity of adaptation to match, by nurturing the following key enterprise capabilities:

Driving intuitive decisions: The ability to sense and respond leveraging data-led insights. This serves to automate routine, frequently-made decisions and responses so little or no human intervention is needed to drive these tasks.

Building responsive value chains: The flexibility to repurpose people productivity into reimagining and reengineering the company's value chain – see what is not there, what needs to be made better and what can be eliminated to deliver more value. This will drive continuous, agile cycles of rapid adaptation.

Nurturing creative talent: A pool of problem-finders to find the right problems that must be solved for our future. After all, if a task – however complex – can be mechanically defined, we can build AI systems to execute it. But problem-finding remains a human frontier.

Delivering perceptive experiences: Responding quickly, yet thoughtfully to opportunities to create valuable new experiences. This comes from learning to spot emerging and unmet needs.

This annual report gives you a ringside view of how we are using these levers to become resilient ourselves and then applying that learning to work for our clients, as we continue to help them navigate their next.

Next-level instincts, intelligence, and intuition.

That's Live Enterprise.
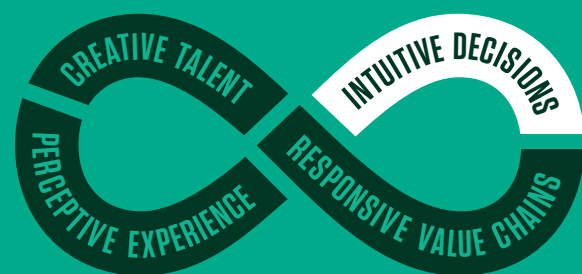
Reimagining everyday decisions at Infosys

Early in our journey to becoming an always resilient, evolving live enterprise, we recognized the need to build intuitive decision-making capabilities within a landscape of reimagined processes, experiences and digital infrastructure. This, we knew, would be vital for automating routine and deterministic decisions, while at the same time providing instant simulation capabilities for users to experiment and test in, before making more complex decisions about what and how to adapt in response to disruption.

To facilitate this, we developed the Infosys Knowledge Graph that links employees, through a network of information, with a view into their skills sets, expertise, projects, innovations, industry solutions, IP and even relevant client associations. This is set within the larger context of near-real-time information of all interactions and business operations active within the Infosys ecosystem. We are working on overlaying this network with the Infosys Digital Brain so it can continuously read the Graph to determine trends and signals, and recommend responses that enable us to make critical adaptive decisions intuitively.

This is making us more relevant to our clients.

Leveraging the Infosys Knowledge Graph, our project teams now find the right fit talent for their project needs in real time. The AI-based talent-matching service considers multiple factors like skills, adjacent skills, proficiency levels,

prior experience working with a given client, talent connections with project team members and their readiness to start. If the best fit is not readily available, the Infosys Digital Brain, constantly monitoring the Infosys talent pipeline, alerts the project team automatically when the right fit is found. We are now extending this capability to our recruitment platform so we are able to quickly spot the availability of right fit talent pools outside of Infosys and bring them into our fold intuitively.

For our employees, based on their professional career and learning aspirations, the Infosys Digital Brain automatically recommends the right courses and learning paths while connecting them to experts and communities that can support their upskilling journey and improve their relevance to clients.

Perhaps the most empowering of them all, we are now using these capabilities to sense the changing needs of our clients in a post-COVID-19 world, based on their multichannel interactions with us. We relay this intelligence to our client partners in near real time along with recommendations for useful responses.

Not surprisingly, our clients have expressed great interest in building similar capabilities to serve their own business contexts.

Mohammed Rafee Tarafdar
SVP – Unit Technology Officer

Letting intuition run their business

The human mind is wired to see patterns. It processes information in conjunction with insights from past experiences to create intuition. Intuition informs much of our decisions. Today, we are helping organizations develop a similar intuition to drive decisions swiftly, accurately and to act with resilience in the face of disruption. AI and automation lie at the core of this endeavor.

For us, this manifests in an ecosystem of tools that captures and maps out complex and vast process environments. There begins our effort to reimagine and improve the way it all works. We rely on historical data, both qualitative and quantitative, to learn from and then guide the formation of patterns that help us to automatically detect, validate, classify and resolve problems. These patterns also help us see opportunities to get better at the things we already do. Our Bot Factory, with its repository of reusable microbots, helps us to quickly stitch together and automate the reengineered process landscape while bringing in self-service capabilities.

We also partner with our clients to bring to them the advantages of AI and automation and build intuitive decisions and agile-action environments for their businesses.

For one client, in the heavy engineering industry, we leveraged machine learning techniques including Deep Learning Neural Networks to help their experts improve underwater corrosion detection and assessment. We instituted data patterns and made it possible to predict leakages thereby ensuring a high degree of asset integrity and standards of safety.

For a telecom client, we deployed AI techniques of prediction, time-series based event stitching, correlation analysis, text analysis and state transition models to improve order activation predictability. This greatly improved their customer experience, while lowering operational costs and accelerating revenue realization.

We optimized plant scheduling for a manufacturer, reducing costs and increasing throughput, by predicting the optimal sequence of work orders, eliminating human error, reducing idle time of assembly lines and streamlining delivery.

In the enterprise context, there is sometimes the need to respond to disruption that emanates after a crisis. Our clients today need to chart a meaningful way forward in the new normal post COVID-19. We are working to build machine learning algorithms and automation as potential solutions to the recent disruptions in their workflows and other processes that rely primarily on human interventions. Our research in areas like Explainable AI, Transfer Learning, Generative AI and Capsule Networks are great resources that enrich this journey.

Balakrishna D.R.
SVP – Head, AI & Automation Services

"At K+S, we're excited to work with Infosys to accomplish our key business goals, transform the current IT infrastructure, and future-proof our digital workplace. Infosys' expertise in the next-gen hybrid cloud will enable us to streamline our operations across data centers, global networks, workplaces and end-user support services. This partnership will help us cope with the evolving times by transforming our IT infrastructure with new-age technology adoption for flexible service delivery in a cost-effective and timely fashion."

– Dr. Berthold Kröger, Head of IT, K+S

Responding to
opportunities with
lightning-quick reflexes.

That's
Live Enterprise.

CREATIVE TALENT
INTUITIVE DECISIONS
PERCEPTIVE EXPERIENCE
RESPONSIVE VALUE CHAINS
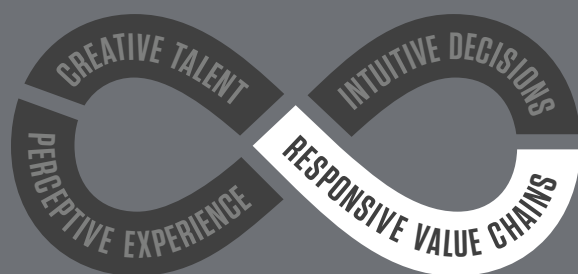
For us, responsive value chains on the outside begin inside

If our employees must be the most resilient, most responsive versions of themselves, their needs, very much like the needs of our clients, must be actively anticipated and met. Our operating environment must be geared to support this. We need to find ways, powered by smart technologies, to sense bottlenecks, inefficiencies and deviations, and put in place mechanisms to self-heal. The value chains that our workforce participates in, as they go about their work routines, had to be reimagined to yield exponential results – both in terms of adaptability and efficiencies.

We have embarked on this journey to rewire and modernize our landscapes, and the early results are very promising.

Take for instance Sheila, who received an offer of employment from us, along with an invitation to register on Launchpad – our onboarding app for paperless induction. Once on Launchpad, Sheila popped a couple of questions, which were answered almost immediately. She was delighted, of course, on discovering that now she could also access and leverage Lex – our learning platform. And all of this before Sheila even reported to work! When Sheila started to work remotely, although keen to download InfyMe – our employee productivity app – she forgot all about it. But we did not. Automated texts and mails gently prodded her with reminders to act. Because at Infosys, we want to make sure nobody is left behind on our journey to greater resilience and efficiency.

In fact, this capability served us well in recent times when COVID-19 made physical distancing a necessary part of our work lives.

Then there's the case of Courtney, one of our most effective sales leaders. The Infosys Live Enterprise Store, with its wealth of insightful resources that correspond with client interests, is her go-to resource to prepare for important discussions and negotiations with clients. New sales recruits often mention to her the Store's other benefits – pointers that make travel bookings and expense reimbursement so much simpler. Naturally, Courtney is a fan.

In an entirely different department and context, delivery project managers, constantly on the lookout for specialist skills, are now nudged by automated systems that find and match available talent from the larger pool with specific project demands. This means more time and resources freed and redirected towards creating more client value. After all, building better, more responsive value chains begins right here at home base, for Infosys.

Narendra Sonawane
VP – Head, Information Systems

Helping them disrupt their business, and delight customers

What can make what we offer more valuable to our customers? What else can we do that more accurately captures the exact things our customers want, especially right now? And how do we nurture the flexibility to repurpose saved people productivity into reimagining our customer value chains?

We asked ourselves these questions day after day in the stressful weeks that just went by as we all dealt with the COVID-19 situation. In many ways, this came naturally to us, because very often we find ourselves in the position of trusted navigators to our clients who are often seeking answers to tough business challenges. They are looking to chart a path to understanding what is viable in their positioning mix, within the value chain, what additional capabilities they might need and what can be eliminated within their existing portfolio, resulting in solutions that make them better at what they do. They also appreciate the vital importance of driving higher performance consistently and learning lifelong to drive continuous agile cycles of make-deliver-improve-remake. This they know will help them accelerate innovation and then successfully scale it with the right operations strategies.

We partner with them on that journey.

For example, we are now providing a full spectrum of services to clients such as major 5G enablers, who are no longer just in the business of providing infrastructure, service plan and content delivery. They are creating smart cities. They are building edge computing cloud solutions which will reclassify their business models. This is earning them a place alongside leaders across diverse categories, who are reimagining the services landscape ranging from healthcare to energy production to banking and more.

For another client seeking to modernize their pharmaceutical discovery and production processes, we are implementing a digital strategy that meets Industry 4.0 standards that will vault them into the position of a sector-leading player. This will significantly and positively impact their technical and R&D capabilities while driving the reshaping of their workforce skill set.

We are also rewiring old-line manufacturing industries into becoming factories of the future through blockchain, automation and condition-based sourcing capabilities, empowering them with what they need to succeed in an ever-changing landscape.

We have stepped up our own digital services and products portfolio, bringing to our clients the leverage of a spread of offerings for them to build their winning strategies with and become continuously relevant contributors to an exciting future.

Corey Glickman
VP – Partner, Business Consulting

"GE Appliances is on an ambitious multi-year journey to transform our information technology landscape as well as to reimagine the way we work. We believe that this transformation will help us innovate better and faster for our end-users and we are looking forward to working with Infosys as one of our key partners in this journey."

– Viren Shah, Chief Digital Officer, GE Appliances

The talent to dream it,
and the tech skills to do it.

That's

Live Enterprise.

Lifelong learning meets problem-finding at Infosys

At the heart of problem-finding lies the motivation to spot hidden opportunities and to redefine business problems in a way that makes new, innovative responses possible. Never before have we been so severely tested on this front than recently when we were ourselves coping and helping our clients cope with the COVID-19 outbreak. This was hard because the process of problem-finding is experimental and educational – an antithesis to the conventional *'Get it right the first time, then repeat'* approach.

Typically, companies are quite resistant to steering away from the status quo. What if the reverse were true? What if people were truly invested in finding new ideas or ways to improve something? This is what drives the problem-finder workforce. At Infosys, lifelong learning and learning by failing in a fail-safe environment, integrated effectively into our workday, is our instrument of choice to empower our problem-finders.

Our workforce leverages Infosys Lex digital learning platform, averaging 35 minutes per person per day on it every day. Delivering on the principles of just-in-time and bite-sized learning, it allows us to ease them into course material that span from one hour to over 244 hours as in the case of full stack specializations. Through Lex, our problem-finders have access to a library of over 2,70,000 assets created and curated by subject matter experts including the best from institutions such as Purdue University, Rhode Island School of Design (RISD) and Cornell University (through eCornell, the university's online program).

Their learning journeys are tailored to suit individual personas. The personalized sandbox learning environment, gamification, learning playlist, handpicked co-learner cohorts and adaptive course curriculum challenge our people to expand the scope of their capabilities on their own terms. Not just in the STEM subjects, but also in non-STEM spaces like user experience and design. Zoiee, our personalized, 24x7 AI-powered learning assistant expertly multitasks as personal coach, quiz master, makes smart suggestions for better knowledge retention and even proposes adjacent learning opportunities. Rewards come in the form of skill tags, which set apart those who master new skills.

We also widely share the creative power that knowledge brings with engineering students in India, through InfyTQ – the Infosys learning app, and plan to extend the empowerment to the markets in which we serve. Infosys Foundation USA opened up their digital learning platform for teachers, so they could continue to school their students from home during the recent lockdown. After all, when it comes to nurturing problem-finders, the earlier the better.

Thirumala Arohi M.
VP – Head – Education, Training and Assessment

Building talent for our clients' transformation

Our clients often ask us what exactly disruptive companies do that enables them to zero in on emerging customer needs before anybody else. How do they always come up with winning moves? Over time, and over several conversations with both digital natives and incumbent leaders, we have started to see a pattern emerge. A pattern marked by the people choices that companies make.

With the growing maturity of software intelligence, problem-solving is going to increasingly become a task for software-powered machines. But that is not true of problem-finding. Every disruption begins with reimagining the customer value chain, and disruptor firms must find, nurture and retain a talent pool of problem-finders to uncover the right problems that must be spotted and then solved to ensure continued relevance for their businesses.

We help our clients build and leverage sustainable talent pools of problem-finders. We have institutionalized a talent value chain that nurtures local and diverse talent by offering learning and growth opportunities – not just for those with advanced degrees, but also others including our own legacy workforce, blue collar workers and even displaced workers, so they can then serve our clients. We chart for these workers a continuum of lifelong learning so they develop a mix of functional hard skills (process engineering, data science, etc.), soft skills (strong work ethic, high cognitive ability, leadership skills, etc.) and holistic skills like approaching solutions with empathy for users. As machines take on the more analytical tasks, attributes like creativity, multidimensional perspectives that are associated with the liberal arts, and design sensibilities are what will differentiate our best people. For example, when we hire and train students from design schools, they bring with them the skills to leverage design in creating form. We show them how to leverage that, for our clients, to think through structures and designs for systems. This also means learning by questioning the assumptions held by our clients or their customers. For instance, a retailer client approached us to help make their online presence more robust because they believed that was key to customer retention, but our own investigation revealed that more human experiences would better benefit them.

We believe that each of us can train to be effective problem-finders. Recently, as COVID-19 circled the globe, our employees world-wide tapped their imaginations along with their learning to challenge the status quo and find bold unconventional responses to serve our clients.

Lara Salamano
AVP – Senior Digital Strategist

"Digitalization is at the core of our strategy for the future. We are excited to have found an effective partner in Infosys who can support us to further improve our employees' growth journeys with My Learning World. This is an important partnership for Siemens, and we look forward to a new learning experience for our employees."

– Thomas Leubner, Chief Learning Officer, Siemens AG

Staying ten steps ahead
of demanding consumers.
Checkmating competitors.

That's
Live Enterprise.