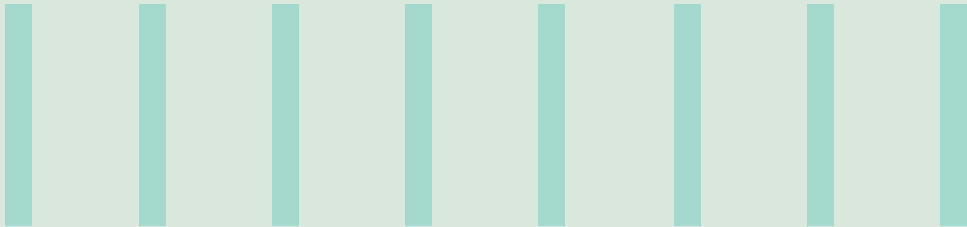




NEXT GEN IT OPS



Introduction

Live Enterprise is our technology vision and platform for the future. An enterprise that is continuously learning, evolving and alive. The Live Enterprise help the users in providing right insights and information that enables them to make right decisions in right time. It also has the agility in the entire value chain so that it can adopt quickly. It can change as per the changing business needs and customer demands and is able to quickly respond to the market dynamics.

This paper presents the application of these capabilities to IT Run Services for a Consumer products company.

Our vision for IT Run Services

Global mega trends have an influencing role to play in the sustained structural growth of any Enterprise. The global pressures of urbanisation, global warming, remote working due to pandemic make the need for Digital solutions ever higher. Changing demographics with both the increase of youth coming of age and ageing consumers is another consideration for the any company. Technologically savvy consumers want personalised solutions. These global trends have resulted in the need for any company to continually innovate and drive product leadership through R&D, as well as optimise costs across its value chains, including costs associated with IT.

Information Technology has a key role in overcoming these challenges and providing a direction by seeking out new opportunities to support the business. AI/ML led optimisations, large scale analytics, proactive engagements with internal stakeholders and platform led solutions enable the company to attain the balance between scale, focus and accountability, resulting in a novel experience for the company employees. IT Run Services was identified as a starting point to introduce this change.

Our vision in IT Run Services has been to effect a change across all layers of the operating model to accelerate the realisation of Next Gen IT Services. This vision is centred on making the organisation's move from a 'fail and fix' model to a 'predict and prevent' model with use of AIOps, Machine first, cognitive automation and AI led analytics solutions.

Our endeavour is to enable this vision for our clients to effectively manage the next generation digital applications and infrastructure that they have built

or are in the process of building. These are connected, intelligent, have zero touch resolution, self-service enabled, decentralized using IoT and powered by AI. These are managed through an intelligent, open cloud enabled platform that enables enterprises to continually Observe, Orient, Decide and Act and learn from the data generated across business process, application and infrastructure, using Cognitive IT Ops and AIOps for predictive and preventive maintenance.

The Cognitive Enterprise Framework

To realise the vision of Next Gen IT Ops, we needed to develop solutions focussed on Live Enterprise concepts incrementally. The Cognitive Enterprise Framework enables the accelerated realisation of this vision.

The Cognitive Enterprise framework improves IT outcomes through greater insights generated by a powerful combination of data, machine learning, knowledge management, and cognitive automation capabilities. By relying on AIOps, Robotic Process Automation, Runbook Automations and BOTs, Cognitive First can enhance IT Ops performance through

- Real-time Business KPI Monitoring
- AI Ops to predict and forecast business performance
- Real-time insights into potential disruptions
- Automated resolution of disruptions through Bots

The framework's cognitive-driven application service delivery uses AI and tech components intelligently to deliver

Observe, Orient, Decide, and Act (OODA) continuously in IT Operations.

- Observe to proactively identifying IT disruptions
- Orient for seamlessly interacting with end users
- Decide for autonomous data-driven operations
- Act for acting on decisions in real time via intelligent Bots

These four dimensions are further elaborated here.

Observe

Telemetry for sensory inputs: Real-time processing of information from systems and users using distributed observability enable us to make split-second decisions to initiate appropriate measures, autonomously. This is realised through technologies such as

Orient

Conversational AI for human-like engagement via chatbot backed by an army of bots: Usage of state-of-the-art chatbot backed by machine learning, natural language processing abilities that in-turn invokes various taskbots to resolve user issues within seconds, delivering business hyper-productivity.

Decide

Digital Brain (Machine Learning, Deep Learning and Data Analytics) for novel experiences: Widespread advocacy of AI to anticipate our users' needs and offer them solutions to those needs beforehand. e.g. using algorithms to determine data discrepancy across multiple systems and recommending corrections to business.

Act

Intelligent automation for self-determining processes: The adoption of process automation that leverage AI powered by the Digital Brain enables us to respond to non-deterministic scenarios we face in IT operations.

Working on the four dimensions of OODA, we were able to deliver the following capabilities and deliver a superior user experience, measured through NPS across the touchpoints and always-on, always-available IT services.

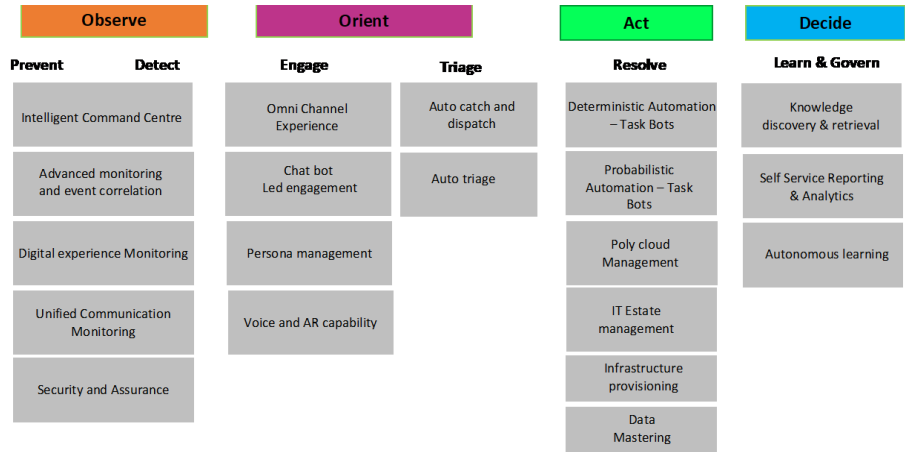


Figure: Sample capabilities delivered by the Cognitive First Framework

The client

The company is a British multinational consumer goods manufacturer, headquartered in UK. It is a leading manufacturer of branded products on personal care, hygiene, health, home, and nutrition products. The company has operations in nearly 60 countries and its products are sold in almost 200 countries.

The client had an ambitious vision of delivering superior service experiences, with an always-on, always available Machine First, Cognitive IT Enterprise. We initiated a transformation of IT Services to prepare for future of work and support business change. This transformation is being powered by digitised processes, smarter toolsets, and vibrant talent.

The client's IT operations had an opportunity to advance, modernise and tech-enable IT operations would release time and budget for more valuable activities, whilst enhancing the experience of employees.

This program was set up with the objectives to:

- Reduce IT operations effort (and thus cost) by ~20%, releasing budgets for Innovation and Transformation
- Minimise IT disruptions enabling hyper-productive business
- Be in the top quartile of employee happiness (measured in Net Promoter Score - NPS) by proactively serving the needs of the workforce, particularly in their interaction with and support of customers

Enabling nextgen IT Ops for the Client

Infosys analyzed the existing IT landscape comprising almost 40 tools to arrive at recommendations that would significantly enhance results in three primary areas – efficiency, insights and experience.

We realized that the power of advanced technologies must be harnessed to deliver the exceptional outcomes expected by the client on a large scale. So, Infosys conceptualized a Living Lab to drive large-scale automation and transform it into an Experience-First and Cognitive-First enterprise. Infosys's Cognitive First approach played a big role in this program.

Further, Cognitive First has a library of over 230 autonomous capabilities across IT and business operations available in the form of over 15000 microbots that help reach desired outcomes faster.

The Infosys team's implementation of the Cognitive First framework focused on the three-point agenda of:

1. Increased efficiency of IT operations
2. Better insights to resolve issues proactively
3. Improved user satisfaction with Reckitt's support team

This was realised through the adoption of cognitive technologies (AI/ML), automation technologies and adopting multilingual, omni-channel engagement channels such as mobile apps and chatbots.

Measurable Output

The programme has driven two clear benefits.

It has provided superior services to the business that are proactive, insights-based and always-on, always-available. Additionally, it has achieved a best-in-class, delightful experience for each of the 43,000 staff through simplification of technologies, processes, and tools for operations.

Business Experience and Productivity

- 20% increase in NPS: At the start of the journey, our NPS was +65; this has improved to +80 in 2021.
- Saved more than 10,000 business hrs per month for business in IT resolution wait time; 30% of service requests are resolved 20% faster.
- 7,900+ interactions per month in 14 different languages handled by our chatbot Iris: logging 10% of support tickets raised via Iris and handling 60%+ chat interactions resulting in reduced load on chat engineers.

Effort and Cost Savings

- 20% Effort and Cost savings in IT Operations. Our investment has resulted in a 1:1 cost savings per annum; this makes the program self-funded and frees up cash for transformation.
- 80%+ tickets get logged via digital channels (self-service, Iris, NOW mobile); 55% tickets get resolved without L1 Service Desk intervention.
- 18% tickets/tasks resolved by 84 bots saving time and effective deployment of human workforce.

Impact on Culture & practices

We had to be course conscious of the need to manage the human part of the equation too. While the new technology will improve their effectiveness, we need to address cultural aspects too. We have therefore also reinvented our culture to be fully agile, with elevated Digital IQ to enable seamless co-working of Digital & Human workforce to drive value realisation faster. Our Platform & Product teams, already highly skilled in AI and automation, work in a scaled agile mode to deliver value to business, while realising cost savings.

The Road Ahead

Our platform based IT Run Services derived from the Live Enterprise vision of helping clients sense the business and the IT health metrics, draw valuable insights from the AI led analytics, respond almost instantaneously based on these insights (either in the form of zero touch automation, or ML driven recommendation to resolve the potential disruption / failure etc.), and continuously

learn from the systems and the digital footprint of the systems to evolve into a self-healing, self-sustaining application landscape has been a differentiator for us in this domain. Key differentiators that we helped us deliver value to our client in this journey:

- Demonstration of our ability to take end to end accountability, bring in hyper productivity through new age solution for elimination and automation of work drivers through Infosys LEAP, and other technology and platform specific automation solutions integrated with LEAP
- Empowering the business users to address the issues themselves through conversational AI (Chatbot) solutions integrated with the digital knowledge asset store i.e. the digital brain in Infosys LEAP.
- Delivering and measuring AMS on business outcomes has been another key differentiator where we are Shifting the paradigm from IT SLAs led run services to business process KPIs driven run services with the use of AL and ML led analytics, and predictive and self-healing solutions.

- Structured model for continuous improvement led by our grass root innovation framework to instil the mindset of innovation anywhere, everywhere and every day by the support team powered by technology solutions for innovation experiments.

We hope to make a positive impact to the business by creating intelligent and connected capabilities that simple, reliable & secure.

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We are truly a futuristic organisation, thinking ahead of time to deliver preferential and personalised IT services. Our journey towards #DigitalTransformation in IT Operations leveraging AI/ML based tech automations, intelligent bots and our efforts have served us well throughout this new normal. Now building further on our success, we are accelerating towards the #NextGen IT Ops. We are making a big difference and get ready for the #FutureOfWork!

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- IT Director

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