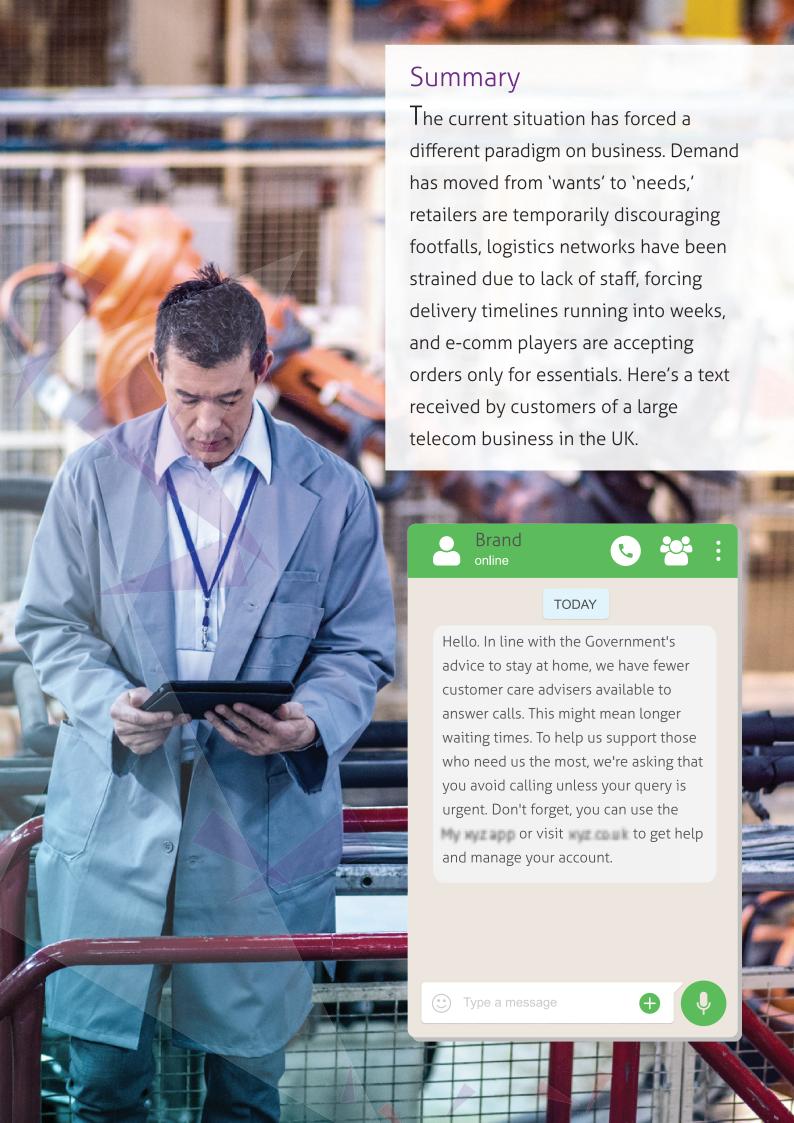


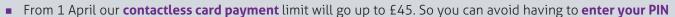
Enterprise IT imperatives for the 'new normal'

Accelerating DevOps adoption through a Composable Automation Solution for Enterprise to reduce costs and improving time-to-market



We're protecting our colleagues and customers

- In stores we're prioritising serving our elderly or vulnerable customers - we recommend coming in when we first open in the morning
- We're making sure customers know they can use our self-service digital channels to do their banking
- We've temporarily changed our store opening hours to limit contant - all stores will open Monday to Friday 10am - 4pm and will be closed at weekends for now
- We are encouraging customers not to visit unless it's absolutely necessary, and have put social distancing in place across all the stores
- To help us prioritise those who need us most, please only call our contact centre if you have an urgent question or probelm





While this disruptive phase is expected to be short term, the ramifications are driving future business models. Business will innovate and create new operating models and capabilities, which could impact several industry segments e.g. retailers will invest in shared outbound logistics infrastructure, banks will create capabilities for dynamic changes to loan repayments without impacting non-performing assets and provisioning, and large e-comm players will strengthen their essentials and grocery business. Digitization and virtual interface will help drive new business products and straight-through business processes with minimal human intervention. Moreover, all these product and operating parameter changes may need to be made while staff shortage is the norm.

In a nutshell, the new business paradigm will be based on three different operating standards – Gold (normal business environment), Silver (business environment on caution) and Bronze (stressed business environment with bare essential customer service). This shift is expected to be incorporated into Business Continuity Plans of tomorrow.

The above scenario has a **non-trivial implication on IT.** IT organizations will be expected to mimic business operating standards. Unfortunately, IT organizations are ill-prepared for this new operating paradigm. The

challenges faced by IT teams are:

- 1. Keeping the current business running on shoestring staffing &/or budgets
- 2. Enabling the business to move to a new operating paradigm (Gold/Silver/Bronze class)
- 3. IT organizations themselves transforming to the new Gold/Silver/Bronze operating model

Moreover, these transformations are to be carried out when we face the aftermath of unprecedented headwinds with cuts in both OpEx and Capex.

While IT delivery models have evolved recently to support Digital initiatives, they were intended to essentially solve problems of speed and agility. In our view, these innovations of IT delivery are ideal solutions for the new IT operating paradigm 'Elastic IT' (Elastic IT is the capability to operate in different service classes (Gold/Silver/Bronze) with varying availability of IT and business operations staff). This new paradigm will require retaining/preserving core IT capabilities (like application business capabilities and underlying architecture) for instantaneous ramp-up when the situation improves, while ensuring that multiple cost take out initiatives are delivered at the same time.

The DevOps delivery model with slight tweaks and tools can help solve the three main problems to enable Elastic IT.

#	Key Aspect	Characteristics of Business Demand on IT	Enabling Solution Construct
1	Keep lights on at decreased staff strength / remote working teams	Bronze class demand - Lower incidents, lower SLA acceptable; focus on Priority 1 (P1) and Priority 2 (P2) on-call	Shrink to core DevOps team and focus operations with high level of Intelligent Automation using monitoring and RPA Bots
2	Continue to deliver Must-Need' IT changes	Lower velocity with business-critical capabilities for Bronze class operations	More capacity allocated to change. High level of automation using Continuous Integration (CI)/Continuous Delivery (CD) and Test automation enabled by DevOps tool chains
3	Retain core capabilities to flex up when required	Ability to ramp up both support services and project deliveries	Key knowledge assets (architecture, interfaces, domain knowledge and embedded tribal knowledge) are retained through a small core team and embedded in automation code

In this whitepaper, we have outlined how we see the <u>DevOps solution</u> evolving to enable and sustain a dynamic and elastic business operating model.

Reducing costs & improving throughput with Accelerated DevOps

Mindtree helps drive the objective of 'Elastic IT' by enabling key applications, while support personnel are retained and effective, even though working remotely, using accelerated *DevOps service delivery*. The adoption of DevOps in normal times has faced friction due to structural and people issues. We believe this friction is greatly reduced in the current context and needs infusion of automation and Dev to Ops tool chain integration. This enables us to fast track <u>DevOps adoption</u> using our CAPE™ (Composable Automation Platform for Enterprises) platform with a managed services construct to deliver an integrated application & infra service. CAPE™ enables remote IT teams by providing a single web interface for rich analytical dashboard for service delivery management and engineering workbench with "Execute" mode for of development and operations teams.

These CAPE™ features mask the underlying complexities of tools and technologies and enable fast ramp up of remote teams to deliver services from a distant location.

CAPE™, which is ISO27001 certified, comes with 150+ tools (e.g. Jenkins, VSTS/TFS, Git, Git-lab, Maven, SonarQube, S-Now, Jira, SoapUI, Selenium etc.) that are pre-integrated and a library of ready-to-use pipelines for Hybrid deployments. The DevOps-based Elastic IT managed services helps reduce costs up to 50%. Delivering IT staff productivity with the right throughput is another key objective while navigating the business out of a pandemic situation. Mindtree proposes to deliver up to 30% decrease in deployment time with our platform-driven approach enabled by CAPE™ by automating the IT lifecycle enabling continuous

integration, deployment, monitoring, testing and continuous delivery a reality. This platform is designed to work on multi-cloud or on-prem, thus enabling us to integrate and deploy them easily into the client existing landscape and start automation from Day 1 of the engagement.

CAPE™ adds value primarily in three areas:

1. Accelerated DevOps adoption: Integrate Dev and Ops tool chain with 150+pre-integrated CI/CD tools and RPA Bots (Service Delivery Report Creator Bot – deployed for a leading sports goods business in Germany, access provisioning Bot, website monitoring Bot, URL monitoring Bot), <u>Machine Learning</u> and cognitive conversational capabilities (Intelyzer-based)

- web traffic predictor for a leading internet banking application in AsiaPac) from our Bot store repository to automate operations
- 2. Build your own: Point and click capabilities to build your own tool chain & CI/CD, Infra and app components (e.g. On prem VM, Azure/AWS/GCP Compute resources), Dev and Ops analytic dash boards and reports (e.g. Risks per build, Commits per author, Flow velocity)
- **3. Compose once, deploy anywhere:** Compose portable DevOps automation tool chain as blueprints as canvas, and deploy on-prem or multi-cloud (deployed for 13 digital applications for a leading pension fund)

Context

Current situation of dynamically changing business needs and constrained availability of technology SME requires new paradigm to handle:

- Locally & Globally Dispersed staff
- Automated Ops
 Elastic Team Capacity
- Continue to Deliver new Functionality (faster time to market)

Our Market-Ready Solution

Mindtree brings a platform-led solution to accelerate DevOps delivery model to individually & geographically dispersed teams

Differentiated Approach

- Integrated platform led DevOps pipeline for managed services
- Build your own Infra and tools
- Build your own CI/CD pipeline
- Build your own Dashboards and Reports

Suitable for

- e-Comm Platforms
- Mobile & Digital Platforms
- Open-systems based LOB Apps
- Cloud deployed Apps

Mindtree IP / Platforms







Discovery, Service Transition and Management

Key Benefits



Cost reduction by 30-50%



Accelerated

deployment – Elapsed time reduced **by 30%**

Duration & Ways of working



to deploy DevOps MVP

- Autonomous non-invasive DevOps diagnostic
- **Secure, remote** DevOps pipeline creation & execution

Commercial construct



- **Application services** priced based on DevOps model
- Free CAPE DevOps assessment & implementation for first portfolio



Our experience in cost takeout

Using the CAPE™-based service delivery approach, we have been able to reduce costs, improve reliability and increase time-to-market for our client: For a leading pension annuity provider that has operated on a traditional IT model, we accelerated DevOps adoption and migrated all 13 digital application portfolios to CAPE™ in three months, which has in turn reduced time-to-market by 12 months. The benefits realized include an increase in Jira tasks by 20% in 3 months and improved defect reduction by 50%, thereby saving 25% costs.

Conclusion

The need of the hour is to enable an organization to switch their operating models between various operating standards e.g. Gold, Silver and Bronze standards in response to changes in the business environment.

<u>Mindtree</u> makes this switch to Elastic IT possible by accelerating DevOps adoption through its Platform - CAPE™ and delivering <u>IT services</u> enabled by CAPE™, providing end-to-end managed DevOps-based IT services that can at the minimum, dynamically reduce costs by 30 to 50%.

About Mindtree

Mindtree [NSE: MINDTREE] is a global technology consulting and services company, helping enterprises marry scale with agility to achieve competitive advantage. "Born digital," in 1999 and now a Larsen & Toubro Group Company, Mindtree applies its deep domain knowledge to 300+ enterprise client engagements to break down silos, make sense of digital complexity and bring new initiatives to market faster. We enable IT to move at the speed of business, leveraging emerging technologies and the efficiencies of Continuous Delivery to spur business innovation. Operating in 18 countries and over 40 offices across the world, we're consistently regarded as one of the best places to work, embodied every day by our winning culture made up of over 21,000 entrepreneurial, collaborative and dedicated "Mindtree Minds."

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