Mindtree

A Larsen & Toubro Group Company

Struggling with an inept delivery model?

Seven digital engineering imperatives to build a successful one.

Welcome to possible

A Mindtree Point of View

Traditional delivery models fail to do justice to delivering superior digital initiatives. Digital initiatives have distinct characteristics, which demand an evolved delivery model. Digital initiatives need better engagement with stakeholders, they need faster responsiveness, and they usually leverage a complex and evolving technology ecosystem. In this POV paper, we will look at the seven key characteristics that make digital initiatives unique, necessitating the need for a new operating model and delivery culture in order to drive effective digital engineering.

Seven key characteristics of digital initiatives to build a successful delivery model

1. Close engagement with brands and markets

Digital applications are used extensively by your brand and market teams, such as sales, marketing, and customer engagement teams. The ideal digital delivery model must engage with these teams across all stages, including planning, roadmap, build, and rollouts while at the same time being responsive to ever-changing market forces.

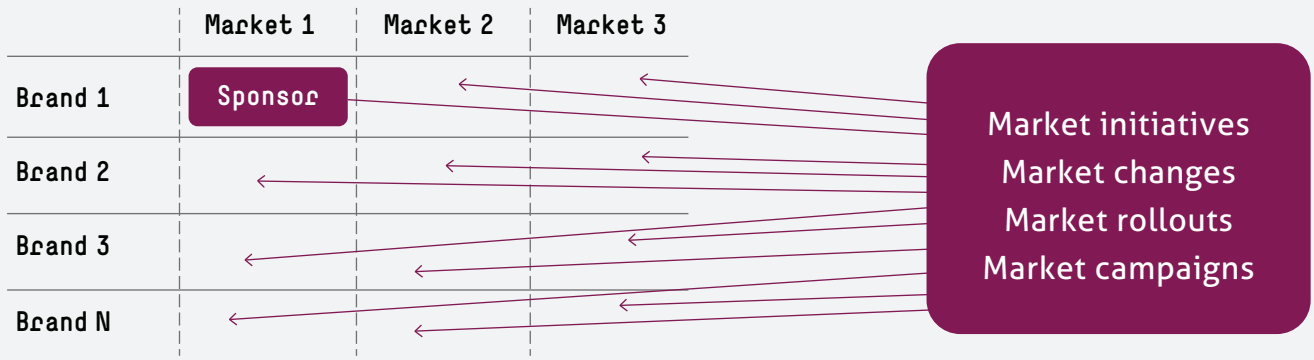

Exhibit 1: How brands and markets are intertwined

2. Driving top-line growth with continuous iterative changes

In an increasingly digital world, digital applications are expected to directly drive top-line, whether by attracting customers to build the funnel, converting them, or driving loyalty and repeat sales. In a competitive marketplace, these approaches need to respond to the evolving market. A lot of improvement is therefore driven by iteration and experimentation. Your delivery model must think ahead, experiment, and respond to customer behavior, business changes and enable seamless agile implementation. The process must be continuous and not a one-off implementation.

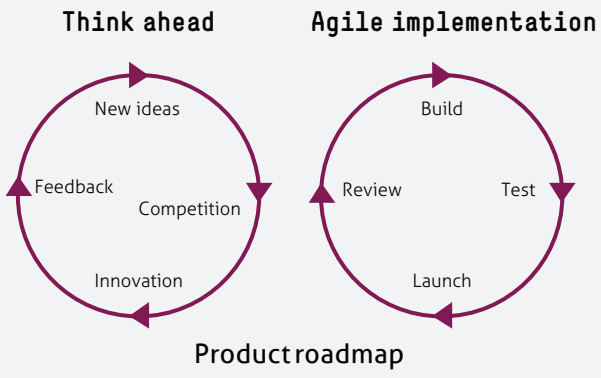

Exhibit 2: The continuous feedback loop amidst change

3. Real-time data visibility across all channels

Seamless engagement demands the same information and capabilities to be available across multiple channels—online, physical, partner, or phone-based. This demands a set of common capabilities to be created that can be assembled and used across channels, departments, and brands.

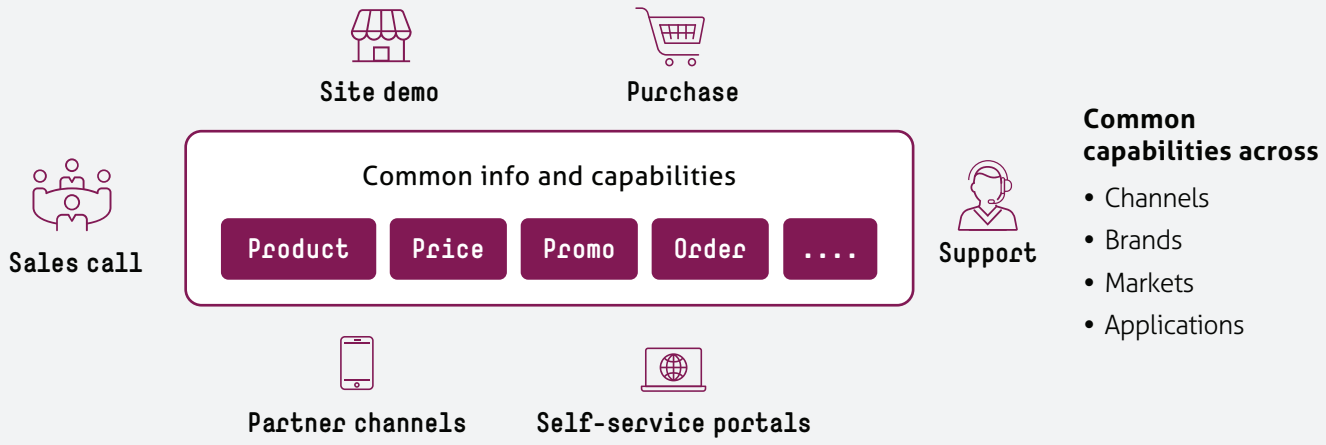

Exhibit 3: Making data available across channels in a non-siloed fashion

4. Feature-based applications

Digital applications tend to have a complex technology landscape integrating multiple technologies and products. In a traditional application development process, a single tech stack is used. Whereas, while building a robust digital application, other features such as marketing, commerce, microservices, etc., are required. While traditionally, teams were built based on a single tech stack alone, robust digital applications are built based on features.

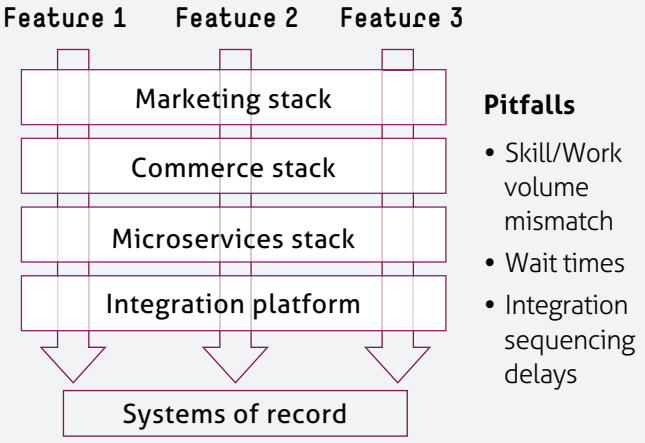

Exhibit 4: Feature-based application framework

5. Continuous integration and delivery

The release management function should run like a well-oiled machine. For a successful digital engineering team, continuous integration and continuous delivery are a must. Businesses should see the changes in production regularly, and hence multiple small releases are required. The perfect delivery model should support continuous integration, delivery, and releases.

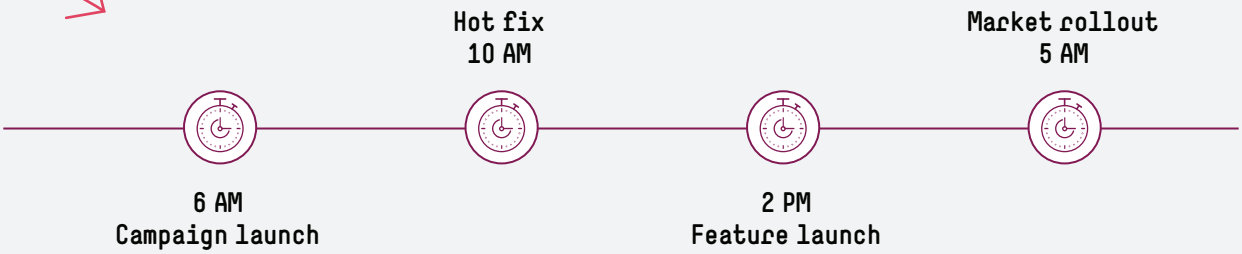

Exhibit 5: A timeline of activities in continuous delivery

6. Building IoT and Industry 4.0 use cases

Digital initiatives are all about innovation and disruption. Using an API-first approach makes it easier to combine them with IoT initiatives and come up with completely new types of use cases. IoT and APIs can provide use cases that sense what is happening and drive response to it.

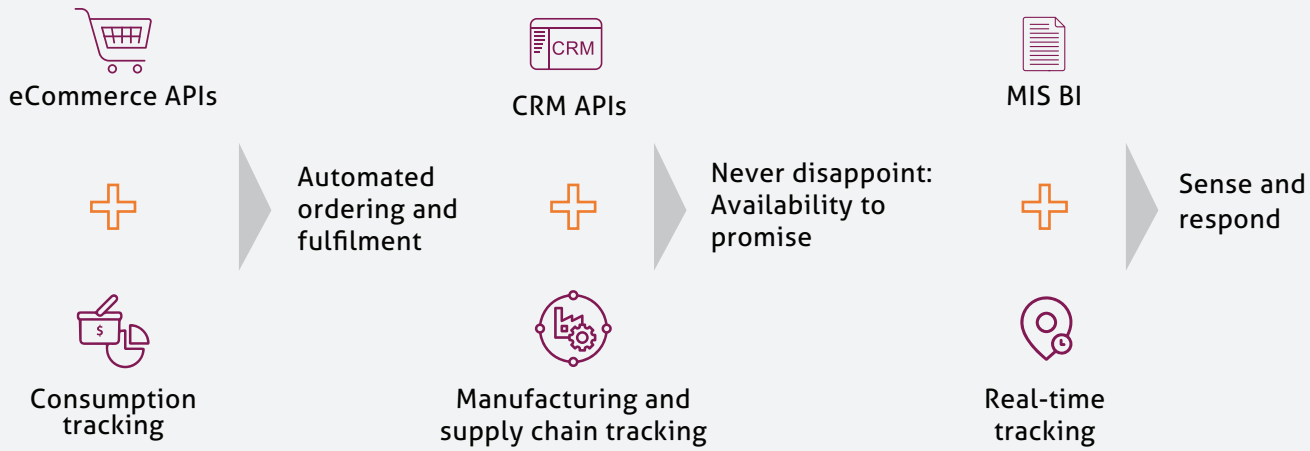

Exhibit 6: A responsive manufacturing and supply chain

7. Self-healing and machine-first operations

Digital applications drive business, and SLAs are not the best parameters for business impact. Support should be prioritized by business KPIs rather than system uptime statistics. Self-healing and machine-first operations go a long way in enhancing business impact. KPI monitoring can track issues beyond system down, e.g., identifying parameters like conversion reduction and revenue dip that need an immediate response.

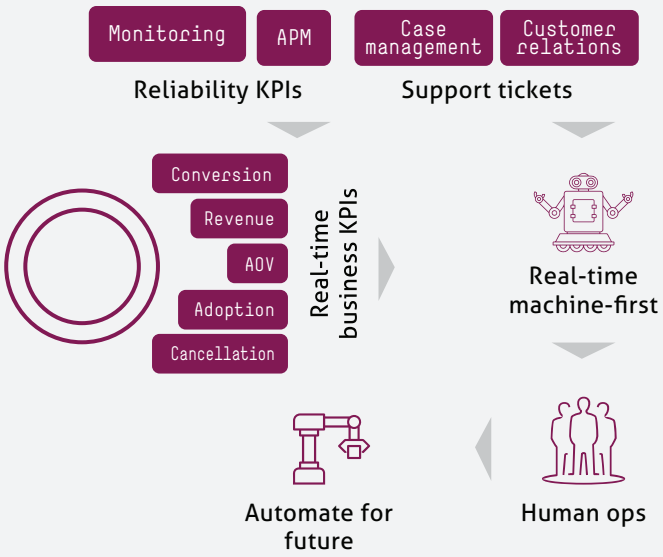

Exhibit 7: Self-healing and machine-first operations

Why Mindtree?

Mindtree has helped many clients across industries and geographies set up their digital engineering models addressing these unique characteristics of digital delivery. Digital being the DNA of Mindtree, nimbleness, flexibility, and innovation comes naturally to us. In addition, we have built tools, platforms, and accelerators to support the DevOps and agile-based delivery models. We have deep experience in implementing product IT-based models for all kinds of business processes and complex organizations with varied tech stacks. Read our case studies to learn more.

Case Study 1

Operating a product IT + DevOps-based delivery model for one of the world's largest outdoor power tools and equipment's manufacturer based in Europe

Challenge

Despite their successes, the client's DevOps adoption had not reached full maturity. Moreover, they also had non-integrated development and testing tools. This scenario, combined with non-standard and non-streamlined release management, gravely affected their time-to-market, product quality, and cost of ownership.

Solution

Mindtree created an operating model where the IT teams are structured to mirror the business functions like sales, operations, and logistics. The principles of our DevOps model have been consistent from day one. Azure DevOps is implemented to bring CI/CD in motion. Built an Automated Regression Testing Suite on component-based test automation (CBTA), an automation framework platform based on Blue Prism, monitoring using Mwatch and focused insights. Mindtree is acting as a Service Integration across 23 partners and 57 applications.

Benefits

- Streamlined release management process and achieved a 25% reduction in the potential cost of operations.
- Achieved 13-15% reduction in defect leakage into production driven by an increase in build frequency.
- Improved code coverage by 17-19% by automating the review process.

Case Study 2

Omnichannel commerce for leading home improvement retailers

Challenge

Traditional commerce platforms hit the limits of scalability. Inefficiencies and idle time crept into the development processes. The cost of downtime was too high with multi-billion dollar revenues.

Solution

Mindtree created a feature-based operating model, where the teams are organized by features rather than by technologies, thus eliminating the integration phase. SRE principals adopted for support with incremental automation eliminating the L2 support teams. The system was able to scale to higher revenue with a lower team size and a higher feature velocity and enable real-time releases.

Benefits

- L2 support team eliminated with SRE and automation.
- Feature team enabled faster releases with the elimination of integration phase and wait times.
- Team size reduction eliminated idle time in processes.
- Significantly reduced downtime and business losses.

Get in touch with us

In case you too are struggling with a delivery model inept for digital engineering of your enterprise, Mindtree is happy to help. Please reach out to Manish Bhargava at Manish.Bhargava@mindtree.com or Pranshu Jain at Pranshu.Jain@mindtree.com